Research on climate change has given rise to a variety of images picturing climate change. Climate change graphics have not only increased knowledge about the subject, they have begun to influence popular awareness of global weather events. This volume combines a wide range of perspectives and questions, treated here in sixteen interdisciplinary case studies. The author’s specializations include both visual practice and theory: in the fields of climate sciences, computer graphics, art, curating, art history and visual studies, communication and cultural science, environmental and science & technology studies. The close interlinking of these viewpoints promotes in-depth insights into issues of production and analysis of climate visualization.

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Image Politics of Climate Change: 
Introduction

BIRGIT SCHNEIDER, THOMAS NOCKE

In September 2013, the Intergovernmental Panel on Climate Change (IPCC) presented its fifth report about climate change during a press conference in Stockholm. On this occasion, the audience was also presented with some of the latest scientific images produced for the new Summary for Policy Makers. In the manner of the previous reports colored global maps, barren graphs and curves served as most simplified condensates for visually communicating the findings of the highly complex research field of climate change.

For the fifth report, the graphs seemed to have been shaped even more directly, woodcut-like, in order to put across the urgency of the worrying messages delivered to the decision makers even more clearly this time. Thomas Stocker, Professor of Climate and Environmental Physics and head of the IPCC Working Group I (“the physical science basis of climate change”) directly addressed the imaginative power of scientific imagery. While pointing to a global map marking mean temperatures in bright red he declared: “This is the face of the surface of our planet if you look at the atmosphere. It is red. The world has been warming. The trend that you see is clearly given as colors of red.”1 His co-speaker, Michel Jarraud, Secretary-General of the World Meteorological Organization, pointed to another highly condensed graph, showing the comparison of temperature scenarios with two curves in blue and red climbing more or less steeply into

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1 The press conference was held in Stockholm on 27 September 2013 to present the Summary for Policymakers of the Working Group I contribution to the Fifth Assessment Report. The quotes were taken from the webcast which in the meantime has been deleted.
possible climate futures. He commented on the graph saying: “The children born now will see the last part of the graphic.” [our italics]²

Future is invisible; likewise, global temperatures can neither be experienced nor seen. When, during the press conference, the IPCC scientists pointed to the highly abstracted and conventionalized graphs, they communicated the essence of climate scientific findings with the help of visual media. By speaking colloquially about the images, the scientists metaphorically related the data abstractions back to their concrete meaning for mankind.

Alongside scientific graphs, many alternative and even opposing image strategies exist today that also strain to testify to climate change. The online picture library “Global Warming Images,” compiled by the photographer Ashley Cooper during the last ten years, might serve as an example. In contrast to the scientific extractions like global graphs and maps, the online library photographically documents the impact of climate change on landscapes, people and wildlife by capturing visually the consequences of weather extremes in specific locations that are related to climate change. Differently to scientific graphs, but with a similar outcome, the photographs make evident climate change as an inevitable process which deeply transforms the world as we know it. Cooper’s photographs can be taken as examples of the vast amount of images which pinpoint tangible and local hot spots where possible impacts of climate change can be experienced and seen directly. Cooper traveled around the globe to witness, with the help of his camera, droughts in Australia, floods in Bangladesh, coastal erosions in the UK, glacial retreats in France, or rising sea-levels in Amsterdam, to name but a few.

Both categories of images—the abstract condensates of global climate science and the pictures of concrete climate events—have entered the collective “cultural memory” (Jan Assmann). Images have started to shape the imagination of a world under the conditions of climate change.

**Visualizing the Unimaginable—Motivation to Write this Book**

The present book seeks to analyze the full diversity of pictures originating from different fields which all claim to make climate change meaningful on a visual level. With this publication, we want to add to contributions made by Julie Doyle, Mike Hulme, Libby Lester, James Painter or Stephen Sheppard who have

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² Ibid.
all published on certain aspects of images in the climate change discourse in recent years. Since there is no single discipline appointed to deal with the subject, we decided to compile this anthology in order to make the many approaches to climate pictures accessible by combining them across the disciplines.

A starting point for putting together this anthology has been the observation that since scientists began to make their findings public, the number of images picturing climate change has been growing immensely: the reports of the IPCC are filled with a plethora of colorful graphs; every week, another popular book on climate change broadcasting scientific data graphics is published, but also plenty of expensive photobooks have been compiled depicting landscapes under the impact of climate change; magazines print high quality photo series of a changing world and the latest natural disasters caused by climate impacts; art galleries have put together a great number of shows in the last few years addressing climate change issues at an artistic level; numerous movies have been produced focusing on the issue of a final and global catastrophe or addressing climate change from a documentary perspective; innumerable websites and blogs with scientific, journalistic or political backgrounds exist which make use of climate change pictures; pictures of climate change have even become a permanent backdrop for the visual language of advertising.

To sum up, scientific research on climate change has given rise to a variety of images picturing climate change. Alongside the diversity of scientific pictures, many other fields have started to translate climate change findings into languages other than science. In this case, the highly conventionalized and regulated structures of scientific graphs, tables, bar charts and map structures undergo a different framing. Although originating in climate science, in the cultural spheres alternative images are produced in order to communicate and comprehend the different meanings and impacts of climate change.

Due to their quantity, it is necessary to critically analyze climate pictures, because a reverse movement can be observed, as is the case for images in general. It is a special characteristic of images that once in use, they become normalized; they acquire the characteristic of unquestioned naturalness, which makes us forget their constructiveness. The images gain their “own reality.”

Climate Change Knowledge is Mediated Knowledge

The sheer observation of quantity is contrasted by another observation that is also causally connected to climate science: most phenomena studied in climate science are invisible. Climate change as a long term process cannot be seen. It needs to be constructed on the basis of physics, chemistry and big data: measurements, simulations and statistics. Because climate is a scientifically constructed object, there is no way to learn about it other than through media devices. We need media to learn about climate change. Visualization methods represent an important means of mediating climate change besides using language. Therefore one needs to ask how (Western) culture obtained this view.

Pictures have played a significant role in climatology ever since its beginnings around 1800. The history of climatology began with the transferal of increasing amounts of weather data into graphs and maps, such as the first climate map based on information visualization which Alexander von Humboldt realized on the basis of only 58 short term measurement series from weather stations (see Figure 6 on page 42). Synopsis (literally ‘seeing together’), the method of creating images based on statistical thinking, gave form to the data collections of otherwise shapeless and spatially detached weather events.

It was only through these new strategies of visualizing numbers of observation and measurement that the climate became evident, and as such, an epistemic object of research. By the same token, it is thanks to the existence of charts that

6 Knebusch, ibid.
7 This is what German naturalist Alexander von Humboldt (1769-1859) did in 1817, when he outlined the first set of isotherms—statistical lines of average temperature—on a map structure. By introducing isotherms he was able to give an idea of climatic zones. Cf. Schneider, “Reisepfade der Erkenntnis,” 2012; Monmonier, Air Apparent, 1999 and the article by Grevsmühl in this volume.
climate change became detected. Without such graphical methods, climate warming would have been much more difficult to interpret or might even have gone unnoticed. The discovery of climate change is a cultural achievement originating in the scientific history of knowledge production and the globalization processes accompanying this development.

Therefore we propose to examine in this book the hypothesis that today, the media and the climate as scientific object are inextricably linked. Knowledge about climate change on a global level cannot be acquired through direct experience but only via translations and abstractions accomplished by media. Abstract scientific graphs are where climate change first became visible, like the curve plotting first begun by Charles David Keeling in 1958 to document the ongoing change in concentration of carbon dioxide in Earth’s atmosphere. The constructed abstractions of climate science have been the primary catalyst for images of climate change.

**Climate Change can be Successfully Visualized but not Imagined**

Although a full range of pictures successfully visualizing climate as a scientific entity already exists, scientific graphs have been repeatedly blamed, from very different sides, for being highly limited when it comes to communicating climate change to those not involved in climate research. Here, we need to differentiate between questions of visualization and imagination. Some findings are so vast and huge—they contradict all experiences we have about the world today; in fact they are unimaginable. We can look at the IPCC curves as long as we want—the meaning of climate futures stays unimaginable although the colored lines follow a clear rationality. Here, two distinct forms of expression clash. In the case of climate change, the vast metaphor of nature’s revenge, according to Lorraine Daston, evokes a feeling of “terror,” because passions cannot respond to the global violation of nature—our senses fail.

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8 Climate change in this global totality might even be called an “absolute metaphor” (Hans Blumenberg), a thing we are able to name but we cannot fully relate to (like “the world,” “history” etc.).

In response to this, various actors have urged the need for images distinct from science to fill this gap. Climatologist Hans Joachim Schellnhuber, for example, during a conference called “Tipping Point” organized by the British Council in Potsdam/Germany in 2008, put forward his idea for an “exhibition of the worst nightmares of climate scientists.” The conference brought artists from different fields into dialogue with climate scientists from the Potsdam Institute for Climate Impact Research. Schellnhuber explained that he felt the urge to use a format like this because in the highly regulated framework of scientific practice there was no space for scientists’ emotional reactions, such as fear, to the findings. Such emotions had to be assiduously suppressed when making scientific statements.

Alongside climate scientists, humanities scholars like cultural scientists or philosophers, environmentalists, curators and artists have pointed out the alternative potential of artistic approaches to imagining climate changes and to communicating the matters concerning the climate crisis.

It has been claimed that contemporary art in particular has the potential “for discovering new ways of seeing the world” and for “rethink[ing] categories and phenomena that we usually take for granted.” In the case of climate change, it has been suggested that art might be able to “help focus attention on the cultural dimension of climate change while also outlining the contours of a range of wider social, political, and aesthetic changes that point towards a new cultural awareness.” Given these expectations, art is usually placed on the communicating and the imaginative side of the problem. The artists do not offer solutions to the problems, “but images which can be employed as tools for reflection, discussion, insight—and possibly, action.”

Therefore we suggest that the problem is one of imagination rather than of representation. Because we do have pictures that successfully communicate the concept of climate change especially in terms of science.

**Climate Images are Political Images**

Although it can be claimed that images of climate change make visible the unimaginable, at the same time actors in all fields repeatedly state that the current images of climate change wouldn’t be strong enough to deliver the urgent information effectively enough. For this reason, more emotive images are sought,

11 Ibid.
ones that are more “expressive” and clear, and provide better metaphors and more tangible future scenarios. The argument goes like this: We know enough about climate change, but still so little is done on all levels—ergo we need stronger, more striking and engaging images. But the claim—or hope—that images have the power to produce action and influence decisions, and in so doing, to change reality, is only rarely brought into question.

When such statements are made, the political dimension of images is addressed—the practice and theory of influencing people’s opinions and decisions. Climate pictures are often produced for normative purposes; they are fabricated to change what they show: possible futures are blueprinted in order to prevent the futures shown with the help of the curves from coming true. The power of evidence and the power of persuasion are two main features which are especially valid for climate pictures. Climate pictures are produced to testify, prove and explain the concept, impacts and social and cultural meanings of climate change.

Because of their normative character, what is special about images depicting climate change is that they have implicitly also become political images. This is likewise true for scientific images of climate change. Climate science is facing considerable pressure from all sides: when scientific graphics produced by climatologists started to gain currency in the field of policy, as climate change became a key issue within risk society, they encountered different values and expectations. Climate change is not only a science subject, it is also at the core of socio-political interests. Climate science is the paradigmatic field in which images assume a role as political agents. Discussions about the trustworthiness of the latest findings are therefore often conducted based on key images, since they offer evidence that attracts the most careful attention. Scientific graphics about climate change are used as the basis on which political decisions are discussed—the heated discussions of climate change skeptics and mainstream climate science researchers might serve as the most obvious example of where the political role (and the blurring of roles) of climate science pictures is revealed.

Is there a general link from knowledge to action, from image to action? It is claimed that using pictures which are as effective as possible helps to vividly put across to the recipients what they are unable to visualize and become conscious of by means of text alone. It is this implicit basic assumption of the power of images to influence reality that we address in this book. How are images supposed to influence reality? What different assumptions underlie image usage in the

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broad field of climate change communication? What problem-solving approaches are taken in the different disciplines?

**The General Role of the Visual**

Media society thrives on a predominance of the visual. Messages are to be accompanied by pictures. In the case of climate change, pictures have at least the same importance as text in shaping our knowledge of the world. Therefore, we want to point out the most important functions and roles ascribed to images in this field.

It is generally assumed that pictures have a pedagogical ability to show complex connections in an easy, comprehensible and instant manner. Successful pictures are meant to reveal knowledge and meanings at a glance. Because of their greater vividness, images are thought to be “a more easily accessible medium of communication than (conceptual) language.”

This is especially true for scientific images. In the sciences, successful climate pictures “condense” knowledge; they are the extraction in a cascading process of simplification. Many climate pictures more or less directly rely on the complex research of climate change findings (big data, statistics, global perspectives). But in the process of making images, complex knowledge is radically reduced to core statements and concise synopses. The process of knowledge acquisition remains invisible—in the background of the pictures. The picture extracted might be thought of as an iceberg where only the very top can be seen; still the outstanding peak signifies for the whole iceberg.

The unique benefit of condensing knowledge into a single picture frame is that images, in contrast to texts alone, have the ability to very directly address and concentrate human perception.

Parallel to these productive epistemic functions images can fulfill there are, however, many strong reservations opposing these positive views on the power of images. These reservations are likewise contrasted with the understanding of texts. From a negative perspective, pictures are believed to provide merely a blurred version of reality. They are said to generally appeal more to emotions than intellect. They are considered to belong to the realm of emotions and sub-

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jectivity, whereas texts are thought to belong to the field of rationality. Accordingly, images leave the door open for deception, propaganda, illusion and seduction, and can attract a great deal of mistrust.

However, the ease with which fabricated images can be distributed indicates their potential power. The result of the simplification and extraction process referred to is an eidetic and concise gestalt. This gestalt can be easily reproduced, distributed, recombined and scaled. This is what Bruno Latour summed up with the term “immutable mobile.”

In the context of scientific pictures of climate this means when the figures are communicated and distributed beyond the field of science, the accompanying texts might be cut out in the process and the images might start to travel independently, detached from their original background. Images start to migrate from one sphere to another. They might keep their basic gestalt (immutable), but as picture agents they are able to serve various interest groups, trigger different associations and offer new perspectives.

Images can start to travel and migrate in different ways. Initially, they are reproduced, copied or reworked when a scientific paper is brought to a news magazine and an image might be redrawn by a graphic designer. Or a photograph is printed in a magazine. But when images get taken up by the media they gain collective visibility and something else can happen. Pictures can imprint their gestalt onto the memory of the observers: some images become iconic: in other words, they start to influence or even dominate the concept of a world under the threat of climate change. This happens when pictures start to enter the collective memory by acquiring “collective symbolism” (Jürgen Link).

W. J. Thomas Mitchell has described images metaphorically as quasi-living organisms (spreading even like viruses) that populate the world, and have even received the status of subjects in our culture. By ensnaring people within a structure of desire and power, images are even able to develop omnipotence. The Hockey Stick graph and the polar bear would be the most obvious examples for iconic images of climate change today; but also photographs picturing droughts, floods and retreating glaciers would fall into this category, or even old religious images like Judgment Day or biblical plagues which become linked with images of a threatening climate catastrophe. Such images today influence how climate change is imagined.

This broad impact of images is, we believe, due to the fact that images contain a surplus value that cannot be fully controlled. This aligns with a unifying

17 Latour, ibid.
factor present in all these articles, which is the idea that pictures in general, even the most straightforward charts, do more than merely illustrate data information. Rather, they inevitably imbue the findings with an additional quality beyond the objective and the rational. This quality is often emotional, sometimes turning contemporary climate pictures into ambivalent agents, depending on who makes use of them.

To sum up: when images are widely distributed, they are indeed able to shape how the world is thought about and seen. In this respect, they are able to also shape futures—by opening up thoughts about futures but also by narrowing the perspective, as in the case of geo-engineering phantasies. They might be visions with only fictional status but they can become the catalyst for future actions. Today’s images might become the blueprint for tomorrow’s realities. Therefore climate pictures have a key role in making the future imaginable.

**DESCRIPTION OF THE BOOK**

This book takes as its subject the visual aspect of the climate discourse, treated here in sixteen interdisciplinary case studies. It takes a critical look at the very varying strategies that are used by the different contexts. For this purpose, it combines a wide interdisciplinary range of perspectives and questions, in order to discuss the different strategies and conceptions that lie behind pictures concerning climate. By analyzing very disparate kinds of image-making and image interpretation in the field, one might even say the articles compiled in this volume portrait distinct cultures of image-making. But by looking at the images through the lens of “images of climate change” we consequently needed to bring together very different disciplines in order to give an outline of a fragmented field.

A particular feature of this book—the authors’ specialist backgrounds—is reflected in the interdisciplinary nature of the subject. Their specializations include both visual practice and theory: in the fields of climate sciences, computer graphics, art, curating, art history and visual studies, communication and cultural science, environmental and science and technology studies. The close interlinking of these viewpoints promotes in-depth insights into issues of production and analysis of climate visualization, some of which have the character of a work-in-progress.

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All articles in this book share a common basic feature: the lines of inquiry they pursue remain close to the material, in other words, they use case studies as examples. At its heart are images which depict the climate and climate change in very different ways—landscape photography, press photos, maps and diagrams used in climate science, and artists’ treatments of the subject and the visual strategies of environmental activism. In the process, the visual part of the climate discourse is critically analyzed in the context of politics, technology, science, media and society. The visual examples originate mainly from the current climate discourse—most concern climate change. As the volume also includes historical case studies, it will be possible to relate the history of climate graphics to current practice.

The volume is divided into five thematic sections, or chapters, each of which highlights the subject from a different perspective. The sections are organized not according to disciplines, but themes. This enables them to be viewed simultaneously from different disciplinary perspectives. It becomes apparent on reading the individual articles which concepts and pictorial logics underlie the particular forms of visualization, also at which points frictions emerge due to different expectations and conceptions when specialist pictures in particular circulate amongst the politics, science, press and publicity scenes.

The first section—The Epistemic Value of Visualization in Climate Sciences—examines the issue of the epistemological status pictures have in climate science, both historically and currently; in other words, how climate as a research object is defined using visualization. Sebastian Grevsmühl discusses the importance of visual metaphors for climate science for the example of the “ozone hole” to explain how the visual creation of geophysical invisible phenomena takes place. Thomas Nocke provides an overview of how visualization is used within the heterogeneous climate science field in the form of an analysis method, and illustrates recent developments and new data visualizations.

The second section—Communicating Results: The Status of Climate Expert Graphs in IPCC Reports—centers on scientific expert pictures and how they have acquired great significance in the wake of the IPCC (Intergovernmental Panel on Climate Change) reports. There is an apparent juxtaposition of the scientific ideal of sober objectivity and a contrasting sense of anxiety and warning which is particularly evident from the pictures. In this context, Lynda Walsh takes up the issue of graphics in the IPCC Summary for Policy Makers of 2007 in a rhetorical analysis and reveals popular misconceptions about scientific graphs in public perception. Mike Hulme and Martin Mahony perform an analysis of the “burning embers” diagram which visualizes abstract concepts such as
risk and danger, investigating the social organization of knowledge production and the role of expert judgments.

The third section—Pictures of Climate Change in the Press and on the Web—looks at the role of different media formats such as print and internet. The main issue here concerns what intentions, conventions and forms of logic are behind the use of pictures in these areas, and aims to provoke discussion around the subject of climate and climate change. Elke Grittmann analyzes the highly conventionalized image language used by the press during the United Nations Climate Change Conference in Copenhagen in 2009. Birgit Schneider, Thomas Nocke and Georg Feulner investigate the images employed in skeptical climate media and the argumentation strategy used to visually cast doubt on climate research findings. Wrobel and Reusser review challenges and approaches to visually communicate climate research knowledge on web portals interactively.

The first, second and third chapters deal mostly with maps and diagrams, whereas in chapter four—From Vision to Action? Making the Invisible Imaginable through Art and Photography—the special role of photography and art, and the visual strategies used by climate activists are analyzed. The images discussed here all aim to make visible the invisible in climate change, involving terms such as “shock” and “sublimity,” and show the most difficult task of picturing climate change using images in the first place. Julie Doyle identifies a dominance of the photograph within Greenpeace campaigns, and analyzes Greenpeace climate change campaign literature since 1994. Vera Tollmann investigates visual strategies of climate activists, reviewing the example of the polar bear and its visual deconstruction. Ulrike Heine presents a systematic analysis of several elaborate photobooks which have been published on the subject of climate change within the last decade. Edward Morris and Susannah Sayler—starting from a critical perspective on the power of images to depict climate change—question artistic practices such as pensive photographs as alternative approaches to generate public sentiment and climate change awareness.

In contrast, the fifth section—Images of Climate Control—looks at the use of pictures in terms of how they are used for control and surveillance of climate. Gisela Parak investigates the early collections of aerial survey photography in the United States from the 1940s to the 1970s. She shows how the remote bird’s-eye view was used to demonstrate climatic conditions of territory and to indicate manageability by focusing on technologically formed urban and rural landscape patterns. The last two articles focus on the phantasms of geo-engineering: James Rodger Fleming contrasts the ideas of vast geo-engineering concepts with science fiction, art, cartoons and Greek mythology to expose underlying myths of controllability. Isabell Schrickel performs a critical iconic analysis of typical
geo-engineering illustrations, which support a normalization of the discourse and lead to a familiarization of technical and natural processes in a geo-engineering context.

**How to Read this Book**

This book seeks to provide an overview of a wide spectrum of languages, styles and strategies, all of which aim to make climate phenomena, climate change or climate impacts visible and explicit. In assembling this diversity of ‘voices’ we hope to provide material which will be useful to a wide range of people or even contemporary decision makers concerned with the topic of climate change and climate change communication. It can be read as a whole by those interested in the entire topic of visual studies regarding climate images, or by disciplinary experts with a more focused view. Some specific suggestions follow:

*Climate scientists* might first focus on the chapters related to climate data visualization and the climate media discourse (1, 2 and 3), then move to the more cultural framings of the topic within the chapters 4 and 5.

*Visualization experts* from the fields of scientific and information visualization are encouraged to start reading the articles in chapter 1 as well as the articles “Twist and Shout: Deceptive Graphs in the Skeptical Climate Blogosphere” by Feulner, Nocke and Schneider and “Towards an Interactive Visual Understanding of Climate Change Findings on the Net: Promises and Challenges” by Markus Wrobel and Dominik Reusser in the third chapter.

*Art historians and Visual Studies researchers* might start with chapter 4, where the role of images in making the invisible imaginable through art and photography is discussed.

*Media and communication scholars* might begin with chapter 3 and read the article by Elke Grittman “Between Risk, Beauty and the Sublime: The Visualization of Climate Change in Media Coverage during COP 15 in Copenhagen 2009” or the article by Julie Doyle “Picturing the Climate(c)tic: Greenpeace and the Representational Politics of Climate Change Communication” in chapter 4.

*Science and technology study scholars* might start with chapter 1, reading “The Creation of Global Imaginaries: The Antarctic Ozone Hole and the Isoline Tradition in the Atmospheric Sciences” by Sebastian Grevsmühl or chapter 5 “Picturing the State of the Nation’s Environment: Early Aerial
Photography in the United States from the 1930s to the late 1960s” by Gisela Parak or turn to chapters 2 and 5 where the discussions of today’s scientific imagery are covered.

**Political scientists** might first focus on section 2 and move on to the article in section 5 “Images of Feasibility: On the Viscourse of Climate Engineering” by Isabell Schrickel.

**Policy Makers** might start at chapter 2, with Lynda Walsh’s article “‘Tricks,” Hockey Sticks, and the Myth of Natural Inscription: How the Visual Rhetoric of Climageate Conflated Climate with Character” or Julie Doyle’s article in chapter 4, “Picturing the Clima(c)tic: Greenpeace and the Representational Politics of Climate Change Communication” and before turning to chapters 2, 3 and 5.

**Conclusion**

The approach of this book is to take a critical look at images showing climate change, as pictures in this context are widely used by all concerned, and are connected with very high expectations; we look at these images critically because in their daily use, especially when they are duplicated over and over again, they end up becoming ‘transparent.’ The more normal these images become in their daily usage, the more they are overlooked and taken for granted.

If we take a close look at the visual elements of the climate discourse, we can demonstrate the complex ways in which images have the power to reinforce and accentuate the threatening results presented by climatologists, but also the ways in which the power of images sometimes becomes precarious. The impacts climate pictures create, which are discussed in this book, are manifold. To name only a few: they might be expressive, influential, documentary, global or regional, fictional, sublime, prognostic, religious, scientific, rational, historical, emotional, engaging, alarming, artistic, activist, misleading, enlightening or convincing.

We take the view that climate change today should not be reduced to a discussion of it as a scientific object of knowledge, but rather be investigated as a cultural event with its impact and conceptions as well. Societies need cultural images in the broadest sense, transferring global scientific knowledge into regional knowledge and imagined scenarios. For this purpose, alternative languages to scientific language have to be created to make the unimaginable imaginable: what kind of Earth it will be that our children will experience? What does it mean locally when the face of the Earth turns red? How will the total
transformation of our landscapes, cities, factories and transportation systems change society and culture?21

Images might be a means by which visions, phantasies and imaginations could be developed that make climate change more tangible, and hence shape how we see this world and behave in it. Images in the Anthropocene become a crucial way of detecting climate change, hence it is necessary to pose questions regarding their reality and construction.

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