



The Future as Catastrophe

*Imagining Disaster
in the Modern Age*

Eva Horn

THE FUTURE AS CATASTROPHE

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IMAGINING DISASTER IN
THE MODERN AGE

EVA HORN

TRANSLATION BY VALENTINE PAKIS

Columbia University Press
New York



Columbia University Press

Publishers Since 1893

New York Chichester, West Sussex

cup.columbia.edu

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Originally published in German as *Zukunft als Katastrophe*

(Frankfurt: Fischer, 2014).

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Library of Congress Cataloging-in-Publication Data

Names: Horn, Eva author. | Pakis, Valentine A. translator.

Title: The future as catastrophe : imagining disaster in the modern age / Eva Horn;
[translated by Valentine Pakis].

Other titles: Zukunft als Katastrophe. English

Description: New York : Columbia University Press, 2018. |

Includes bibliographical references and index.

Identifiers: LCCN 2018008908 (print) | LCCN 2018022545 (ebook) |

ISBN 9780231547956 (e-book) | ISBN 9780231188623 (cloth : alk. paper) |

ISBN 9780231188630 (pbk. : alk. paper)

Subjects: LCSH: Fiction—History and criticism. | Disasters in literature. |

Future, The, in literature. | Disaster films—History and criticism. |

Future, The, in motion pictures.

Classification: LCC PN3352.D57 (ebook) | LCC PN3352.D57 H6713 2018 (print) |

DDC 809/.933582—dc23

LC record available at <https://lcn.loc.gov/2018008908>



Columbia University Press books are printed on permanent
and durable acid-free paper.

Printed in the United States of America

Cover design: Noah Arlow

Cover image: © Peder Norrby

CONTENTS

Acknowledgments vii

INTRODUCTION 1

1. LAST MEN 21

2. CATASTROPHE WITHOUT EVENT:
IMAGINING CLIMATE DISASTER 55

3. SURVIVAL:
THE BIOPOLITICS OF CATASTROPHE 89

4. THE FUTURE OF THINGS:
ACCIDENTS AND TECHNICAL SAFETY 134

5. THE PARADOXES OF PREDICTION 174

CONCLUSION 227

Notes 239

Bibliography 261

Index 275

ACKNOWLEDGMENTS

The idea of dealing with our sense that the future that is headed toward disaster first came to me in 2008, in the moment of the financial crisis. I was struck by the feeling that we were all waking up to a future that was less and less predictable and that we could not ever prepare for. As a literary scholar, I wanted to know more about the cultural history of this feeling—and found that it had been there all along, accompanying modernity's trust in an ever-brighter future like a dark shadow. Many friends and colleagues, students, and interlocutors have left their traces in this book, in the form of arguments and objections, encouragements, challenges, or generously offered ideas.

Early on, Nitzan Lebovic invited me to a conference in Tel Aviv on the Politics of Time, giving me an occasion to present some rough ideas on the aporias of foreknowledge. He also pointed out to me the biopolitical subtext of many disaster movies. Friedrich Balke had me come to Weimar to discuss some of these ideas further within the context of film and media theory. Michèle Lowrie invited me to a conference on Security at NYU in 2009, where I discussed my reading of *12 Monkeys* and was introduced to John Hamilton's ideas on the topic. Three years later, Michèle gave me the occasion to discuss my thoughts on Byron at the University of Chicago with her, Eric Santner, David Wellbery, and Anselm Haverkamp, who gave me a better understanding of the darkness of Byron's anthropology. An early encouragement to write on the future from a humanities

perspective came from Harald Welzer. Ulrich Bröckling, whose ideas on prevention were crucial for parts of this book, gave me an excellent commentary on chapter 5. The first reader of the book's German manuscript was Isak Winkel Holm in 2013, who was so knowledgeable on the entire subject that, having met him only late in the writing process, I briefly wished to start all over again. He saved me from that impulse by giving me a brilliant and thorough commentary on my early manuscript. Pál Kelemen and his students, by inviting me to Budapest during the last stages of writing in 2013, helped me strengthen the general outline of my book. My students in Vienna, accompanying the development of my book at various stages, forced me to clarify many details of my readings and the book's historical narrative. Through his continuing encouragement and insistence, my editor at Fischer Verlag, Alexander Roesler, was crucial in eventually getting the book to the finish line. My assistant, Martina Süess, brought the manuscript into a shape that finally started resembling a book.

This is a shortened and updated translation of my book *Zukunft als Katastrophe*, which came out in German in 2014. I wish to thank Wendy Lochner for her confidence in me as an author new to Columbia University Press. I am grateful to the two anonymous reviewers who made excellent suggestions on how to change the manuscript for the English edition. Ben Robinson oversaw my editing and secured the image rights. His comments helped make the English version a shorter, more concentrated version of the German edition.

Writing about the future as catastrophe is challenging, intellectually and otherwise. I dedicate this book to those who have taught me how to dwell in the present: my friends.

THE FUTURE AS CATASTROPHE

INTRODUCTION

THE WORLD WITHOUT PEOPLE

A man is speeding through Manhattan in a sports car, racing down Fifth Avenue toward Midtown. Although it is daytime, the streets are empty. Cars are parked on the side of the road, but otherwise nobody is there. A suspicious amount of grass is growing through the cracks in the asphalt. The camera pans high above the rooftops, and we see that the man is the only person in the city and that his car is the only thing moving, its motor's distant humming the only sound. In Times Square, the grass is shoulder high, and deer are grazing. What was once a flurry of crowds, advertisements, and chaotic traffic is now overgrown, peaceful in the afternoon light of an Indian summer.

The opening credits of the film *I Am Legend* (2007) are like the fantasy of a weary city dweller: a deserted metropolis, plants overrunning the eternally busy streets. Complete silence.¹ The last living person in this empty city, Dr. Robert Neville (Will Smith), suddenly has the entire city to himself. He is free of the burdens imposed by incessant social contact and by a civilization whose familiarity with plants and animals was limited to parks and household pets. Yet the film is not about an idyllic return to nature. It is about the ultimate catastrophe—the end of humanity. Neville is the lone survivor of a manmade epidemic that has depopulated almost the entire world. He is the Last Man, both a witness to and a victim of the



FIGURE 0.1 New York after the end of humankind: Fifth Avenue overgrown with plant life.

Source: Still from *I Am Legend* (2007).



FIGURE 0.2 Humans go, the wilderness returns. The last man, Dr. Robert Neville (Will Smith), hunting deer in Midtown Manhattan.

Source: Still from *I Am Legend* (2007).

end of the human species. Nevertheless, this image of a quietly decaying, empty New York is more than just a horrifying scenario (fig. 0.1). It is also a secret desire: an image of postapocalyptic peace that can only come when mankind has finally vanished (fig. 0.2).

In recent years, the image of a world without people has gained a symptomatic popularity.² In his nonfiction bestseller *The World Without Us*

(2007), Alan Weisman has imagined the future decay of cities and infrastructure in the wake of mankind's extinction. Weisman's book was so popular that it inspired the television series *Life After People* (History Channel). The book describes locations abandoned by humanity, showing how quickly houses and prominent architectural landmarks deteriorate after the departure of the humans who maintain them. Concrete will crumble; steel cables, snap; and bridges, fall apart. Weeds will grow rampant, and animals will shelter in our high-rises. Weisman presents a picture of a world finally "relieved" of the pressure placed on it by humanity:

Look around you, at today's world. Your house, your city. The surrounding land, the pavement underneath, and the soil hidden below that. Leave it all in place, but extract the human beings. Wipe us out, and see what's left. How would the rest of nature respond if it were suddenly relieved of the relentless pressures we heap on it and our fellow organisms?³

Weisman's scenario of a future without man where nature has taken over is also one of a return to the origins *before* mankind—just as Manhattan in *I Am Legend* gradually comes to resemble the overgrown rocky promontory that, just four centuries ago, was known as Mana-hatta. The narrative of humanity's sudden (and slightly miraculous) disappearance is strangely comforting. Once humans are gone from the earth, their vestiges will soon vanish. Its natural balance restored, the world will bloom and flourish again, a Garden of Eden, a return to the beginning. This is a narrative of sickness and healing, of pressure and its release—told by the very being that was the sickness. Humankind blissfully dreams of its own extinction.

The same story can also be told from a slightly different point of view. One hundred million years from now, a spaceship with a crew of alien paleontologists lands somewhere on the "Great Northern Continent" of the Earth. In a deep canyon, they come across a broad stratum of rock in which they discover metal and stone artifacts: signs of an ancient and long-extinct civilization. In the same stratum, however, they also find traces of a great catastrophe that must have drastically altered the living conditions on the planet. What the alien researchers are analyzing are the remains of humanity, preserved for millions of years.

This story is told by the geologist Jan Zalasiewicz in his book about the long-term archaeological traces that human beings will leave on the face of the earth.⁴ Zalasiewicz's posthuman narrative is used to introduce the geological term "Anthropocene." The Anthropocene designates the current epoch, in which it has become clear that humans will leave an indelible geological impression: "Since the start of the Industrial Revolution, Earth has endured changes sufficient to leave a global stratigraphic signature distinct from that of the Holocene or of previous Pleistocene interglacial phases, encompassing novel biotic, sedimentary, and geochemical change."⁵ Humanity, in other words, is not just a fleeting disease on the planet. Its impression will not simply be obscured beneath plants and sediment but will last for millions of years. While Zalasiewicz focuses on our geological agency and everlasting effect on the planet, Weisman emphasizes the transient nature of human achievement and structures. But both narratives are based on an apocalyptic fiction in which humankind will have vanished and all that will remain of it are scraps or a geological stratum.

Both narratives are symptomatic of the present relationship to the future. They adopt an impossible postapocalyptic standpoint: Humankind looks back upon itself *after* its end. It is a gaze in the future perfect, a future that *will have been*. This perspective, that is, a gaze looking back on the future *as past*, is emblematic of our current relation to the future. And this relation to the future seems to be inevitably dependent on narratives, fictions, or fictional modes of thought—even in the most nonfictional genres. Given Zalasiewicz's diagnosis that humans have entered the epoch of the Anthropocene, it is somewhat ironic that humans are dreaming of their own extinction in the very epoch named for the indelible trace they will have left in the geohistory of the planet. Remarkably, however, both postcatastrophic stories are strangely discreet about the event that has wiped out humankind. Weisman speculates briefly about a *Homo sapiens*-specific virus that could kill everyone in a single stroke, but his book makes no mention of what happened to the seven billion corpses. Humans are just magically gone.⁶ Tellingly, both thought experiments are about a catastrophe without disaster, death, and destruction, as though we were looking back at our demise from a distant future, as alien witnesses to our own end.

THE FUTURE AS CATASTROPHE

The fiction of a world without people is symptomatic of a currently pervasive apocalyptic fantasy. It extends from mainstream movies to scientific nonfiction and from philosophical essays to the novel. Clearly, this fantasy participates in the breakdown of the modern order of time, recently analyzed by Aleida Assmann. She describes the disintegration of a temporal order in the modern age in which the future was still an “auratic key concept,” a space of hope and planning, a locus of utopia.⁷ Today’s conceptions of the future could not be further removed from such optimism. Their tense is the future perfect, and their object is the future as catastrophe. This fantasy—its contents, sources, political functions, and epistemological implications—is the topic of the present book. The fantasy of the future as catastrophe is the emblem of a new, highly ambivalent attitude toward the future, marked by a strange fixation with catastrophe as a moment when an ultimate truth is revealed.

Images of catastrophe and its aftermath have taken hold of today’s popular imagination. The “apocalyptic tone”⁸ of the 1980s has been revived in a wide variety of media and genres: in film (from Roland Emmerich to Lars von Trier), in literature (from Cormac McCarthy and Paolo Bacigalupi to Michel Houellebecq), in popular works of nonfiction, in computer games, in sociological and philosophical discussions (from Ulrich Beck and Peter Sloterdijk to Timothy Morton and Bruno Latour), in the natural sciences (from geology to climatology), and even in the notoriously optimistic and growth-oriented field of economics. Sociology describes our current society as a “risk society” marked by self-generated yet widely distributed dangers. The German sociologist Ulrich Beck has analyzed a “global risk society” in which threats are delocalized and incalculable.⁹ Jared Diamond’s study of collapsing societies became a bestseller, as did Harald Welzer’s bleak prognosis of imminent “climate wars” and resource conflicts.¹⁰ James Hansen, one of the earliest scientists to warn about the threat of climate change, recently corrected his own prognosis with the following words: “I was too optimistic.”¹¹ James Lovelock, who in the 1970s developed the “Gaia hypothesis” about the biosphere as a macro-organism, has lately turned to foretell “Gaia’s revenge.”¹² Almost every month sees a

new movie imagining a more or less spectacular end of the world (2012, *Melancholia*, *Seeking a Friend for the End of the World*, 4:44: *End of the World*), contemplating the extinction of the human race (*Oblivion*, *World War Z*, *Contagion*), or taking place in a deserted world after the disappearance of humankind (9, *Wall-E*, *The Book of Eli*, *After Earth*). Other movies explore the dissolution of social order (the Mad Max series, *Time of the Wolf*, *Hell*, *The Road*). The apocalyptic obsession of current cinema has even become the object of parody, as in *This Is the End* from 2013. The grim-mest postapocalyptic novel of recent years, Cormac McCarthy's *The Road*, won the Pulitzer Prize and was made into a prominent film starring Viggo Mortensen and Charlize Theron.

The present feels as though it is stumbling toward an end. Today's idea of the future has been succinctly put into words by a position paper from the reinsurance company Swiss Re: "The future is not a question of distance in time. The future is what radically differs from the present."¹³ We see the future as a radical disruption with regard to the present, something we can hardly anticipate or prevent. It might consist of a nuclear meltdown the day after tomorrow or an end of the world in millions of years—either way, it will be radically different from everything we know in the present.

The term for such unforeseeable disruption is old, and it initially referred to the realm of literature. The Greek word καταστροφή (*katastrophē*) is a compound made up of the preposition κατά (*kata*) "down, downward" and the verb στρέφειν (*strephein*) "a turning." Literally, "catastrophe" thus denotes a "sudden downward turn." Aristotle referred to it as a *peripeteia*, a reversal in which a situation turns into its opposite, from fortune to misfortune.¹⁴ In poetic theories after Aristotle, however, *katastrophē* came to denote not the turning point but rather its *result*. In this sense, "catastrophe" is the final part of the plot (the denouement), when everything has taken its ultimate course—for better or for worse.¹⁵ It is an ending, a conclusion—something that *will have come*. This does not necessarily have to be an unhappy ending. Only at the end is it possible to survey and make sense of a given story. The poetological term eventually made its way into theology and the natural sciences in the early-modern period, where it came to designate a purely negative event.¹⁶ For theologians, a catastrophe is an act of divine retribution; for historians, a political revolution; and for scientists, it implies the "decay, corruption, and dissolution of nature," as David Hume put it.¹⁷

During the twentieth century, the term “catastrophe” eventually transformed into a “ubiquitous category of crisis that gradually came to denote a process instead of an event.”¹⁸ It thus became a keyword for a modern historical sense of the present, the sense of looming danger. “Something is taking its course,” as it is put in Beckett’s *Endgame*.¹⁹ The present is seen as marked by an imperceptible process of doom. This feeling was captured most succinctly by Walter Benjamin: “The concept of progress is to be grounded in the idea of the catastrophe. That things ‘just go on’ is the catastrophe. It is not that which is approaching but that which is. Strindberg’s thought: Hell is not something which lies ahead of us,—but *this life here*. Redemption looks to the small fissure in the ongoing catastrophe.”²⁰ Benjamin’s understanding of the term is thus the opposite of its original meaning as a sudden turn of events. For him, the catastrophe is that *there is no longer any event*. What is horrifying is the continuity, the fact that the present keeps on unfolding into the future—its inexorable perpetuation.

The present consciousness of an imminent yet entirely unpredictable catastrophe combines precisely these two opposed conceptions: on the one hand, the sense of a break from the present, which derives from poetics but continues to inform even the concept of the future used by insurance companies; on the other, the idea formulated by Benjamin that the true catastrophe is the continuation of the here and now. The idea of the future as catastrophe is a combination of continuity and discontinuity, the notion that the very perpetuation of the present is heading toward a disastrous turn.

Today, the most common metaphor for this is the “tipping point.” It signifies the point at which a previously stable condition suddenly becomes unstable, tips over, and turns into something qualitatively different. Malcolm Gladwell has described the tipping point as the moment of achieving a critical mass, when a slow swelling gives way to exponential proliferation. According to Gladwell, the tipping point of social processes involves the introduction of something entirely new simply by means of a few well-connected people beginning to spread, for example, a virus, a brand, or a particular form of social behavior.²¹ Such turning points, however, are not restricted to social dynamics. They are crucial elements of any complex system, such as financial markets, the climate, or the ecosystem. Here, the tipping point represents the threatening possibility that, through

the simple accumulation of small steps and minute acts, a situation can go out of balance. Impending tipping points of this sort can be observed nearly everywhere: in the climate, the ecosystem of the oceans, the welfare state, financial markets, logistic systems, and consumer behavior.

The problem is that such systemic turning points are hard to predict. Since self-regulating systems (like ecosystems, markets, or societies) can keep themselves in balance for a long time before they suddenly reach the dangerous point in question, they may seem stable while actually heading for a crisis. The concept of the tipping point means that, at some point, self-regulation will no longer work, that a system will become “saturated” (as the phenomenon is called in chemistry), or that (to borrow an expression from physics) a “critical mass” will be reached. Tipping points are thus not caused by human decisions. Rather, they are phenomena of spontaneous emergence. A critical change in conditions will develop out of a barely noticeable tendency, out of an accumulation of tiny steps. Inevitably, such changes are hard to predict as they are brought about by minuscule quantitative growth or seemingly negligible side effects. They are veiled by an appearance of stability suggesting that everything will go on as before.

Today’s awareness of the future as catastrophe consists in the feeling of being at a tipping point, at a moment when simply going on with our customary lifestyles will gradually lead to catastrophe—yet one that we can hardly anticipate in its scenario and repercussions. This is why the disaster scenarios currently most discussed revolve around the collapse or disruption of highly complex systems. Global warming, which currently dominates concerns about a major destabilization of the earth’s life system, can thus be understood as a name used to render this type of catastrophe representable as an object of study and concern. Climate change, to which I will devote a whole chapter, is nevertheless not the only problem at hand, as is pointed out in the current debates about the Anthropocene, which cannot be reduced to global warming. What we are dealing with is a *metacrisis* composed of many interrelated factors, dispersed into a multitude of scenarios, and distributed among many different subsystems.

As this book will argue, this novel type of catastrophe is a *catastrophe without event*. It may have many different forms of “outbreak,” but it essentially (and paradoxically) consists in the sheer perpetuation of

current policies, lifestyles, and modes of managing the future. It lacks identifiable agents, a precise moment in time, and a definite location in space, and it is not confined to any particular single scenario. The catastrophe without event is characterized by disparate, diffuse, and ultimately undefinable scenarios, temporalities, localities, and processes. The bleak underlying feeling today is that the continuation of the present will inevitably lead to a radical break or collapse. No one knows, however, exactly how this will come about.

CATASTROPHE AS REVELATION

The cacophony of scientific, political, and fictional depictions of catastrophe raises the question of what is at stake in them all. What compels us to imagine ourselves as the last men on earth, as in *I Am Legend*? What latent conflicts and desires are processed or brought to the surface by these fantasies? How does our predilection for disaster stories relate to our inability to make political decisions that would stall the looming dangers coming from, for example, environmental damage or high-risk technology? Which imagined disasters are inherent to our concepts of precaution, security, and safety? Imagined disasters illustrate potential dangers and risks that we cannot fully grasp. The imagination of disaster seems to shed a light through the fog of an overly complex world, to make things manageable and to promise to reveal an essential truth.

So why does the awareness of an impending crisis go hand in hand with a remarkable inability to act, both politically and individually? Why are we so eager to read books about the demise of humanity while remaining politically passive, neither protesting on the streets nor giving up our cars? Hardly anybody spends their days stocking a private bunker with groceries; we do not even take out more home insurance. We are on high alert while also lame and indecisive, repeatedly conjuring up looming catastrophes and immediately forgetting them.

The aim of this book is to decipher this ambivalent engagement with catastrophe as a symptom of the modern relation to the future. My concern is not to provide a social or psychological analysis of collective anxieties. The book aims to examine the images, narratives, and

scenarios—that is, the fictions—that define and inform this relation. These fictions are part of a social dimension that has become known as the “collective imaginary.” According to Charles Taylor, images, myths, stories, and symbols influence the ways in which “people imagine their social existence, how they fit together with others . . . the expectations that are normally met, and the deeper normative notions and images that underlie these expectations.”²² Shared conceptions, attributions, narratives, images, and metaphors are modes by which we understand “reality,” from the basic elements of a given lifestyle to semiotic systems, the effable and ineffable, and the relations among various subsystems of society. The future and our collective and individual relation to it are part of this imaginary. Knowing and communicating about the future is impossible without stories: stories that “look back” from the future to the present or that extrapolate from past predictions about what is to come. Such narratives structure the way we anticipate and plan for the future and, above all, how we try to prevent catastrophic futures from occurring.

Our relation to the future is thus unthinkable without metaphors, images, visions, or hypothetical scenarios of potential future worlds. In this regard, Ulrich Beck has pointed out the decisive role of “staging” risks and dangers: “For only by imagining and staging world risk does the future catastrophe become present—often with the goal of averting it by influencing present decisions.”²³ Fictional scenarios of the future in literature, film, popular culture, and popular nonfiction are such “stagings” as much as they are metaphors (such as “Lifeboat Earth” or “Spaceship Earth”)²⁴ or symbols (from the mushroom cloud to the hockey-stick graph of climate change). They are also the sites for *negotiations* about the future and the measures used to securitize it, whether with optimism or alarm, with skepticism or precaution, “prepared for anything” or willing to accept risk. They inform the expectations and anxieties we have regarding the future. In doing so, they are neither mere symptoms of the collective psyche nor simply media of ideological indoctrination but epistemic tools to understand and discuss potential futures. They furnish modernity’s open and plannable future with images, narratives, and affects. With their vivid images and exceptional plots and characters, they are more poignant than sociological averages or the humdrum predictions of technocrats and futurologists. Future fictions thus create not only the future

but, above all, the present, that is, the reality in which we live, or at least our notion of it.

Catastrophes are perceived not just as a break from a given reality but rather as a revelation of underlying structures, the irruption of something “real” yet imperceptible in everyday life. Slavoj Žižek has remarked that notions of the “real”—that is, of a reality beneath everyday social surfaces—are themselves structured by fantasms that we encounter at the movie theater, in literature, in the rhetoric of politicians, and in popular science.²⁵ According to Žižek, these popular fantasms structure what we regard to be probable, possible, expectable, and authentic; they influence the imaginary patterns and cognitive schemes through which we perceive and interpret reality. This notion of the “real,” which tends to come to our attention in emergency situations, unanticipated turns of events, moments of civil unrest, and the collapse of social institutions, is thus itself an imaginary construct. As such, it is something to be analyzed on the basis of its fictional sources and stages.²⁶ Examples of such fantasms include discussions of “emergencies” in which different social rules ought to be applied for the sake of survival; the notion of mutually assured destruction (a.k.a. MAD); or the hope, which underlies every act of prevention, that our knowledge of the future is accurate enough to be the basis of an intervention into the course of events.

Unlike other forms of relating to the future—such as promises, plans, utopias, or hopes—future catastrophes are seen primarily in the light of their obviation or prevention. This is why every depiction of impending catastrophe claims to reveal something that *already exists in the present*. With the disaster, something that we previously just feared, suspected, imagined, or possibly even misunderstood will become an event and take on a tangible—horrific—form. Catastrophes are emergencies that suddenly claim to unveil the “true face” of everything that had *already* been looming as a danger. In predicting or imagining a catastrophe, what had existed only in hypotheses, statistical probabilities, or prognoses all of a sudden appears with a clear and palpable shape.

The epistemic effect of catastrophe scenarios lies in the promise of revelation. In this sense, they are always *apocalyptic*—that is, revelatory: They expose a hidden “truth” about humanity, both about the inner essence of individuals and about the bonds that constitute the texture of

society. Disasters thus illuminate society under stress and reveal the collective or individual reactions to this stress, from self-sacrifice and solidarity to the reckless fight for survival. Catastrophes test human beings, their strength and resilience, the sustainability of their bonds, and the ability of their social institutions to withstand a crisis. They show what people are made of beyond the cocoon of intact civilization. Imagined catastrophes thus produce a specific form of anthropology by creating exceptional situations for decision making, both individual and collective. They thereby reveal which values and possessions really count, which communities are sustainable, and which are fragile. The basic idea is that, when push comes to shove, the true essence of our existence will come to light.

ABOUT THIS BOOK

This book is neither a psychological study nor a cultural history of catastrophic visions of the future. It is rather a historical analysis of how imaginative depictions of future catastrophes have structured collective realities. Such realities are contingent and subject to historical change. The catastrophic imaginary traced in this book emerges in Romanticism with the figure of the Last Man, shapes the fantasies of the end of humankind in the Cold War, and still haunts current disaster fiction. The historical span this book is concerned with—from 1800 to the present—is best framed by two literary texts that, though written nearly two hundred years apart, depict almost identical catastrophic scenarios: Byron's poem "Darkness" (1816) and Cormac McCarthy's novel *The Road* (2006). They mark the beginning and provisional end point of a specifically modern notion of catastrophe. In their radical view of humanity and of nature after our demise, both texts combine a sharp contemporary awareness of crisis with an insight into the ethical dimensions of catastrophes. They show how a disaster might affect not only our environment but also the essence of humanity.

Tellingly, both McCarthy's and Byron's texts revolve around a collapse of the climate. They portray a world gone dark and cold, a world after the

end. In the chill of a final winter, all of life has come to a halt except for a few last survivors, who struggle in despair to postpone their death. The point of both works is that the end of nature is also an end to that which makes human beings what they are. The catastrophe exposes the inherent fragility of the world and humankind: “The frailty of everything revealed at last,” as McCarthy’s novel puts it.²⁷ Byron, too, develops an anthropology of catastrophe that denudes man of all his better and humane features but in an almost more radical way. Faced with disaster, Byron’s last men evince no rationality, solidarity, or sympathy but rather prove to be wretched, selfish, and cruel: “All hearts / Were chill’d into a selfish prayer for light,” and “no love was left.”²⁸ What this vision of destruction demonstrates is the existential dependency of human beings on the fragile world they inhabit, exploit, and pretend to control. Both texts encapsulate their devastating anthropological diagnosis in an image of the ultimate taboo: cannibalism. Yet the image of cannibalism is perhaps not merely the epitome of human depravation in a moment of crisis. It is also an allegory for a human relationship to the world that consists primarily of consumption and waste. When the earth is no longer there to nourish it, humanity will turn on itself as the last resource to be exploited.

I will begin by offering a brief summary of the history of the catastrophic imagination. Based as it is on fictional disaster scenarios, this book is an attempt to provide, as it were, a *historical* diagnosis of our *present* relation to the future. This also means, however, that historical fissures need to be taken into account. Without understanding how the classical notion of the apocalypse, derived from the Book of Revelation, had come to an end around 1800, one might be tempted to ascribe the continuing presence of apocalyptic motifs and symbols to a continuity of an eschatological idea of history. Chapter 1 will give a brief history of the end of eschatological thought and the rise of a purely secular notion of catastrophe. Without an understanding of the specific attitude toward catastrophe and security that was developed in the nuclear age, it would be impossible to grasp the bewildering novelty of our current idea of the future as a “catastrophe without event.” As Walter Benjamin remarked, history can serve to illuminate the present. The historical examples of the catastrophic imaginary serve as “constellations” in which “what has been

comes together in a flash with the now.”²⁹ The interpretations presented in this book are meant to reveal precisely such flashpoints, where historically contextualized texts come together with our present concerns, fears, and epistemic, moral, and political dilemmas.

The following chapters begin with two historical scenes: Romanticism and the Cold War. Whereas Romanticism dismissed the traditional theological understanding of catastrophe and thereby laid the foundation for a genuinely modern and secular conception of the future, the atomic age took into account the consequences of mankind’s active and conscious self-annihilation (chapter 1). From that point on, the future as catastrophe suddenly seemed like an imminent possibility with which human beings had to contend. If the second half of the twentieth century lived under the spell of nuclear war as a politically viable disaster, today this scenario has given way to a type of catastrophe far less tangible: the looming catastrophe without event, whose most poignant—yet still uncannily opaque—image is that of climate change. My historical overview thus arrives in the present with a discussion of past and current models of the climate catastrophe (chapter 2). Climate change represents a catastrophe of an entirely new kind, one that has replaced the great historical caesura of a nuclear strike. The uncanny and hypercomplex transformation of our life-worlds that climate change brings forth has become the image of an unpredictable future composed of multiple complex and interrelated disasters.

At this point it is possible to outline three central areas of current catastrophic thinking that have arisen from the genealogy of the modern catastrophic imagination. The first raises the question of survival, more specifically, of the social, political, and individual dilemmas posed by situations of survival (chapter 3). Here I will analyze present-day survivalist movements and recent popular catastrophe films as fantasies of society in a state of emergency. Both are concerned with the biopolitics of survival, that is, with the question of who should be allowed to survive and who can, under extreme circumstances, be left to die. Second, imagined catastrophes engender regimes of safety and prevention. My final two chapters are devoted to the prevention of future catastrophes: to the matter of technical safety, on the one hand (chapter 4), and, on the other, to the paradoxes of foreknowledge, prevention, and preemption (chapter 5). In both cases, my aim is to uncover the narrative structures that

underlie the models of safety and security and that inform the politics of prevention. While technical safety is nothing but the anticipation of a future accident whose “prehistory” has to be reconstructed, prevention of social disasters has to take a standpoint in a fictitious future in order to look back at the present. Yet the narratives that are at the basis of any kind of foreknowledge and prevention also give accounts of their own tragic failures. All knowledge of the future contains a degree of *non-knowledge*, a constitutive misconception inherent to any effort to shape and prevent future events. If the future can be grasped only in the form of narratives, these narratives reveal the limits of our relationship to the future.

Fictions of the future are thus models in which the inextricable link between knowledge and nonknowledge is spun out into a potential world—a world imbued with what is *not yet known*. In a present characterized by a catastrophe without event, fictions are a way of giving tangible shape to the intangible. They create something that can be narrated, represented, and experienced—a concrete and model situation in which the future can be grasped and thus emotionally processed. Narratives can turn the threatening future into the object of subjective consciousness and individual affect. Through fiction, we may not be able to master the uncanniness of looming catastrophe, but at least we are able to keep it in sight.

The material examined in this book is not restricted to conventional forms of fiction such as novels, images, or films. In a broader sense, fictions are also the figures of thought and speech used by philosophers or sociologists, figures such as “the bomb” (which haunted the Cold War), “Lifeboat Earth” (thought to be always “too full”), or the “Anthropocene” (which implies humanity’s retrospective examination of its own effects on the planet). Not least, fictions are also scientific extrapolations, hypotheses, scenarios, and simulations, including, for example, Malthus’s sinister calculation of a future subsistence crisis, the expectation of global cooling that haunted the nineteenth century, the Cold War doctrine of mutually assured destruction, the reports issued by the Club of Rome, the so-called nuclear winter modeled by the TTAPS team in the 1980s, and today’s climate simulations of global warming. The convergence of aesthetic and scientific depictions of the future demonstrates how literature and science, fiction and politics mutually inform and comment on one

another. They are forms of experimenting with and exploring a space that is inaccessible to knowledge based on experience or observation. To juxtapose literature, images, or films alongside scientific scenarios and political metaphors is also to gain a clearer view of the nature of these experiments and thus a better understanding of the collective imaginary. Unlike scientific scenarios, which are created within specialized academic disciplines, aesthetic fictions are not limited to a particular object or epistemological method. Rather, they are interested in multiple perspectives and forms of knowledge—and in the aporias and contradictions that thereby emerge. While science may give us the brute facts on such things as climate change, mutation rates after a nuclear strike, the etiology of large-scale accidents, resource shortages, or the destruction of ecological systems, novels and films can produce a “thick description” of their consequences both for the individual and for humanity at large.³⁰ They can provide internal *and* external perspectives—a dual viewpoint of both the observer and the victim of a catastrophe.

This dual perspective of involvement and reflection—of subjection and distance—is most clearly embodied in the image of the Last Man, a figure from Romanticism that persisted throughout the Cold War and into the present. This literary figure is the expression of an aesthetic representation that always and simultaneously demonstrates the conditions of visibility and effability. Literary disasters do not present “facts” about catastrophes but rather make transparent the schematics through which we *perceive* disasters or in which potential disasters can be *imagined*. To borrow a term from Richard Grusin, they are “premediations” of disasters that are only accessible to us in the specific forms of their conveyance.³¹ It is in the *form* of fictions that the underlying ratio of blindness and insight can be elucidated, a ratio inherent in all forms of foreknowledge. Fictions illuminate not only what we know about the future but also the *conditions* of such knowledge and the misconceptions that necessarily accompany it. Fictions thus design narratives that explore the relationship between knowledge and nonknowledge, certainty and uncertainty, plannability and loss of control. In doing so, they translate the abstractness of these epistemic aporia into concrete narratives, perceptions, and affects. It is only on the basis of fictions that we are able to access the difficulties of our relation to the future as individuals, discuss them collectively, and deal with them politically.

ANALYZING SCENARIOS

One concept that has proven to be especially useful in my analysis is the *scenario*, which despite its origins in screenwriting has not been a common term in literary and film criticism. A scenario is an instrument for exploring possible futures. The technique of scenario analysis was developed by the strategist Herman Kahn during the Cold War in order to simulate the options and potential developments of a nuclear war, a type of conflict entirely novel at the time and that did not allow for any experimentation. Even if scenarios are invented worlds, they are conceived as *possible* processes with a given starting point in known reality; as potential courses of events, they are meant to clarify which factors might play important roles in deciding on the situation's outcome. Kahn defines scenarios as follows:

A scenario results from an attempt to describe in more or less detail some hypothetical sequence of events. Scenarios can emphasize different aspects of future history. . . . The scenario is particularly suited to dealing with several aspects of a problem more or less simultaneously. By the use of a relatively extensive scenario, the analyst may be able to get a feel for events and the branching points dependent upon critical choices. These branches can then be explored more or less systematically. The scenario is an *aid to the imagination*.³²

Clearly, scenarios, which became one of the most important tools of futurology, are neither prognoses nor visions of the future; rather, they are analytic explorations of *possibilities*. If a situation *x* should arise, what would be the best course of action in response (*a*, *b*, or *c*)? What might the possible consequences of these responses be? Which factors will determine how this situation might unfold? What difficulties might emerge? How large would their role be in relation to other factors? At what points will decisions have to be made, and what consequences will they have? The scenario technique is an experimental form of storytelling that allows possible courses of action to be “tested.” Consequently, there is not one “scenario” in the singular but only “scenarios”—multiple divergent processes or “alternative futures.” They ask: *What would happen if* . . . ? and

answer with a set of narratives that are both accurately fact based and, at the same time, have to be necessarily hypothetical and highly creative. Their epistemological advantage over abstract models of the future lies in their ability to go into detail, offering a thick description of the future that is meant to analyze and understand the complexity of its often simultaneous and interrelated aspects. Moreover, they highlight the branching points created by critical choices. By enabling decision makers to understand these crucial branching points and their diverging outcomes, scenarios have been important tools in anticipating, planning, and shaping the future ever since the Cold War.

In situations where experimentation is impossible (for which the nuclear war was a paradigmatic example), scenarios open up a different, *third* realm of knowledge, a realm in which experiments and experiences can be worked through without causing harrowing repercussions in reality. They thus serve as a paradigmatic case of the way in which our relation to the future depends on narrative structures, be it in the form of foreknowledge, planning, precaution, or safety measures. Narratives do this not only in literature but also in scientific or technical analyses of the future—basically in any kind of hypothetical narrative that serves to explore potential sequences of events. As media of time-axis manipulation, narratives can unfurl a sequence of events retrospectively, from a future perspective that represents the branching points where decisions are made in favor of one future over another. Unlike prophecies or visions, which always predict a single outcome, hypothetical narratives underscore the contingency of future knowledge by calling attention to the critical decision points or “bifurcations” (as Jorge Luis Borges called them) that will determine which sort of future might actually occur.

In terms of methodology, this entails a slight but decisive shift in my treatment of fictions. The following chapters are *not* primarily concerned with plots and narrative structures, metaphors and motifs, characterizations, stylistics, or the many language games literature plays, from rhetorical figures to style. My focus will rather lie on the *margins* and *backgrounds* of the fictional worlds presented. I read these worlds as *scenarios*. This means concentrating more intently on the backgrounds than on the foregrounds of the texts I read: not so much on the plot but on the world in which it is set, not so much on the characters but on the implicit conditions that make them act as they do. In the field of

narratology, this world of action is called “diegesis” and is treated as something distinct from the story. According to Étienne Souriau, it is a “totality of beings, things, facts, events, phenomena, and contents within a spatio-temporal framework,”³³ or, in Gérard Genette’s words, it is “a universe rather than a train of events (a story).”³⁴ What interests me are the parameters of these fictive universes. How did they come about? Such questions require an investigative approach and an eye for details—small clues in the background of the actual plot (such as weather conditions), the material objects that are being used, references to historical technologies, fragments of backstories, minor characters, and so on. In the case of scenarios, storyline is less important than the *conditions of possibility* that allow things to take place as they do. This will be the focus of my readings.

To analyze scenarios is thus to observe the preconditions that enable the world of action. It demands that we treat the imagined universe of a literary text, image, or film *as though it materially existed* and that we approach it not only with historical and cultural knowledge but also with practical knowledge of the world. This is not a matter of plumbing the elements of this world for their symbolic or metaphorical meaning but rather of accepting them as diegetic realities—only in order to marvel at them all the more. To “enter” a diegesis, a fictional universe, is to tap into its context, just as we explore unfamiliar worlds in our everyday lives—not, that is, to understand them as signs or symbols that in turn refer to something outside of this world (in the abstract realms of literary history, philosophy, theology, and so on). To comprehend the scenario of a potential world is not merely to illuminate it with historical knowledge but *also* to do so with a sort of heuristic naivety that is oriented toward descriptions, literal meanings, and “basic” understandings.

This may even mean applying personal experiences and practical knowledge to a world that, having never existed, can never really be known. It is an alien world that alters and shifts our view of the world in which we actually live. Only in such a way can we understand the strange universes of fiction as *possibilities* for our real environment. Just such a possibility is the world presented in McCarthy’s *The Road*. The uncanny and horrifying scenario the novel depicts eventually closes with a puzzling image: that of a trout with labyrinthine patterns on its back, a fish that smells like moss in one’s hand, a fish that no longer exists. It stands

for a world that, as expressed in the last lines of the novel, “could not be put back. Not be made right again.”³⁵ Surely this passage would not have made such an impression on me had I never held a live trout—slimy, cold, and strange, yet with incredibly sensitive, shimmering marbled skin. Reading McCarthy’s book, I was reminded of feeling the cold, twitching fish in my hand, and today I think of it as a token of the world’s strangeness and familiarity—and of its fragility. My aim in this book is to retrace the intricate contours of this fragility.