THE POWER OF NARALIVE

Climate
Skepticism
and the
Deconstruction
of Science

The Power of Narrative

The Power of Narrative

Climate Skepticism and the Deconstruction of Science

RAUL P. LEJANO AND SHONDEL J. NERO Illustrations by Michael Chua





Oxford University Press is a department of the University of Oxford. It furthers the University's objective of excellence in research, scholarship, and education by publishing worldwide. Oxford is a registered trade mark of Oxford University Press in the UK and certain other countries.

Published in the United States of America by Oxford University Press 198 Madison Avenue, New York, NY 10016, United States of America.

© Oxford University Press 2020

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, without the prior permission in writing of Oxford University Press, or as expressly permitted by law, by license, or under terms agreed with the appropriate reproduction rights organization. Inquiries concerning reproduction outside the scope of the above should be sent to the Rights Department, Oxford University Press, at the address above.

You must not circulate this work in any other form and you must impose this same condition on any acquirer.

Library of Congress Cataloging-in-Publication Data
Names: Lejano, Raul P., author. | Nero, Shondel J., author.
Title: The power of narrative: climate skepticism and the deconstruction
of science / Raul P. Lejano and Shondel J. Nero.
Description: New York, NY: Oxford University Press, 2020. |
Includes bibliographical references and index.

Identifiers: LCCN 2020019171 (print) | LCCN 2020019172 (ebook) |
ISBN 9780197542101 (hardback) | ISBN 9780197542125 (epub)
Subjects: LCSH: Climatology—Social aspects. |
Climatic changes—Effect of human beings on. |
Anti-environmentalism. | Rhetoric—Social aspects.

Classification: LCC QC981.45 .L45 2020 (print) | LCC QC981.45 (ebook) |
DDC 577.27/6—dc23

LC record available at https://lccn.loc.gov/2020019171 LC ebook record available at https://lccn.loc.gov/2020019172

1 3 5 7 9 8 6 4 2

Printed by Integrated Books International, United States of America

CONTENTS

Preface vii Acknowledgments xi					
1. Introduction 1					
2. Ideology as Narrative 17					
3. When Skepticism Became Public 38					
4. Skeptics without Borders 81					
5. Unpacking the Genetic Metanarrative 95					
6. The Social Construction of Climate Science 113					
7. Ideological Narratives and beyond in a Post-Truth World 129					
Appendix: List of articles analyzed for Chapter 3 149 Notes 155 Bibliography 169					
Index 183					

PREFACE

Early one March morning in 2017, the press gathered in Washington, DC, in anticipation of one of the first public statements by Scott Pruitt, the newly appointed director of the US Environmental Protection Agency. If they were hoping for headlines, they were not to be disappointed. Responding to a question about the scientific consensus around CO₂ and climate change, he said: "No, I would not agree that it's a primary contributor to the global warming that we see." Pausing a bit, perhaps to take in the stunned silence of the reporters, he added: "We need to continue the review and the analysis."

Several months later, President Donald Trump would announce a plan to pull out of the Paris Climate Accord, stating that it was a misguided initiative and, worse, part of a global conspiracy to attack the US way of life. With the United States' withdrawal, the agreement's inherent weaknesses stood out in bold relief. As of this writing, pledged carbon reductions would amount to barely a third of what scientists estimated would be needed to keep the increase in mean global temperature to under two degrees centigrade.

Reaction to this came fast and furious from all sectors (even from within Trump's own Republican party) and all corners of the globe. It was as if the sky had literally fallen, and the entire climate agenda that Obama, Merkel, and others had carefully and painstakingly crafted together had been taken apart overnight.

The truth is that this was an outcome long in coming. There had been, all throughout Obama's two-term presidency, and well before, a rising tide of antagonism to climate change science. Rather than a sudden wave of disenchantment with the climate change agenda, climate skepticism was a movement that grew steadily and surely over decades, refining (and coarsening) its discourse and expanding its network of sympathizers. Anne and Paul Ehrlich had documented its early beginnings more than twenty years ago. More recent commentators, such as Aaron McCright, Riley Dunlap, Naomi Oreskes, Erik Conway, and

viii PREFACE

others, noted the political lobbying that was gaining in power and influence, fueled by funding from the coal industry and other power players. And the lobbying efforts took root. In a Pew survey in 2016, 66 percent of all moderate Republicans and 85 percent of all conservative Republicans polled rejected the idea that global warming was mostly caused by human activity. The 2019 Pew survey reported these numbers as 63 percent and 84 percent, respectively, which suggests this narrative has a degree of resilience.

A number of scholars have written about the political lobbying and financing of the climate skeptical movement. But there is something more, and deeper, to it than the self-interested machinations of the coal and gas industry and their cronies in Washington. One cannot but observe that there was something powerful about the climate skeptical movement. Their message resonated with people somewhere deep in their psyches, deep enough for the story of colluding, self-serving climate scientists to challenge the primacy of science as the font of empirical truth and knowledge. Deep in the US heartland, conviction about a global conspiracy promoting a "decarbonized" world ran as strong as beliefs in democracy. For some, it was an essential truth that was part of a raging battle between falsehood and the right way. In short, it was a narrative that confounded its critics and captured the public's soul. Millions of US citizens (and, as also discussed, those in other nations as well) profess the belief that climate change research is, in Sarah Palin's words, "snake oil science."

This book is an exploration of the strength of that narrative. In a way, it is also an inquiry into the nature of a new fundamentalism that has captured not just a segment of the US public but also other ideologically torn nations in the developed and developing worlds. The discussion traces the evolution of the narrative over the decades.

The climate skeptical narrative was not just a memorable story spun well. It was, as we argue in this book, a narrative that resonated with the most fundamental aspects of modern culture and the everyday lives of millions of people. It resonated because it was foundational. This book illustrates how, exactly, the narrative operates on the ideological level. Interestingly, the climate skeptical narrative, we argue, is founded upon a more basic (meta)narrative that is not even about climate itself.

The book also explores how the narrative helps create a network of policy actors, business interests, and members of the public. It binds the network and gives it its identity and its playbook. More deeply, we elucidate how certain properties of the narrative have served to isolate this network so that it now precludes dialogue. Climate skepticism is an ideological watershed that has become a core belief for millions of people. It is also a coherent movement that has the power to bind powerful actors into a loose but effective coalition.

PREFACE ix

In the following chapters, we demonstrate how the narrative can do this—create a network and hold it together against a scientific consensus around climate change. We also demonstrate the inextricable link between the narrative and how it is narrated. We employ narrative and critical discourse analyses to illustrate the properties of the climate skeptical narrative that provide it with power and with a moral coherence that can bind people to it. To the best of our knowledge, there has been no such systematic exploration of climate skepticism as storytelling. This volume builds on previous work on how narrative can forge community, especially Lejano's co-authored book *The Power of narrative in environmental networks*, where the concept of the narrative-network was introduced. This present book is thus the second feature in what hopefully will be a continuing *Power of Narrative* series.

Our analysis brings out another interesting dynamic. The ideological discourse and reactionary stance taken up by climate skeptics is beginning to engender similar reactions on the part of some in the scientific community. As we will further describe, ideology seems to beget more ideology in the political discourse overall. The tragedy of this sequence of action and reaction is that progress on deliberation around these contentious issues seems ever beyond reach. The book asks another tantalizing question: Is it possible that the narrative of climate skepticism shares with other narratives a more elemental (or genetic) metanarrative that is common to all of these? What would that genetic plot look like?

Perhaps the most important question taken up is how to understand the ongoing conflict between science and its counter-narrative, an issue that goes beyond climatological concerns. An ideological struggle is raging in every society today. This book is an attempt to not just explain how we arrived at this point but also, though less directly, how we might move beyond it. It speaks to the interests of public policy, both the researchers of policy and political science as well as the practitioners. It speaks to a growing scholarly community around science and technology studies, scholars of the cultural aspects of science who have yet to fully appreciate the narrative properties of scientific discourse. This book aspires to reach a general audience, as well—members of the public who, along with scholars, woke up one morning to find themselves in a different world, and wondered how we got here.

Postscript

As the book goes to press, the world faces the specter of a global pandemic in the form of the novel coronavirus, COVID-19. Initially, President Trump opted to respond to it with a bit of an ideological narrative of denial, using terms like x PREFACE

"fake news" and the "new hoax" (and possibly even linking it to immigration),³ contrary to what health experts were saying. This is related to what we study in this book, which has to do with the social construction and deconstruction of science. As one of the authors noted, we could have replaced the term, "climate skeptical", with "anti-vaxx" throughout the text, and written a book about the pandemic, instead. Given that both climate change and the coronavirus are ultimately crises of humanity, we can only hope that, over time, consensus and more reasoned narratives prevail.

ACKNOWLEDGMENTS

The authors wish to thank Sarah Humphreville, senior editor at Oxford University Press, for her vision and guidance in shaping the book. We were also helped considerably by the insights of the reviewers who evaluated the book proposal and draft manuscript. We also thank Emma Hodgdon at Oxford University Press for managing the production of the book.

We acknowledge the assistance of New York University, which provided a research challenge grant that allowed us to hire research assistants to help in this endeavor, namely Brian Robinson, who sifted through a large amount of text, and Ching Chit Chau, Shreya Sanjeev, and Ma Loisa Tong, who helped us with the preparation of the final manuscript. The grant also allowed us to engage Michael Chua, architect and cartoonist.

We acknowledge the work of Jennifer Dodge who co-authored (with Raul Lejano) an article, "The narrative properties of ideology: The adversarial turn and climate skepticism in the USA," that provided some of the analytical method used to trace the evolution of climate skeptical narratives over time. Chapter 2 makes use of some empirical material first featured in this article in *Policy Sciences*, published by Springer Science+Business Media.

Similarly, some textual data used in chapter 5 first appeared in an article in the journal *Bulletin of the American Meteorological Society*, "Ideology and the narrative of climate skepticism," authored by Raul Lejano and published by the American Meteorological Society.

Some of the conceptual roots of this book trace back to Lejano's long-standing collaboration with Helen Ingram and Mrill Ingram, most notably on their book *The power of narrative in environmental movements* (MIT Press, 2013). The present book is the second installation of what will hopefully be a continuing collection on the power of narrative. Another foundation for this work was Lejano's first book *Frameworks for policy analysis: Merging text and context* (Routledge, 2006), notably its relational and textual perspectives on public policy. Raul

would like to thank his wife, Dr. Wing Shan Kan, professor and social worker, for her love and support, and Baobao too.

The other strand of scholarship, which was key to this book, is Shondel Nero's work in applied linguistics, specifically discourse analysis within and beyond the classroom. This work, which has its roots in studying language acquisition and vernacular use in the classroom (e.g., *Vernaculars in the classroom*, co-authored with Dohra Ahmad, Routledge, 2014), has provided valuable insights into the evolving language of climate skepticism and the ways in which critical discourse analysis can help to unpack the sociopolitical context that gave rise to it. It should be obvious that the study of narrative and discourse should occur together, but it isn't, and it only happened through the chance collaboration of two scholars approaching a common topic from different directions.

Finally, Shondel Nero would like to thank her spouse, Louis Parascandola, for calling her attention to new climate change articles and being her sounding board for every new development in the climate change debate.

This book is about how words become edifices; how they come together like brick and stone, and people set them down, layer upon layer, building structures and neighborhoods and cities. And the villages that people settle into are the stories that these words build up into alleys that connect and walls that set apart.

There is a legend among the Seneca about a boy who wandered into the forest and stumbled upon a talking stone. In exchange for everything he had, the stone would tell stories from the beginning of the world. Amazed, the boy would spend his days in the forest listening to the storytelling stone. He told others of the stone and soon others came, to listen to it. Their numbers grew, until the elders told everyone to see the stone and listen and before long the entire village had gathered there. The stone told story after story and after it had told all the stories in the world it said, "I have finished." And it told the people: "You must keep these stories as long as the world lasts; tell them to your children and grandchildren, generation after generation." It was time for them to become a storytelling people. And this is how the Seneca were sustained, as they are today, as a tribe.¹

It's the magic of stories that we take up, how they bind people to one another so they come to constitute a community. Or maybe the better term is coconstitute. For just as the Seneca kept their stories alive, at the same time the stories kept the Seneca tribe and its traditions intact. This coming together of community and story seems to be two sides to one coin. Some researchers have referred to this twin relationship as a narrative-network, where the stories need a community to maintain them, and the community needs the stories to give it identity.²

The power of the narrative to co-constitute has not escaped the attention of scholars of collective action and social anthropology. For example, researchers studied storytelling traditions within the Aeta (or Agta), an indigenous nomadic tribe in the Northern Philippines.³ The tribe was scattered across a number of separate communities, and the researchers began by inquiring into which of the

communities had better storytellers than the others. They concluded that the stronger the tradition and practice of storytelling in a community, the better organized and better performing it was.

Scholars seem to naturally gravitate toward traditional and indigenous communities when studying the power of storytelling, which is understandable. Traditional communities are thought of as having kept their traditions alive through the strength of oral history, telling stories across generations. But it's not as if the centrality of narrative in community has dissipated in modern society. Scholars in the field of organization studies have looked at the role of narrative in corporations as well. What they found is that narratives serve much of the same purposes in Wall Street that they do in traditional communities. In organizations like IBM, the World Bank, and Wells Fargo, great stories and storytellers help organize the company, stamping its blueprint on the minds and hearts of its employees and selling it to the rest of the world. Corporations maintain themselves because, just like the Aeta or the Seneca, they are a storytelling people.

The organizing power of narrative in society isn't far removed from Ricoeur's point about narrative allowing the individual to organize a multitude of experiences and motivations into a coherent sense of personhood.⁶ Rather than a jumble of people, things, and events, storytelling (Ricoeur uses the word emplotment) gathers them together into a coherent, even memorable, logic.

In this day and age, what is most striking about these investigations is not so much the point about narrative being an ubiquitous part of the workings of society—this has become, by now, a truism. It's also not even the insight that narrative, just as it organizes a novel's characters, places, and events into a story, can organize a group of people into an organization or a tribe. Rather, the most significant thing is that, in this postmodern age, when all convention has supposedly dissolved into thin air, when we use terms like post-truth to capture the unsettledness of the moment; with all this, that apparently people continue to be able to tell the good story from the bad. Some stories are great, and people gravitate to them. Whether they be ancestors huddled around a storytelling rock, or post-millennials watching a YouTube video on their phones, people can recognize great stories and are still moved by them.

Which brings us to the question at hand. Every year, various research centers around the world poll the public regarding their attitudes surrounding climate change. Most of these organizations, but not all,⁷ don't hide the fact that the people behind these surveys firmly believe the science of climate change, its anthropogenic causes, and the urgency of decarbonization. And, so, these surveys are awaited with not a little bit of anxiety.

One recent survey, polling a random sample of the US public, says that, first, a majority (70%) of the US public does believe that climate is changing and, furthermore, that anthropogenic carbon emissions are the main culprit.⁸ The

report goes on to say, as if breathing a collective sigh of relief, that "A majority of Americans (58%) understand that global warming is mostly human-caused, matching the highest level since our surveys began in 2008." But the tables also show another interesting thing, that while a majority are decidedly on the side of climate science, there is a persistent minority, in fact 28%, of the public who do not believe climate is changing or, if it is, that human activities are causing it. This is the segment of the public that describes itself as climate skeptics (though, as we will discuss, other scholars prefer the term climate deniers). Of these skeptics, half in fact believe that climate scientists are part of a grand conspiracy. It is, to be sure, a minority, but what a minority. And the striking thing about this is that despite the august testimony of the great majority of the scientific community, almost a fifth of the US public think it is all fake news. Later in the book, we will examine climate skepticism in other countries as well, but the US example illustrates this phenomenon most clearly.

For us, the rise of climate skepticism is most interesting because we wonder how this is possible. How is it, that a significant portion of the public, hearing and reading about all the data and scientific reports about the changing climate, can take all that and decide, this is all wrong, and the truth is clearly the opposite? How is it possible for significant numbers of people to take a position contrary to most of the scientists on a matter of science?

There are different ways to try and understand this. One is to ascribe climate skepticism to a radical fringe—i.e., what Barack Obama christened the "flatearth society." ¹⁰ But one would simply dismiss a significant segment of the public at one's peril. Recall, not that long ago, when supporters of Donald Trump were dismissed as part of an illogical fringe group. As it turns out, there was a real groundswell behind him, and the movement was strong enough to convince almost half of the electorate (and more than half of the electoral college) and, fast forward a few years later, the rest is history.

More to the point, if we are to take the notion of civil discourse seriously, when members of the public express strongly held beliefs, they deserve to be at least listened to. It should not be so easy to simply dismiss the public. Much of the commentary on climate skepticism has increasingly taken a dismissive stance, arguing, for example, that the idea of balance leads journalists to give minority views more credence than they deserve. This should be enough to give the reader pause. One of the authors recalls, an engaging conversation not long ago with a young entrepreneur starting up a new business. He was, quite obviously to the reporter, an intelligent, thoughtful person. He was also a climate skeptic. He was not, by any stretch, a "flat-earther." Toward the end of the conversation, he made a point of saying there are a lot of people who, out of political correctness, mainly want to point fingers at you and tell you you're wrong about

climate, and they never care to discuss it; most of them have never read anything about the science.

Consider this for a moment. A significant portion of the public, at least in the United States, ¹² is taking a position on a matter of science that runs counter to the strongly held position of most of the scientific community. And so, we ask: what is it about the climate skeptical view that is convincing, even compelling, to many members of the public, perhaps most of whom are not so different from the thoughtful but skeptical entrepreneur? How do we explain the phenomenon of the intelligent climate skeptic? ¹³

A central premise of this book is that there is something about the narrative of climate skepticism that is compelling. Narrative, as we know, takes hold of people's ideas and feelings and help build allegiances among them. There is a wealth of scholarship on the power of narrative in constructing individual identity¹⁴ and group solidarity.¹⁵ Not everything is about narrative, of course, and there is more to the phenomenon of climate skepticism than just this. But most certainly, and this is something that will be explored in this book and not merely claimed, the strength of the narrative is an important reason behind the resolute skepticism of many. In this book, we foreground narrative, while not forgetting other contributing factors. There are new insights that emerge when we focus on narrative more closely than is found in the literature, which examines climate skepticism from the more conventional focus on pluralist politics and industry lobbying. Scholars have done extensive investigations into the action of political entrepreneurs in promoting the climate skeptical view.¹⁶ It is in these political agents' self-interest to maintain a carbon-emitting economy. But whatever self-interested motives can be ascribed to politicians and industry lobbyists, the same cannot be said for members of the public.

Whatever one feels about climate science and skepticism, the healthiest approach is to take members of the public at their word when they express their beliefs. When a significant portion of the public tells pollsters that they don't believe in climate change, the safest bet is to assume that this really is the case. If the skeptical public really, secretly believed that the science behind the theory of climate change was right and that their children's and their grandchildren's future were imperiled, they would rally behind climate action. The narrative of climate skepticism is repeated by members of the public because, we presume, it rings true to them.

If the reader is willing to, at least provisionally for now, consider that the anti-climate science movement owes much to the narrative itself, what are the properties of the narrative that make it so compelling?

Consider what this narrative has been able to do. It has been able to create a counter-narrative to that maintained by most in the scientific community in what is, on its face, *a matter of science*. Who can claim authority on matters of

empirical fact any more than the scientist, whose territory this is after all? And yet, the climate skeptical narrative is somehow able to mount its own perch and stake out its own territory. A narrative approach will help us understand how.

Good Narratives

In 2007, a documentary entitled *The Great Global Warming Swindle* was released.¹⁷ Here is an excerpt from the beginning of the video:

- <u>Narrator (N)</u>: Each day the news reports grow more fantastically apocalyptic. Politicians no longer dare to express any doubt about climate change.
- <u>Lord Lawson, former UK economic minister:</u> There is such intolerance of any dissenting voice . . . this is the most politically incorrect thing possible, is to doubt this climate change orthodoxy.
- N: Global warming has gone beyond politics; it is a new kind of morality.
- (Cut to BBC news report: Well, the prime minister is back from his holiday, unrepentant and unembarrassed about yet another long-haul destination . . .)
- <u>Narrator:</u> . . . Yet, as the frenzy of a man-made global warming grows shriller, many senior climate scientists say the actual scientific basis for the theory is crumbling.
- <u>Prof. Nir Shaviv (Univ. of Jerusalem):</u> It appears for example in earth's history when we had three times as much CO₂ as we have today, or ten times as much CO₂ as we have today, and if CO₂ has a large effect on climate, then you should see it in the temperature reconstruction.
- <u>Professor Ian Clark (Univ. of Ottawa)</u>: If you look at climate from a geological time frame, we would never suspect CO₂ as a major climate driver.
- <u>Dr. Piers Corbyn, Forecaster, Weather Action:</u> None of the major climate changes in the last thousand years can be explained by CO₂.
- <u>Clark (Ottawa)</u>: We can't say that CO₂ will drive climate. It certainly never did in the past.
- <u>Prof. John Christy (IPCC author)</u>: I've often heard it said that there's a consensus of thousands of scientists on the global warming issue and that humans are causing catastrophic change to the climate system. Well, I am one scientist, and there are many that simply think, that is not true.
- <u>N:</u> Man-made global warming is no ordinary scientific theory. It is presented in the media as having the stamp of authority from an impressive international organization, the United Nations Intergovernmental Panel on Climate Change or IPCC.
- <u>Prof. Philip Scott (Univ. London):</u> The IPCC, like any UN body, is political. The final conclusions are politically driven.

- <u>Prof. Paul Reiter (Pasteur Institute, IPCC)</u>: This claim, that the IPCC is the world's top 1,500 or 2,500 scientists... you look at the bibliographies of the people, and it's simply not true. There are quite a number of non-scientists.
- <u>Prof. Richard Lindzen (MIT):</u> And to build the number up to 2,500 they have to start taking reviewers, and government people, and so on, anyone who ever came close to them. And none of them are asked to agree. Many of them disagree.
- <u>Reiter (Pasteur):</u> Those people who are specialists but don't agree with the polemic and resign, and there have been a number that I know of, they are simply put on the author list and become part of this 2,500 of the world's top scientists.
- <u>Lindzen (MIT)</u>: People have decided you have to convince other people, that since no scientist disagrees, you shouldn't disagree either. But that, whenever you hear that in science, that's pure propaganda.
- N: (narrator continues) . . . This is a story of how a theory about climate turned into a political ideology.
- <u>Patrick Moore, former founder of Greenpeace:</u> See, I don't even like to call it the environmental movement anymore, because really it is a political activist movement, and they have become hugely influential at a global level.
- N: . . . It is the story of a distortion of a whole area of science.
- <u>Dr. Roy Spencer, NASA:</u> Climate scientists need there to be a problem in order to get funding.
- <u>Christy:</u> We have a vested interest in creating panic because, then, money will flow to climate science.
- <u>Lindzen:</u> There's one thing you shouldn't say, and that is: this might not be a problem.
- $\underline{N:}$. . . It is a story of how a political campaign turned into a bureaucratic bandwagon.
- <u>Prof. Patrick Michales (Univ. VA):</u> Fact of the matter is, that tens of thousands of jobs depend on global warming right now. It's a big business.
- <u>Scott (London)</u>: It's become a great industry in itself, and if the whole global warming farrago collapsed, there would be an awful lot of people out of jobs and looking for work.
- \underline{N} : . . . This is a story of censorship and intimidation.
- <u>Nigel Calder, Editor, New Scientist:</u> I have seen and heard them spitting fury at anybody who disagreed with them, which is not the scientific way.
- <u>N:</u> . . . It is the story of Westerners invoking the specter of climatic disaster to hinder vital industrial progress in the developing world.
- <u>James Shikwati, Economist and Author:</u> One clear thing that emerges from the whole environmental debate is that there is somebody keen to kill the African dream, and the African dream is to develop.

<u>Moore (Greenpeace)</u>: The environmental movement has evolved into the strongest force there is for preventing development in the developing countries.

N: ... The global warming story is a cautionary tale of how a media scare became the defining idea of a generation.

<u>Calder:</u> The whole global warming business has become like a religion, and people who disagree are called heretics...

The reader can disagree (or agree) with the above, but a good exercise is, for a short time, to set aside the issue of agreeing or disagreeing with it and just pay attention to the narrative. Observe how it weaves a premise, entices the listener by building dramatic tension, even a foreboding sense of wrong being perpetrated as the participants speak, and populates the story with voices, people, events, twists, and turns—in short, how it emplots. If you, the reader, keep coming back to your disagreement with the narrative, just consider it as you would a fictional work of art. You might begin to appreciate that it is an engaging narrative well told. Observed purely in terms of emplotment, it's a skillful narrative.

For much of this book, we will set aside the matter of fact, which is establishing what the science is and what it proves. We can eventually get back to this important question in due course. Our main concern, for now, is what the narrative is and how it does what it does.

If the narrative of climate skepticism has the power to move many, then we can say that it is, in literary terms, a good narrative. The good narrative, as scholars like Jerome Bruner, Martha Nussbaum, and Walter Fisher point out, enwraps, engages, delights, enrages, and surprises. It has a coherence that holds the many parts together and, through the power of emplotment, keeps it all from breaking apart into chaos.¹⁸

But the narrative of climate skepticism doesn't exist in a vacuum. It has to contend with its alter ego which, in this case, is the narrative of the science of climate change. And, in that public space where op-ed pieces and online blogs move about, the skeptics are able to wrestle with the scientist's narrative and provide a counter-narrative that is compelling to at least some members of the public (and quite a few politicians). And the question is, how does the narrative do that? Through what logical and rhetorical devices did skepticism respond to the overwhelming logic of the scientist? It is not just about the power of the logic of a narrative, since narrative is able to combine logic with the emotional, aesthetic, moral, and other dimensions as well. So how did it combine emotion, persuasion, cognition, and logic into something that challenges the narrative of climate science?

This is a book of narrative analysis. Literary scholars will parse the fine distinctions between narrative and its kindred terms—story, discourse, plot, or *sujet*. In this book, we will not need to make these distinctions and can interchange all these terms without much effect on our core arguments.¹⁹









Narratives can be carefully crafted, and they can evolve over a period of time, improving each time they are retold. Or they can be spun faster than spiders spinning webs. Even tweets are narratives. But not all tweets constitute complete narratives; they only become narratives if one or more tweets describe a logical set of ideas or sequence of events that constitute a coherent chain. To do this, tweets can connect with other tweets or other texts (spoken, written, or thought) outside it. Otherwise, they might just be a set of random, haphazard utterances. Which brings us to the question, what is a narrative?

While we don't dwell on fine categorical distinctions in this book, the reader deserves at least some definition of terms. Narrative is, most plainly, story. But, more deeply, as Ricoeur says, it is the way we experience time and lend coherence to the disparate events, things, and persons that we encounter.²⁰ Thus, we regard narrative as the form by which people emplot different aspects, events, and characters (e.g., related to climate science) and make everything connect into a meaningful whole (i.e., a plot). Narrative takes the otherwise inchoate things, events, and places in a novel (or a life) and makes everything fit together. Narrative is also a story told by a narrator. The same basic story can be told in different ways by different narrators.

Later in the book, we will talk about how sometimes a narrative becomes all the more powerful when it develops into a systematic ideology. An ideology is a body of ideas that constitutes a coherent, systematic belief system (of the world, society, climate, etc.). By connecting the two ideas of narrative and ideology, as other scholars have done, we suggest that ideologies can, most often, be represented in the form of a narrative.

Another term that needs some explanation is skepticism—specifically, why we choose to use this term more often than another term in common use, which is denial. Skepticism is simply doubt over the truth or reasonableness of statements about facts and norms. In this book, skepticism specifically refers to expressing