UNIVERSITY OF CALIFORNIA

Santa Barbara

Towards an Environmental Linguistics: Sociolinguistic Style and Discourses of Conservation among Rural American Hunters and Fishers

A dissertation submitted in partial satisfaction of the requirements for the degree Doctor of Philosophy in Linguistics

by

Jessica A. Love-Nichols

Committee in charge:

Professor Mary Bucholtz, Chair

Professor Jeffrey Hoelle

Professor Argyro Katsika

Professor Lal Zimman

September 2019

Jeff Hoelle	
Argyro Katsika	
Lal Zimman	
Mary Bucholtz, Committee Chair	

The dissertation of Jessica A. Love-Nichols is approved.

August 2019

ACKNOWLEDGEMENTS

I am incredibly grateful to the people who have given me so much support in the completion of this project. I am especially indebted to my advisor, Mary Bucholtz, whose guidance, insight, and mentorship shaped who I am as a scholar as well as this work. I also am deeply thankful for the rest of my committee: Lal Zimman, for his patient suggestions and illuminating courses, Argyro Katsika, for her valuable advice and wonderful phonetics class, and Jeff Hoelle, for his helpful perspective and reminders to stay grounded. I would also like to extend my sincerest thanks to all the hunters who participated in this study, who graciously shared their perspectives and time as well as their food, experiences, and encouragement throughout the project. The research assistants who worked on this project— Quinn Danner, Alexandra Lyon, Alyson Osgood and Callista Tai—also contributed immensely, and I am very grateful for their valuable assistance. In addition, I would owe a great deal to Paula Ryan and the ISBER staff, whose patience in keeping me organized through grant applications and management allowed me to fund this research. I would also like to thank Alicia Holm, Cheryl Saum, and Rene Marchington, who guided me through the logistics of a graduate program, and the staff at the UCSB library, and especially at the interlibrary loan program, who tracked down books from far-flung corners of the country. I would not have completed this project without my friends and colleagues at UCSB. Special thanks go to Morgan Sleeper, Nina Wellander, and Kayla Palakurthy, who were constant sources of support, feedback, and balance throughout this process. Thank you as well to Joyhanna Yoo Garza, Jamaal Muwwakkil, Katie Jan, and Daniel Hieber, for all the illuminating and enjoyable conversations. Finally, no one has been more influential to me in this undertaking than the members of my family. I would like to thank Bill and Lee Love Anderegg, who helped me think through these ideas, and Mike Anderegg, for his help in

recruiting participants. I cannot begin to express my gratitude to my parents, Elizabeth Love and Dave Nichols, my sister Jamie, and my new brother Matt, whose unwavering has support has made me who I am and whose love is with me in whatever goal I pursue. Lastly, I'd like to thank my husband Kunal, who has taken every step of this journey with me and has done so with seemingly endless optimism and good cheer.

Dedication

For my family, old and new

VITA

JESSICA A. LOVE-NICHOLS

EDUCATION

Ph.D.	Department of Linguistics, University of California, Santa Barbara
Expected	Interdisciplinary Ph.D. Emphasis in Environment and Society
Aug. 2019	Dissertation: "Towards an Environmental Linguistics: Sociolinguistic Style and
	Discourses of Conservation among Rural American Hunters and Fishers"
	Dissertation committee: Mary Bucholtz (Chair), Jeffrey Hoelle, Argyro Katsika, Lal
	Zimman
M.A.	Department of Linguistics, University of California, Santa Barbara
Dec. 2015	Thesis: "Sense-making, Agency, and Globalization: Local Representations of
Dec. 2013	Development Encounters in Nicaragua"
	Committee members: Mary Bucholtz (Chair), John DuBois, Kum-Kum Bhavnani
	Committee memoers. Mary Buenottz (Chair), John Bubols, Rum-Rum Bhavham
M.S.	Department of Education, Pace University, New York City
June 2010	
B.A.	Linguistics, Reed College, Portland, Oregon,
May 2008	Senior Thesis: "Who Does He Think He's Kidding?": A Linguistic Analysis of John
	Kerry's Perceived Inauthenticity in the 2004 Presidential Election"
	Committee: Stephen Hibbard (Chair), Matthew Pearson, Kathryn Oleson

GRANTS AND FELLOWSHIPS

2018	National Science Foundation, Doctoral Dissertation Research Improvement Grant,
	"Doctoral Dissertation Research: Perceptions of Sociolinguistic Style and
	Discourses of Conservation among Rural American Hunters and Fishers." Jointly
	funded through Cultural Anthropology and Linguistics. BCS #1824063
2017	Humanities and Social Sciences Research Grant. University of California, Santa
	Barbara.
2016	"Orgullosamente Indígena: Creating sociolinguistic justice through collaborative
	activism," UC MEXUS Small Grants, University of California Institute for Mexico
	and the U.S.
2014-2018	National Science Foundation, Graduate Research Fellowship
2013-2017	Eugene V. Cota-Robles Fellowship, University of Santa Barbara, California
2012	Energy and Climate Partnership of the Americas grant, collaboratively submitted
	with the community of El Prado, Nicaragua

HONORS AND AWARDS

2008	Phi Beta Kappa, Reed College
2007	Academic Commendation, Reed College
2005	National Merit Scholar, Reed College

PROFESSIONAL POSITIONS

2008-2010	Elementary School Teacher (First Grade). Community School 66, New York, New
	York
2010-2013	Peace Corps Volunteer (Environmental Education), Matagalpa, Nicaragua

TEACHING EXPERIENCE

Instructor of Record

Linguistics 132: Language, Gender, and Sexuality, Teaching Associate, University of California, Santa Barbara (Summer 2016)

Linguistics 70: Language in Society, Teaching Fellow, University of California Santa Barbara, and Mixteco Indígena Community Organizing Partnership, in Spanish, (Spring 2017)

Anthropology 104: Language in Society, Adjunct Instructor, Santa Barbara City College (Spring 2015, Spring 2017)

Teaching Assistant

Anthropology 2: Introduction to Cultural Anthropology, Teaching Assistant (Fall 2018)

Linguistics 20: Introduction to Linguistics, Teaching Assistant (Winter 2017)

Spanish 1: Introduction to Spanish, Teaching Assistant (Fall 2016)

Linguistics 50: Language and Power, Teaching Assistant (Spring 2016)

Linguistics 70: Language and Society, Teaching Assistant (Winter 2016)

Linguistics 187: Language, Learning, and Power, Teaching Assistant (Fall 2015)

OTHER TEACHING EXPERIENCE

Escuela Normal José Martí (Teacher preparatory college), Matagalpa, Nicaragua *Methods for Teaching Multigrade Classes*, Instructor (2013)

El Prado Rural Educational Nucleus, Ciudad Dario, Nicaragua

Elementary Science, Science Teacher (2010-2012)

Community School 66, New York, New York

First Grade (English as a Second Language), Classroom Teacher (2008-2010)

Immigrant and Refugee Community Organization, Portland, Oregon

English as a Second Language, Volunteer Tutor (2009-2010)

RESEARCH PUBLICATIONS

Book Chapters

"There's No Such Thing as Bad Language, but...': Colorblindness and Teachers' Ideologies of Linguistic Appropriateness," In *Feeling It: Language, Race, and Affect in Latina/o Youth Learning*, edited by Mary Bucholtz, Dolores Inés Casillas, and Jin Sook Lee. New York: Routledge, pp.

2018 "So That the Environment Looks Clean": Cultural Values and Environmental Communication in a Nicaraguan Community." In *Environmental Communication Among Minority Populations*, edited by Bruno Takahashi and Sonny Rosenthal.

New York: Routledge, pp. 76-100

Forthcoming

"How Much Longer Can You Last in Brooklyn?': Constructing and Challenging the Boundaries of Ecocultural Identity Among Western American Sportsmen." For the *Handbook on Ecocultural Identity*, edited by Tema Milstein and José Castro-Sotomayor. New York: Routledge

Journal Articles

In revision "Tied to the Land: Climate Change Activism among U.S. Hunters and Fishers."

Special

issue: "Critical Approaches to Climate Change and Civic Action," Frontiers in

Science and Environmental Communication.

In revision "Can Emotions Capture the Elusive Gain/Loss Framing Effect? A Meta-Analysis,"

Communication Research. (With Robin Nabi, Nathan Walter, Neekaan Oshidary,

Camille Endacott, Zijian Lew, and Alex Aune)

CREATIVE PRODUCTIONS

Voces del corazón indígena. A collection of podcasts. (Executive Producer, with Katie Lateef-Jan and Anna Bax). In collaboration with the Tequio Youth Group at the Mixteco Indígena Community Organizing Project and Elizabeth Villa
 Orgullosamente indígena. A short film. (Executive Producer, with Katie Lateef-Jan and Anna Bax). In collaboration with the Tequio Youth Group at the Mixteco Indígena Community Organizing Project, Israel Vasquez, Stefan Lee, and Elizabeth Villa

RESEARCH PRESENTATIONS

2019	"How in the world did it go so wrong?': The chronotopic organization of gender
	and sexuality in US country music." Presentation at the 26th Lavender Languages
	and Linguistics conference in Gothenburg, Sweden. May 2-4, 2019. With Morgan
	Sleeper.
2018	"To Actively Participate in Nature": American Sportsmen and Climate Change
	Denial. Presentation at the Annual Meeting of the American Anthropological
	Association, San Jose, CA. November 17, 2018
2018	"Pretty in Pink, Dangerous in Camo: Constructing White Working-Class Femininity
	through Bumper Stickers." Presentation at the 25th Lavender Languages and
	Linguistics conference in Providence, Rhode Island. April 20-22, 2018
2017	"Sororithroat: The Acoustic and Ideological Properties of an Emerging Voice
	Quality." Poster presented at the New Ways of Analyzing Variation conference in
	Madison, Wisconsin. November 2-5, 2017. With Morgan Sleeper
2017	"Before the droughts moved in': Spatiotemporal Orientation as a Resource for
	Indexing Cultural Affiliation in Climate Communication," Biannual Meeting of the
	International Environmental Communication Association in Leicester, United
	Kingdom
2017	"Before the droughts moved in": Spatiotemporal Orientation as a Resource for
	Indexing Cultural Affiliation in Climate Communication," 21st Conference for
	Language for Specific Purposes, Bergen, Norway
2017	"So that the environment looks clean": Cultural Values and Environmental
	Communication in a Nicaraguan Community," Pre-Conference to the Annual
	Conference of the International Communication Association in San Diego, CA

2017	"Coffee-drinking, Prius-driving Recyclers: Ideological Stances as Enregistered Semiotic Resources," 23 rd Annual Conference on Language, Interaction, and Social
2017	Organization at the University of California, Santa Barbara "Orgullosamente Indigena: Mexican Immigrant Indigenous Youth in Pursuit of Educational and Sociolinguistic Justice," Linguistics Society of America Annual Mosting, Austin TV, Presented with Morry Puebelta, Vetic Jan. and Anna Pay.
2016	Meeting, Austin, TX. Presented with Mary Bucholtz, Katie Jan, and Anna Bax. "'Where in the World Did It Go So Wrong': Spatiotemporal orientation as an element of country music style," Annual Meeting of the American Anthropological Association, Minneapolis, MN
2016	"Ideological Stance and Phonetic Variation: The Mediatized Performance of a Sportsman Identity," New Ways of Analyzing Variation 45. Vancouver, BC, Canada
2016	"Collaborative Language Maintenance of Mixtec and Zapotec in a Youth Group Setting," Workshop on American Indigenous Languages XVIII, Santa Barbara, CA
2016	"Shifting Stances, Varying Vowels: Performing a Conservationist Sportsmen Identity," Symposium for the Interdisciplinary Emphasis for Environmental Science, Santa Barbara, CA
2015	"Orientado o Beneficiado: Locating Agency in Nicaragua Development Encounters," Annual Meeting of the American Anthropological Association, Denver, CO
2015	"Biologic Corridor, Linguistic Corridor: Linguistic and Ideological Flows in Transnational Development Organizations," Fourth conference on Culture, Language, and Social Practice, University of Colorado, Boulder, CO
2014	"Take Only Wilderness, Leave Only Nature: How Sportsmen and Environmentalists Contest a Fractured Construct," Annual Meeting of the American Anthropological Association, Washington, DC
2014	"There's no such thing as bad language, but': How Teachers' Language Ideologies Take Shape in the Classroom," Crossroads Workshop, Santa Barbara, CA

PROFESSIONAL AND COMMUNITY PRESENTATIONS

2012	"Enseñando el alfabetismo: la fonética y la comprensión" (Teaching Literacy:
	Phonetics and Comprehension). Presentation to the Municipal Education
	Leadership, Ciudad Dario, Nicaragua
2012	"Improved Stoves and Their Construction". Presentation at the In-service Peace
	Corps Training, Selva Negra, Nicaragua.
2012	"Estufas mejoradas y su construcción" (Improved Stoves and Their Construction).
	Presentation at the Sustainable Technology Workshop, Chinandega, Nicaragua.
2012	"Developing Lesson Plans". Presentation at the Pre-Service Peace Corps Training,
	San Marcos, Nicaragua.
2012	"Writing Grants for the Energy and Climate Partnership of the Americas".
	Presentation at the In-service Peace Corps Training, Selva Negra, Nicaragua.
2012	"Los bancos comunitarios: Lo qué son y cómo empezar" (Community Banks: What
	They Are and How To Start). Presentation to the Municipal Education Leadership,
	Ciudad Dario, Nicaragua
2012	"Mejorando la comprensión de la lectura de libros científicos" (Improving Reading
	Comprehension of Scientific Texts). Presentation at the In-service Peace Corps
	Training, Chinandega, Nicaragua.

2011	"Aprovechando el tiempo en la clase multigrado" (Optimizing Time-Use in the
	Multi-grade Classroom). Presentation to the Municipal Education Leadership,
	Ciudad Dario, Nicaragua.
2011	"Creando materiales didácticos a través del reciclaje" (Using Recycled Materials to
	Create Educationsal Resources). Presentation to the Municipal Education
	Leadership, Ciudad Dario, Nicaragua.

SERVICE

2017-18	Graduate Student Mentor: Graduate Division, University of California, Santa
	Barbara
2016	Panel Organization: "Playing the Changes, Saying the Changes: The social meaning
	of musico-linguistic style-shifting," Annual Meeting of the American
	Anthropological Association, Minneapolis, MN. With Morgan Sleeper
2015	Conference co-organizer: 25th Annual Conference for Language, Interaction, and
	Social Organization at the University of California, Santa Barbara.
2014-15	Undergraduate Liaison: Linguistics Department, University of California, Santa
	Barbara
2014-17	Curriculum Development: School Kids Investigating Life and Language in Society,
	University of California, Santa Barbara

MEMBERSHIPS

American Anthropological Association American Dialect Society International Ecolinguistics Association International Environmental Communication Association Society for Linguistic Anthropology

LANGUAGES

English (native fluency)
Spanish (fluent heritage speaker)
Chinese (intermediate speaker)
French (academic reading)

ABSTRACT

Towards an Environmental Linguistics: Sociolinguistic Style and Discourses of Conservation among Rural American Hunters and Fishers

by

Jessica A. Love-Nichols

This dissertation examines the interaction of language use, identity, and environmental ideologies among hunters and fishers in the western United States. I draw on multiple methods—ethnographic interviews and participant-observation, an intraspeaker sociophonetic analysis, and a discourse analysis of media texts—to illustrate the complex ties between language and environmental ideologies. My specific focus is on the mobilization of linguistic resources when taking environmental stances and the ways in which local identities are made relevant when discussing environmental changes and problems. This study first explores the historical contexts which have contributed to the creation of the contemporary sportsman person-type and describes the present-day social structures which shape the sportsman persona and conservation ideologies within this community. I then analyze ethnographic interviews, demonstrating how contemporary sportsmen discursively construct a changing climate and its effects and, in turn, how they position themselves through this discursive construction. Through a sociophonetic analysis, I then examine the interaction of sociolinguistic styles and environmental stances; I argue that these environmental stances—and, more broadly, ideological stances—should be considered integral parts of the semiotic bundles that form styles or identities. Finally, the

dissertation investigates the chronotopic stances mobilized in climate change messages produced by hunting- and fishing-oriented non-governmental organizations, showing the prevalence of stances towards a positively evaluated past wilderness and a negatively evaluated disappearing present. I find that the juxtaposition of these spatiotemporal stances situates the sportsman person-type as prototypically at home in the chronotope of the idyllic wilderness past and as anachronistic in the contemporary modern and urbanizing world. Methodologically, the dissertation explores the implications of integrating ethnographic analyses of identity and conservation ideologies at the local level with linguistic analyses of the mobilization of sociolinguistic styles and chronotopic stances. In contrast to the topdown approach often taken in previous work on language and environmental practices and ideologies, this study works to build theory from the bottom up, grounding the conceptual framework in the experiences of speakers negotiating their identities with respect to environmental interactions, broader social and political structures, and ongoing environmental changes. I highlight the ways in which a greater focus on local identities can deepen work in environmental communication and environmental psychology and conversely how a greater theorization of environmental interactions can contribute to linguistic analyses. Ultimately, I argue for more research which takes the environmental linguistic approach exemplified in this dissertation.

TABLE OF CONTENTS

Chapter 1: Language and the environment	1
Introduction	1
Why hunters and fishers?	6
Defining environment	
Previous research on language and the environment	
Linguistic forms and the environment	
Using language as a lens on the environment	
Implicit analyses of language in environmental research	
Towards an environmental linguistics	
Structure of the dissertation	
Chapter 2: Sportsmen (and women) in the U.S.	
History of hunting: The "original conservationists"	
Indigeneity and hunting and fishing	
Contemporary western hunters	
The sportsman persona	
Constructing the sportsman persona	
Anti-hunters	
Hunter education/safety classes	
NGOs and membership organizations	
Hunting regulations and events	
Media and brands	
Hunting and conservation ideologies	51
Conservation discourses in the western U.S.	
Contested ideologies of conservation	55
Unifying ideologies about hunting and conservation	59
Conclusion	63
Chapter 3: "What about the trout?": The discursive construction of climate characteristics.	inge and
identity among sportsmen	
Introduction	
Data source and methodology	
Stancetaking, intersubjectivity, and identity	
Making sense of climate change	
Data analysis	
Discussion	96
Conclusion	
Chapter 4: Talking about climate change: Identity, stance, and variation	104
Introduction	
Sportsmen and sociolinguistic style	107
Style and sociolinguistics	
Stance	110
Identity and environmental stances	112
Data analysis	
Statistical analysis	
Environmental stance and sociolinguistic style	
Conclusion	
Chapter 5: The chronotopic organization of environmental stances	
Introduction	

Spatiality and temporality in environmental rhetoric	138
Chronotopes within linguistic anthropology	141
Hunting and fishing media	
Data and methodology	145
Analysis	146
The chronotopic organization of the sportsman person-type	149
The idyllic past in climate change communications	153
Heroic past hunters	
The precarious future of the hunting heritage	160
Reproduction of social meanings of space, time, and personhood	164
Constructions of climate change	166
Conclusion	168
Chapter 6: Conclusion	170
Theoretical contributions	174
Conclusion	176
References	177
Appendix A: Transcription conventions	200
Appendix B: Interview questions	201
Appendix C: List of media institutions and non-governmental organizations	202
Appendix D: Table of climate change texts	203

Chapter 1: Language and the environment

Introduction

It was a sunny early September day in eastern Washington state, and four older white men wearing camouflage with blaze orange vests were hanging out next to their trucks. As I walked up in my own blaze orange vest, they welcomed me into their conversation, and we chatted in a dirt lot at the edge of a wildlife recreation area in eastern Washington, a place for the Department of Fish and Wildlife to store the vehicles and supplies their employees needed to care for the land. I had come for the mentored youth pheasant hunt, which was almost over now; groups of two to three kids, ranging in age from around ten to sixteen, trickled back to the lot behind their older volunteer mentors. Some were holding ring-necked pheasants they had successfully killed, which the mentors would show them how to pluck once the participants had all gathered. Bird dogs trotted alongside the groups, hopping up into their owners' trucks as they arrived to the lot. As at many of these events, more volunteers had showed up than kids who needed mentors, so several men were passing the time chatting while they waited for the rest of the youth to return. They were happy to speak with me about hunting and conservation, excited about the opportunity to express their under-appreciated—to their minds—efforts in wildlife conservation. One volunteer immediately began reciting statistics he knew by heart which illustrated the centrality of hunters to conservation through their passion, money, and time. Another volunteer handed me a National Rifle Association flyer opposing a firearm regulation which was to appear on the state ballot that November (the regulation passed). His concern, he told me, was that the bill was poorly written by people who had no real understanding of firearms, and as a result it would criminalize some guns used for hunting and therefore ultimately negatively impact wildlife conservation efforts. One of the other men brought up a volunteer who had already left, who apparently supported the proposed legislation and had a bumper sticker from Hillary Clinton's 2016 presidential campaign on his truck. All four of the men shook their heads, puzzled, and one commented that "the Hillary guy just doesn't understand."

Despite the certainty of the volunteers' rhetoric, like any interaction between human social structures and the more-than-human world, the relationship of hunters to wildlife conservation is complicated. Hunting culture, firearms, and conservative political ideologies are tightly bound in an indexical field (Eckert 2008) that is often hard to describe within academic research, as it differs from the national-level ideologies surrounding conservation and identity (Mayhew Bergman 2019). The conservation of pheasants and pheasant habitat is an especially interesting case, because the ring-neck pheasant—the most commonly hunted pheasant—is not native to North America. Pheasant-focused conservation thus is often subject to critiques by scholars and non-hunting environmental groups as a service to the needs of recreational hunters, rather than an ecocentric conservation objective (Loo 2001). However, the funds collected from pheasant hunters and others through hunting licenses, ammunition and firearm taxes, and so on—and the hunting-related conservation groups funded through those measures—carry out vital conservation projects. Habitat conservation, for instance—buying or placing easements on land so that it remains undeveloped—is crucial for the preservation of biodiversity, as loss of habitat is a factor causing stress for many plant and animal species in North America. Hunting-focused nongovernmental organizations also carry out habitat restoration—planting native species, reforesting, restoring soil, and so on for the restoration of healthy ecosystems—which also has large benefits across all species. These efforts by governmental and non-governmental wildlife conservation institutions, as well as others, such as the creation of migration corridors, have been successful in dramatically increasing populations of a number of species, including wild turkeys, whitetail deer, and elk, among others.

The hunting community in the United States is thus an excellent example of the interaction between social and ecological factors in conservation-related contexts, or the "human dimensions of conservation" (Bennet et al. 2017, 56), a topic of growing interest

within the environmental social sciences (Snoo et al. 2013; Endter-Wada et al. 1998; Mascia et al. 2003; Sandbrook et al. 2013). While a rich research tradition examining the issue has emerged in many social sciences, within the field of linguistics this topic has received less interest (Fill & Mühlhäusler 2001; Stibbe 2015). However, language mediates many of the human dimensions identified as important to conservation such as values, communication strategies, and social identity, as well as playing a crucial role in "making materiality meaningful" (Shankar & Cavanaugh 2012, 357), and linguistic and linguisticanthropological methodologies can therefore contribute a great deal to this research area. Within environmental psychology and communication research, for instance, while social identity has come to be recognized as an important factor in both individual and group perceptions of, and responses to, environmental information (Gromet et al. 2013; Hart & Nisbet 2012; Kahan et al. 2011), most research in this area investigates social identity through macro-level demographic classifications, such as age, gender, ethnoracial identity, political affiliation, and so on, rather than the identity categories that are most meaningful to communities themselves (Goebbert et al. 2012; McCright & Dunlap 2011; Swim et al. 2018), a primary focus of sociocultural linguistics (Eckert & McConnell-Ginet 1992). This social-psychological approach to identity can obscure the considerable variation in environmental ideologies and practices that exists within broad demographic categories (Howe et al. 2015; Zhang et al. 2018). Furthermore, this research is also limited by assuming that "conservation" is a shared concept across communities of practice, even though the meaning of the term has been shown to vary widely across cultures and communities, and even within academic work on the topic (Collof et al. 2017; Mace 2014). Finally, while much of this research implicitly involves the role of language in the reproduction and transmission of environmental ideologies, few studies explicitly analyze language use beyond thematic or content analysis.

Scholarship within environmental anthropology, in contrast, provides rich descriptions of environmental interaction and conservation at the local level, but has not

fully considered the role of language or integrated linguistic analysis (Casagrande 2016; Pouchet & Shapero 2017). At the same time, within linguistics, the role of language in the production and circulation of environmental discourses is explicitly analyzed, but environmental discourse and communication remains understudied (Fill & Mühlhäuser 2001), and few studies have examined the environmental discourses of individual language users, rather than media or institutional discourses. Furthermore, there are no quantitative sociolinguistic studies that deal with environmental language.

This dissertation draws on anthropological and sociocultural linguistic methodologies to address these limitations, proposing a mixed-methods analysis of the discourses of conservation within a community of practice whose members' identities are centrally connected to environmental issues yet who remain understudied in all social science research on environmental communication. In this way, I illustrate the complex ties between language and environmental ideologies and practices within hunters and fishers in the western United States. My analysis focuses on the mobilization of linguistic resources as varied as sociophonetic variation and chronotopic orientations by community members when discussing environmental issues. Through this analysis, I explore how local identities are reproduced and highlighted in interactions around environmental changes and problems.

In this study, I focus primarily on the discussions surrounding the climate change crisis within the hunting and fishing community. Climate change—referring to the phenomenon occurring when greater amounts of greenhouse gases are released into the atmosphere by burning fossil fuels, trapping increasing amounts of heat within the earth's atmosphere, and in turn warming the planet, intensifying storms and disrupting previously stable weather patterns—is an important context for the study of environmental interactions for several reasons. It is an increasingly urgent crisis and thus the subject of a great deal of literature within environmental communication (Moser 2016). In addition, the complex and interconnected nature of the process makes the linguistic mediation of climate change

understandings and experiences especially salient. Finally, within the contemporary context, stances towards climate change have taken on distinct social meanings (Kahan et al. 2012) and have come to be situated within an indexical field with close ties to left-wing political ideologies and goals. Given this context, the discussions around the climate crisis within the conservative hunting and fishing community provide a rich context within which to investigate the importance of social meaning and local identities for conservation practices and ideologies.

In the rest of this chapter, I describe the research context and community examined in this study and explain why it is a rich site for investigating the interaction of language and environmental practices and ideologies. I then briefly describe the methods and theoretical frameworks employed in the study, as well as the way the environment is approached within this dissertation. Next, I describe previous research on language and the environment in three main areas: research which primarily focuses on linguistic forms in their interaction with environmental contexts; research which uses language as a lens to study the social context of environmental practices; and lastly, research which implicitly examines language without theorizing its role in environmental contexts. I then present the case for a proposed framework for the study of language and the environment, and briefly describe some of the benefits of this framework for linguistics, anthropology, and environmental communication, as well as other fields that incorporate language into their study of environmental practices and ideologies. Finally, this chapter provides a summary of the rest of the dissertation.

Why hunters and fishers?

Sportsmen and sportswomen, or hunters and fishers—a politically conservative group with historically deep roots to environmental conservation (National Wildlife Federation 2012)—are a crucial focus for the investigation of language and environmental issues. Not only are hunters and fishers a large and very active group in conservation activities in the U.S. (Altherr & Reiger 1995), but their ties to both political conservatism and environmental conservation also demonstrate the importance of community-level analyses of conservation discourses, which are overlooked in broader, demographicallycentered approaches. Sportsmen and women are also crucial participants in research investigating the role of community-based identities in environmental conservation, because environmental orientation plays a large role in the sportsman identity and persona. Little research, however, has investigated the meaning of conservation within this community. Furthermore, the majority of American hunters and fishers categorize themselves as politically conservative (National Wildlife Federation 2012) and therefore find themselves at the intersection of two increasingly conflicting ideologies: environmental conservation and political conservatism. Sportsmen also represent a large and understudied segment of the conservation-oriented public. The National Shooting Sports Foundation, for instance, estimates that sportsmen contribute more than \$1.6 billion to conservation programs every year (US Fish and Wildlife Service 2011). Furthermore, many local and national conservation-oriented NGOs are funded by the hunting and fishing community. While some rural-identified groups with a commitment to conservation—farmers, ranchers, and commercial fishers—have received preliminary research attention (Horn 2016), hunters' conservation discourses remain underexplored within academic scholarship. Understanding the practices and ideologies surrounding conservation within the sportsman community

-

¹ Throughout the rest of the dissertation, I use *sportsmen* (interchangeably with hunters and fishers/anglers) to denote hunters and fishers of any gender. Although the term *sportsmen* is

illuminates the role of community-based identities in environmental discourses as well as how speakers blend ideologically-opposed identities in their talk about the environment.

The western United States, specifically, is a productive area for conservation research for several reasons: First, the western region of the country has the largest acreage of federally-owned public land, a fact which has become more politically charged in the aftermath of the Cliven Bundy armed standoff with federal agents in summer 2014. The standoff took place after, Bundy, a cattle rancher, refused to pay the grazing fees for his use of federally-owned land (Summers 2017). The intensification of the politicization of federal land continued with the Trump administration's decision to shrink the size of several national monuments and therefore eliminate their accompanying environmental protections. Furthermore, at the state level, many Republican politicians in western states in the twentyfirst century have been advocating for the privatization of state-held land, a move which many sportsmen disagree with (Theodore Roosevelt Conservation Partnership 2017). Additionally, the western states also evince very polarized political identities between rural and urban areas. Rural residents of more populous western states like California, Colorado, Oregon, and Washington often feel underrepresented by the political decisions of the larger and more powerful urban populations of their state (Derrik 2014), with some counties going so far as to attempt to secede from their home state (Connolly 2013). This political context highlights both regional and political affiliation as important aspects of identity within the western United States. Because the present study is primarily concerned with investigating conservation in relation to community-based identities and the interaction of conflicting ideologies in this context, the western states provide an ideal geographic focus. This dissertation thus aims not only to contribute to literature on the sociolinguistic styles of the rural western United States, a growing area of interest within sociolinguistics (Fridland et al. 2016; Podesva et al. 2015), but also to expand understandings of how people living in these

gendered, it is also often used by female hunters to describe themselves, and the term *sportswomen* tends to be used only in institutional discourses, as will be discussed in futher detail in Chapter 2.

areas manage intersecting identities while within discussions of environmental conservation. Focusing on the hunting and fishing community, this dissertation is the first community-based study of the language of this group as well as the first to take a simultaneously interactional, ethnographic, and quantitative approach to the study of conservation-related language. I combine an ethnographic and discourse-analytic investigation of the ideologies and discourses surrounding conservation with a quantitative analysis of the interaction of sociolinguistic style and the conservation discourses among hunters and fishers.

Defining *environment*

The terms *environment* and *nature* have been historically difficult to delimit both because of the abstract and culturally-specific quality of what they denote, but also due to the way that the terms can be co-opted to serve different social purposes. As Haraway asks in her critique of structuralist approaches to scientific inquiry, "What gets to count as nature, for whom, and at what cost?" (1997, 104). Similarly, as Hochman points out, the environment is often an anthropocentric notion which has "come to mean a nature tangibly important only to human health and livelihood" (1997, 82), and the concept has been critiqued by many scholars for its vagueness and ambiguity (Howard 1978; Mühlhäusler & Peace 2006; Rowe 1989). In this dissertation, I conceptualize "the environment" as all nonhuman fauna, flora, structures, and geographical features with which humans interact. I reject ideas of nature and the environment as "entities and processes uninterfered with by human agency" à la Williams (1983, 219). Not only is this understanding based on the erasure of many historical types of human-environment interactions, but it also presents a false construction of humanity as separate from the natural world. Accordingly, I follow Abram (2012) in focusing on the more-than-human world, which I take as my understanding of the *environment* throughout this dissertation.

Previous research on language and the environment

Although there is not yet a single field that investigates both the linguistic and material aspects of environmental interaction within the same analytic frame, language and the environment have long been recognized as interconnected. From the earliest European linguists in North America who studied Indigenous languages and their encoding of the world (Sapir 1912), it has been clear to scholars that language and the more-than-human world are inextricably linked. This topic has not received central attention within recent literature in linguistics, however, with some exceptions in ethnobotanical research (Taylor 1989) and the growing body of work using an ecolinguistic framework (Chen 2016; Fill & Mühlhäusler 2003; Steffensen & Fill 2014; Stibbe 2015). Much work on the interaction of language and environmental practices and ideologies has been conducted outside of the field of linguistics, using discourse-analytic frameworks as well as quantitative approaches.

This chapter describes the body of research that has considered the interaction of language and the environment within linguistics and environmental anthropology, as well as other fields that have taken up this question, such as environmental communication and psychology. This research tends to fall into three main categories: (1) research that examines how environmental factors interact with linguistic forms—both how the material environmental interacts with linguistic form, and how linguistic form affects perceptions of, and ideologies around, the material environment; (2) research that uses language as a lens to study the interaction of the more-than-human world and social structures; and (3) research

² The ecolinguistics work cited here focuses on the relationship of language and the environment. In some cases, the term is also used to describe scholarship employing biological metaphors within the studies of language endangerment and language contact, sometimes called an "ecology of languages." I do not include research within that framework in this review. First, it is not within the scope of this dissertation, as it does not focus on true ecologies, but ecology as a metaphor. Furthermore, equating languages with biological organisms is problematic on several fronts (cf. Hill 2002; Pennycook 2004; Skutnabb-Kangas 2003).

that implicitly examines language in the study of environmental practices and ideologies, but with little theorization of the role of language.

Linguistic forms and the environment

As noted above, scholars of language have been interested in the linguistic encoding of the environment since the very first stages of North American linguistic work. Early researchers were especially interested in the effect of different material environmental contexts on linguistic form. Sapir, for instance, pointed out that language bears "the stamp of the physical environment in which the speakers are placed" and reflects "the interest of the people in such environmental features" (1912, 228, 229). This early research, however, rather than leading to a tradition of scholarship on the interaction of language and the environment, instead primarily contributed to ideas of linguistic and cultural relativity (Maffi 2005). Whorf built on this interest—and on Boas's famously misconstrued remarks on Eskimo words for snow (Boas 1911; Martin 1986; Pullum 1989)—in his development of the theory of linguistic relativity, which contends that linguistic structures can affect speakers' perceptions and cognition (Whorf 1940); this theory has been quite influential in some veins of work on language and the environment (Mühlhäusler & Peace 2006). Work in this area has also developed into a productive tradition of ethnobotany, and more broadly, ethnoscience, within both linguistics (Casagrande 2016; Taylor 1989) and environmental anthropology (Ellen 1979, 1999), leading to a growing understanding of how different speech communities understand, classify, and relate to plants and animals (Abrams 1996; Nicolle 2004), and how traditional environmental practices can influence these classification systems (Posey 2002).

Ethnobotanical insights about the relationship of a language to an environmental context have also led some scholars to argue that the movement and dispersion of languages

leads to more negative environmental practices (Abrams 1996; Mühlhäusler 1996, 2003). Relatedly, and controversially from a linguistics standpoint, Abrams (1996) has argued that the development of writing, and its ability to decontextualize language, has also contributed to this phenomenon. Other scholars, primarily working within a critical discourse analysis framework and influenced by Whorfian ideas of linguistic relativity, have argued that certain grammatical features are related to negative environmental perceptions and behaviors. Halliday, for instance, argues, "There is a syndrome of grammatical features which conspire ... to construe reality in a certain way; and it is a way that is no longer good for our health as a species" (2001, 193); he goes on to argue that linguists' role is to "draw attention to it; to show how the grammar promotes the ideology of growth, or growthism" (2001, 196). A number of linguistic structures have been examined through this lens, including the construal of natural resources as non-finite through mass nouns (Halliday 2001); the representation of humans as primary though the use of greater grammatical agency (Halliday 2001); the obscuring of agentive and affected participants within modern scientific writing (Goatly 1996); the misrepresentation of the causes of environmental problems through the diffusion of agency for environmental crises (Schleppegrell 2001); the portrayal of climate change uncertainty through epistemic markers (Bailey et al. 2014); and the impeding of the ability to perceive the natural environment holistically by "fragmenting the mass, quantifying intangibles and imaginary nouns, and perceiving time in terms of past, present and future" (Chalwa 1991, 262). The impact of metaphors when used in the description of environmental impacts has likewise been extensively discussed in ecolinguistic research, which also frequently draws on ideas of linguistic relativity. As Mühlhäusler and Peace have noted, within scholarship focusing on language and the environment within linguistics, "the Whorfian notion that lexicon and grammar of individual languages are the root causes of our environmental crisis" is a consistent theme (2006, 468). Scholars applying these theories to the study of metaphor point out that

complicated scientific concepts can often be mediated through metaphor (Pickett and Cadenasso 2002; Väliverronen and Hellsten 2002), and this work has examined the discursive effects of different types of metaphors in environmental contexts (Goatly 2001). Stibbe (2008), for instance, critiques metaphors of biodiversity as "libraries," arguing that such metaphors promote tokenism and imply that only one or two members of each species are sufficient. Within environmental economics, some scholars also work within a Whorfian framework. Mavisakalyan and colleagues, for instance, controversially suggest that grammatical tense marking predicts "intertemporal preferences" and therefore political willingness to address environmental problems (2018, 1370), though this interpretation is not grounded in a linguistic understanding of temporal expression in the world's languages.

In research which takes a more sociocultural perspective, the study of names and naming has been a context in which scholars have consistently attended to linguistic constructions of the environment. Historians have pointed out, for instance, that imperialism often begins through imagining a new land as empty, *terra nullius*, or "virgin land." Naming these "discovered" lands further inscribes this imagined geography (Said 1979; Stuckey & Murphy 2001). In Canada, for example, colonial names such as the Strait of Georgia, Victoria, New Westminster, and Hallifax reimagined local places and connected them to an imperial whole (Loo 2001). Naming can also function as a form of stancetaking in polarized environmental debates, such as in the case of the tar/oil sands in Canada (Kidner 2016), where the term *oil sands* implies a stance supporting oil extraction, highlighting the resource and financial benefits of its exploitation, while *tar sands* implies opposition to this extraction, emphasizing the pollution involved in accessing the oil.

Using language as a lens on the environment

Another area of scholarship which examines the interaction of language and the environment primarily focuses on environmental ideologies and discourses. This research uses language as a lens to analyze the relationship between humans and their environment (Mühlhäsler & Peace 2006; Orr 2015; Stibbe 2014). Much of this work has examined environmental destruction as "a problem of discourse" as well as a material issue (Killingsworth & Palmer 1992, 6). Some works in this genre, such as Dryzek's (2005) *The Politics of the Earth: Environmental Discourses*, and Killingsworth and Palmer's (2012) *Ecospeak: Rhetoric and Environmental Politics in America*, provide taxonomies of environmental discourses. Dryzek, for instance, details several discourse types, including the pro-environmental "limits" discourse, the "pro-growth Promethean" discourse, and other more reformist, "problem-solving" discourses. Killingsworth and Palmer develop a different typology of rhetoric surrounding the environment which varies along four axes: hegemony, opposition, tension, and direction of appeals.

In another vein of scholarship, some research evaluates environmental discourses for their efficacy in promoting a sustainable relationship with the more-than-human world. Research in this vein has shown the myriad ways in which discourses about the environment reflect and reinforce anti-environmental behaviors (Halliday 2001; Mühlhäusler & Peace 2006), or, in more limited cases, pro-environmental behaviors (Stibbe 2015). For example, Mullin (1999) has shown how discourses surrounding animals often primarily serve human purposes, commodify animals, or function principally to hold up a mirror for the construction of humanity. Other investigations of environmental discourses with potentially negative impacts on the environment examine discursive constructions of neoclassical economics (Stibbe 2005), consumerism (Slater 2007), development (Sachs 1992), progress (Mühlhäusler 2003, 110), agriculture (Stibbe 2003), and advertising (Gargan 2007; Williams 2007). Another widespread focus of environmental discourse analysis is the process of "greenwashing," or presenting practices as beneficial to the environment when

they are not (Budinsky & Bryant 2013; Chen 2016; Miller 2016; Plec & Pettenger 2011). Gössling and Peeters (2007), for instance, investigate the discourses employed by airlines to justify increased air travel, including energy efficiency, social and economic benefits, and technological progress. Coupland and Coupland (1997) have studied the interactions of environmental discourses, suggesting that some should be theorized as "competing discourses" (p. 7). They illustrate this phenomenon in an analysis of the ways in which discourses of ozone depletion are reconfigured in media texts to highlight summer recreational activities and aesthetic body ideologies. Overall, much of the literature focusing explicitly on environmental discourses emerges from a critical discourse analysis perspective but argues for an extension of this framework to the more-than-human world. As Stibbe (2014) states, an ecolinguistic approach to critical discourse studies "considers relationships of humans not just with other humans but also with the larger ecological systems that all life depends on," and thus such an approach "complicates power relations between oppressor and oppressed since it considers impacts on non-human subjects and future generations not yet born" (p. 117).

Other research on environmental discourses does not primarily focus on the ecological consequences of the analyzed discourses, but instead examines the connection between ideologies about the more-than-human world and other social structures. Rogers (2008), for instance, shows the ideological connection of meat-eating and hegemonic masculinity in the contemporary U.S. Pennesi (2015), describes the discursive construction of the farming identity in Brazil as moral, hard-working, and independent and shows how this construction functions within processes of market liberalization to justify farmers' participation in low-paying activities. Finally, Schneider and Peeples (2018) examine how race and ideologies of aggrievedness interact to shape energy policy preferences in the U.S. Lastly, some scholarship within linguistic anthropology involves the relationship between language and the environment but is primarily focused on the analysis of other cultural and ideological systems. Basso (1988), for example, demonstrates how Western Apache

speakers use place names in narratives to invoke and reproduce cultural norms; Johnstone and Mando (2015) show the interaction of proximity and environmental descriptions in media texts in their examination of what they call "job blackmail"; and Blanton (2011) analyzes the importance of spatiotemporal orientations in both resisting environmental racism and promoting color-blind discourses in Oklahoma. Finally, McElhinny (2006) investigates strategies for taking stances on environmental issues and how these strategies can challenge, but also ratify, certain aspects of (post)industrial capitalism.

Overall, discursive and rhetorical analyses of language and its relationship with the environment differ widely in terms of their frameworks and goals. Taken together, these analyses illustrate many types of constructions of the relationship between humans and the more-than-human world as well as the ways in which these discourses can function in the connection of environmental and other social interactions.

Implicit analyses of language in environmental research

The last body of research that illustrates the connection of language and the environment has been largely conducted within environmental communication and environmental psychology and generally does not include an explicit theorization of the role of language. An examination of the framings of environmental messages and their effects has been an especially productive area of research. Framing is defined in this literature as the organization of central ideas, "defining a controversy to resonate with core values and assumptions," and the simplification of complex issues through greater emphasis on some aspects (Nisbet & Mooney 2007, 56). Moser and Dilling (2004, 41), for example, argue for the efficacy of certain types of framings, saying, "If a problem and the actions people can take to help solve it are framed in ways that resonate with cultural values and beliefs, people are more likely to take the action than if they are not. For example, Americans deeply resonate with notions of competitiveness, leadership, ingenuity, and innovation." Some work on framing also investigates the structure of messages applied across different topics.

Examples include the study of gain-loss frames (Spence & Pidgeon 2010), which tests whether the presentation of effects as gains (e.g., "You will live longer if you stop smoking") or losses (e.g., "You will die sooner if you don't stop smoking") is more effective at changing opinions and motivating action. Relatedly, some work has tested the effects of framing messages through appeals either to fear or to hope, and how these framings interact with the presentation of environmental risks as global or local (Lee 2016). In addition, other research has investigated the effects of episodic versus thematic frames in environmental messages. These experiments ask if audiences respond more to information about a single case (episodic; i.e., information about the effects of environmental degradation for one starving polar bear or one flooded town) or statistical data about more general effects (thematic; i.e., information about the effects of environmental degradation for polar bears overall or for aggregate risks of flooding in towns). While these types of frames often show effects in experimental contexts (Myers et al. 2012), they generally vary by topic and response metric. One study, for instance, found that thematic information about the effect of climate change on polar bears increased support for governmental policies compared to episodic messages, but did not affect pro-environmental behavioral intentions (Hart 2011). Finally, the effect of the personal relevance of an environmental message has been tested by manipulating the perceived physical or social distance portrayed in the consequences of anthropogenic climate change. This manipulation, like most that scholars have tested, has been found to vary by partisan affiliation. In one study, for instance, selfidentified Republicans' support for climate change policy actually decreased after exposure to a message illustrating the negative effects of climate change on groups with a high social distance from the participants (Spence & Pidgeon 2010), showing what Hart and Nisbet (2012, 701) call a "boomerang effect.".

Other research on framing investigates what McCright and colleagues term "sociocultural frames" (2016), which highlight facets of some issues (such as a subset of the possible consequences of climate change) that are associated with specific cultures or

subcultures. The most common frames emerging in this research are public health (Maibach et al. 2010), energy security (Lockwood 2011), economic savings or opportunity (Nordhaus & Shellenberger 2007), religious faith or Christian stewardship (Goodstein 2006), and national security (Biello 2013; Werrell & Femia 2013); other frames, such as a legacy frame—the protection of an environmental legacy or heritage—and a nationalist frame, have also been explored (Matz & Renfrew 2014). A popular approach in the study of sociocultural frames foregrounds the alignment of values between a given frame and the values of the audience as the most important factor in predicting audience response. As Maibach and colleagues explain, "choosing message frames for climate change that are consistent with the values of target groups is one important way to make the recommended behaviors or policies easier to accept" (2008, 497). Research in this genre often approaches audiences' perceptions of these frames as reflections of an innate disposition towards liberal or conservative values (Haidt & Graham 2007), rather than viewing frames through a semiotic lens, which could illustrate the how such sociocultural frames achieve social meaning through processes of enregisterment (Agha 2005) and therefore resonate differently across listeners.

Other work in environmental communication and psychology considers the role of identity in environmental attitudes and behaviors (Carfora et al. 2017; Sparks & Shepard 1992; Sparks, Shepherd, & Frewer 1995; Whitmarsh & O'Neill 2010), finding that social identity is extremely important to environmental beliefs and actions in general, as well as to beliefs and action around climate change (Unsworth & Fielding 2014). In climate change attitude research in the United States, for instance, researchers have shown that women tend to care more than men about the issue (McCright 2010), that white men tend to be the least concerned (McCright & Dunlap 2011), that partisan identification has a large impact (Davidson & Haan 2012), and that some self-identification categories—such as the labels

environmentalist or activist—are important to engagement with climate change politics (Brick & Lai 2018; Roser-Renouf et al. 2014). With the exception of work on environmentalist and activist identities, however, most research in this area investigates social identity through macro-level demographic classifications, such as age, gender, ethnoracial identity, political affiliation, and so on (e.g., Goebbert et al. 2012; McCright & Dunlap 2011; Swim et al. 2018), rather than identity categories that are most meaningful to communities themselves. Other research in an experimental framework examines what linguists would call indexical associations in discussing "cultural polarization" (Kahan et al. 2012) and the environmental "spillover of racialization" (Benegal 2018), so termed because racial identification became a significant predictor of public opinion on climate change in the wake of Obama's election in 2008. Benegal attributes this phenomenon to the fact that "racial grievances and identities have become entangled with elite communication about climate change and its related policies today" (2018, 733).

Building on this research using a sociocultural linguistic framework can explain how such associations come to exist. Third-wave studies of sociolinguistics, for example, have shown that linguistic variables emerge as meaningful only in context and their perception is affected by co-occurring variables (Eckert 2012). Research on effectively communicating about climate change, however, often attempts to study social meaning in isolation.

Furthermore, linguistic anthropology has shown that linguistic forms can take on social meaning through the process of enregisterment (Agha 2005); this theory could contribute to an understanding of the effects of sociocultural frames such as national security, Christian stewardship, environmentalism, and so on on climate change attitudes. For instance, the finding that people identifying as politically-conservative prefer to avoid purchasing products with "eco-friendly" marketing (Gromet et al. 2013) has been interpreted as an effect of the association of political conservatism "with a preference for the status quo,

traditionalism, and a lesser reliance on harm and fairness principles in moral domains" (p. 9318). An interpretation focusing instead on the semiotic processes through which proenvironmental stances gain social meaning within communities of practice, however, allows for a more nuanced explanation of environmental stances and ideologies and their relationship with identity.

Overall, research on language and the environment within psychology and communication has explored many factors related to the efficacy of environmental risk communications, especially with respect to framing and the importance of social identity. This research, however, can be augmented through ethnographic understandings of identities and semiotic approaches to understanding the perceptions of environmental messages. In the next section, I explore what this approach would entail.

Towards an environmental linguistics

As illustrated in the previous sections, significant research on language and the environment is currently taking place within widely differing frameworks and methodological approaches. This scholarship has revealed a great deal about how linguistic forms encode environmental information, the myriad ways in which discourses about the environment reflect and reinforce anti-environmental behaviors (or, in more limited cases, pro-environmental behaviors), and how language can be used to frame environmental messages along several social and psychological axes. Moving forward, however, sociocultural linguistic frameworks and methodologies can build on this research by providing a theorization of identity on the local level, as an interactional, emergent phenomenon (Bucholtz & Hall 2005). This conceptualization of identity will help to integrate discourse-analytic research showing the connection between social structures, ideologies, and environmental practices with research that looks at the role of macro-level

identities and sociocultural framing. Furthermore, a focus on community-level identities and practices can help shift the focus from "individual-level behavior related to consumption and lifestyle," toward the "political fabric" of environmental issues (Carvalho et al. 2017, 124-125). Taking an environmental linguistic approach can also facilitate the analysis of the material and discursive elements of environmental interaction within the same analytic frame. Building on Bucholtz and Hall's call for an "embodied sociocultural linguistics" (2016, 174), an environmental linguistic approach can incorporate both environmental anthropology and linguistics to analyze the cultural practices of dealing with the environment as well as the communicative meaning of these practices. As Bucholtz and Hall point out for research on embodied human interactions with technologies, this approach can help to "dissolve the discourse-materiality dichotomy by analyzing semiosis as a process that emerges in the mutually constitutive actions that take place between human bodies and the other entities with which they interact" (2016, 187).

Examining the interaction of discourse and materiality has been an area of growing interest within sociocultural linguistics and linguistic anthropology. Shankar and Cavanaugh (2012), for instance, review a great deal of literature which investigates the ways in which discourse and materiality are intertwined, and they urge scholars to "attend to vital dimensions of materiality in language, as well as the role language plays in making materiality meaningful" (p. 357). While not much research focusing on environmental interactions has investigated the linguistic and the material within the same analytic frame, one important exception is Basso (1996), who illustrates the ways in which the semiotic resources of language and environmental features work together to teach moral values among the Western Apache. In order to capture an integrated analysis of the discursive and the material, environmental linguistics takes an approach to ethnography as theory as well as practice, arguing that environmental practices have communicative meaning within

communities and the social meaning of these practices is best accessible through ethnographic research and can be overlooked in experimental research or media analyses without an ethnographic component. In this dissertation I aim to illustrate the ways in which experiences with non-human animals and the environment take on meaning through cultural discourses within the hunting and fishing community and I argue that such an approach is integral to understanding environmental behaviors more broadly.

Building on earlier research on language and environmental practices and ideologies can, in addition, broaden sociocultural linguistic theory by highlighting the importance of interactions with the more-than-human world for sociolinguistic conceptions of identity. An extensive research tradition within linguistics deals with the construction of identities, documenting the way identities are constructed through intersubjective processes embedded within cultural and ideological structures. As Bucholtz and Hall (2004, 493–494) state, "On the one hand, the [individual] subject is the agent, the performer of social processes; on the other, the subject is the patient, subject to social processes. 'Intersubjectivity' emphasizes that identification is inherently relational, not a property of isolated individuals." Linguists have thoroughly theorized the relationship between language, identities, and structures of power, but have not yet included human interactions with plants, non-human animals, or landscapes within that theorization. Within environmental anthropology, on the other hand, scholars have begun to take a new approach to the non-human world through multispecies ethnography (Kirksey & Helmreich 2010) and the theorization of more-than-human intersubjectivity. This scholarship shifts the focus, as Kohn states, to "how forests think, not how natives think about forests" (2013, 94). This dissertation endeavors to unify these research traditions by highlighting the importance of local identities within work on environmental discourses, exploring the mobilization of linguistic resources—such as sociophonetic variation and chronotopic orientations—in the mobilization of identities and

personae (Eckert 2003) during environmental stancetaking, and finally, by demonstrating the importance of the more-than-human world for the creation of personae and identities within sociocultural linguistics research.

Structure of the dissertation

To that end, in this dissertation I use a mixed-methods approach. I combine ethnographic fieldwork and participant-observation, an intraspeaker sociophonetic analysis of a conservation-focused media figure, and a discourse-analytic examination of media discourses by hunting and fishing media outlets and non-governmental organizations. The combination of these methodological approaches allows me to study the ideologies around conservation and hunting both at the grounded, community level, as well as the institutional and media levels. In addition, the sociophonetic analysis contributes an in-depth examination of the performance of the sportsman persona and the linguistic features and stances associated with that person-type. Because each chapter employs a different methodological approach, a detailed description of the methods used is included within chapters 3, 4, and 5.

The dissertation proceeds as follows. Chapter 2 provides a description of the social context of hunting and fishing in the contemporary western United States, detailing the historical and contemporary circumstances that have influenced the practices and ideologies surrounding conservation within the hunting and fishing community. I illustrate how stances towards conservation as well as interactions with the more-than-human world have contributed to the construction of the sportsman persona since its origin in the nineteenth century. I also locate the hunter-naturalist identity within its social context and with respect to other relevant social constructs, such as gender, class, and race.

Chapter 3 examines how sportsmen and women discursively construct the changing climate, its effects, and its affected parties through their identities as hunters and fishers. It

also illustrates how hunters and anglers position themselves, as a community, through their discursive constructions of climate change. Within ethnographic interviews, I analyze how interviewees' understandings of climate change are interpreted through the lens of wildlife behavior such as elk mating season and salmon migrations, and how they also construct the risks of climate change through its effects on wildlife and wildlife habitat. Furthermore, I argue that hunters and fishers' constructions of appropriate responses to the climate crisis are shaped by their perceptions of the effects and risks as primarily borne by wildlife and by undeveloped landscapes. Finally, this chapter demonstrates how sportsmen and women, through these constructions, simultaneously produce their own identity as people removed from modernity, still connected to nature, and as the community with the most to lose from the effects of environmental changes. This chapter shows the ways in which conservation identities emerge in interaction with non-human actors and argues that linguistic theories of identity should include more-than-human intersubjectivity. It also illustrates how perceptions of possible and justified responses to environmental crises are shaped by local identities and thus shows, for interdisciplinary research on environmental practices and ideologies, the importance of understanding the intersection of identities and discursive constructions of environmental changes.

Chapter 4 explores the relationship between environmental stances and sociolinguistic styles through an intraspeaker sociophonetic analysis. This chapter examines the use of "Country talk" phonetic variables by one media personality—Steven Rinella—while taking two different environmental stances. In one context, Rinella takes a stance arguing for climate change action, a position which is controversial within the hunting and fishing community. In the other, he describes the virtues of the North American model of wildlife management, a stance widely accepted by sportsmen and women. An intraspeaker acoustic analysis shows that Rinella uses of a significantly fronter variant of the BOOT

vowel (associated with a rural, working-class persona) when taking a stance for climate change action, illustrating how Rinella mobilizes stylistic resources to reinforce his authentic sportsman identity while taking a controversial environmental stance. In this chapter, I contend that Rinella's mobilization of stylistic features when taking a disaligned stance shows that ideological stances can be enregistered as elements of the semiotic bundles that constitute styles, personae, and identities, and that as part of these bundles, they interact with phonetic variation and other discursive stylistic resources. This chapter also argues that research on environmental communication should view identity as partial and emergent, as a positioning which can be highlighted and made more relevant or minimized when taking ideological stances such as environmental stances.

Chapter 5 analyzes the chronotopic, or spatiotemporal, orientations drawn on in the climate change media produced by hunting- and fishing-focused institutions. In this chapter, I use a discourse-analytic approach to analyze the primary stances toward space-time: a positive stance towards the wilderness-past and a negative stance towards the rural present. Through the juxtaposition of these stances, sportsmen-created climate change messages construct the chronotope of the idyllic wilderness-past and locate the prototypical sportsman persona as truly belonging in that chronotope and as out of place in the contemporary modern and urbanizing world. I identify three main discursive strategies for the construction of the wilderness-past chronotope within the corpus of climate change media: reminiscing about nostalgic real and imagined pasts, invoking past heroic hunters, and drawing on a fear of the loss of heritage. In contrast with mainstream climate change rhetoric, which is largely characterized by a focus on imagined apocalyptic futures (Killingsworth and Palmer 2012), this chapter demonstrates an emerging mobilization of temporality and spatiality in climate change rhetoric. I also illustrate how these chronotopic representations contribute to a racialized and gendered representation of space-time and shape the perception of the climate change crisis, highlighting the negative effects of lost traditions, but minimizing future

negative effects, erasing the causes of the crisis, and shaping perceptions of possible solutions.

Chapter 6 provides a brief summary of the main points of the previous chapters. I describe the theoretical contributions of this dissertation for linguistics, environmental anthropology, and the broader environmental social science. I also suggest some directions for future research using an environmental linguistic framework.

Chapter 2: Sportsmen (and women) in the U.S.

In this chapter, I describe the historical and contemporary processes that have shaped, and continue to shape, the hunting persona and the ideologies surrounding conservation within the hunting and fishing community. I highlight the ways in which conservation and interactions with the more-than-human world have been fundamental aspects of this community since its inception among the hunter-naturalists of the Theodore Roosevelt era, situating the sportsman identity with respect to other social constructs such as gender, class, and race. After reviewing the historical development of the hunter-naturalist identity, I describe the contemporary persona, its relationship with ideologies of class, gender, and political conservatism, and the structures within the community that function to circulate unifying discourses and ideologies. I then describe the ideologies surrounding conservation in the hunting community, the areas of contestation, and the underlying unifying discourses that are drawn on in the construction and contestation of environmental messages.

History of hunting: The "original conservationists"

The current American conceptualization of the sportsman arose near the end of the nineteenth century as the "hunter/naturalist"—both a student of nature and a hunter and/or fisher (Altherr & Reiger 1995). Around the end of the nineteenth century, the United States was experiencing sharp declines in wildlife numbers. Industrial growth had led to significant environmental destruction. Only a few hundred of the earlier 60 million American bison remained (Jones 2015), facing severe overhunting supported by the federal government, which saw the extermination of the bison as a way to force the Sioux to accept the boundaries of a reservation and agricultural way of life (Phippen 2016). Commercial bison

hunters—who killed bison mostly for their hides—had decimated the once huge herds of the Great Plains. Other game populations were also diminishing due to growing urban populations and the market hunting they demanded. At the time, Theodore Roosevelt and other elite sport hunters, often hailed as the fathers of the conservation movement, were concerned about the loss of wildlife, but even more concerned about the "cultural implications that they saw in the possible loss of America's frontier culture, which they perceived as a serious threat to both Anglo-American masculinity and rugged individualism" (Williams 2015, 17). In order to preserve both wildlife populations and the access to masculinities that interactions with these wildlife afforded, the development of the hunter/naturalist persona also included a strong focus on understanding wildlife and advocating for their conservation, which coincided with and reinforced early efforts to conserve wildlife populations. These efforts resulted in a collection of principles—currently used by governmental regulatory agencies as well as citizen conservation groups contemporarily known as the North American Model of Wildlife Conservation (Altherr 1978; Geist, Mahoney, & Organ 2001), which banned the sale of game meat and prioritized management for the maintenance of healthy wildlife populations. Both the regulatory and discursive changes of this era, however, reflected class- and race-based divisions in American society. The conservation policies pushed by white upper-class urban sportsmen, such as bag limits (how many animals of one species a hunter may kill and keep within a given time period), restrictions on hunting methods, and closed seasons (the time of year during which it is legal to kill an animal), changed traditional patterns of hunting throughout the country. Poor and non-white groups, including Native Americans, immigrants, and poor and rural white hunters, perceived these government-imposed controls as "arbitrary and coercive" restrictions on traditional and well-established hunting practices (Williams 2015, 19).

Roosevelt's concerns for the future of Anglo-American masculinity were also mirrored by many other middle- and upper-class men at the time. Society was experiencing a crisis of masculinity brought about by greater urbanization and industrialization (Jones 2015). The experience of disruptive, rapid, and continuing change created a middle-class nostalgia for and eventually the commodification of a lost natural world and the masculinity that came from encounters with that wilderness. This feeling of loss was part of an emergent sense of what has come to be called anti-modernism, which materialized at the turn of the century in the desire of upper-class urban men for authentic hunting experiences and in efforts by governments and these hunters to conserve wildlife. Middle- and upper-class men living in cities were perceived as having fewer opportunities to realize activities considered masculine, and hunting emerged as a primary way for them to recover that masculinity. The historian Karen Jones (2015, 41), for instance, writes that the hunter-naturalist needed to possess "a full roster of passionate manhood," which included "frontier bravado and the ability to dispatch game with alacrity" and "referents of scientific and explorer acumen, natural history appreciation, self-awareness of the gravitas of the moment, and a performative bent." The crisis of masculinity and anti-modernity sentiment went hand in hand. As Loo points out:

The outdoors was considered a cure for the malaise of modernity afflicting the middle and upper middle classes at the time. For them, modern life, for all its comforts, was empty and sterile, lacking in substance and meaning. Middle-class moderns may have possessed the fruits of human ingenuity, but as an "over-civilized" people they had become incapable of enjoying them. In fact, they seemed incapable of feeling anything but bored or emotionally exhausted. Such was the price they paid for living in an "electrical age." "We moderns ... are keyed up to a concert pitch," observed The Doctor in 1908. "The demands upon us are urgent and nerve-prostrating.... There is no tyranny like twentieth-century civilization." As a result, these people sought what they called "authentic" experiences: experiences that would alleviate their boredom and, above all, teach them to feel the full range of human emotions again, to achieve a balance between reason and passion. It was this bourgeois reaction against modernity and the search for the real which lay at the core of anti-modernism, and which ultimately created a market demand for wilderness. (2001, 99)

Reactions to modernity varied, however. Middle- and upper-class women of the time might have sufficiently authentic experiences with the non-modern world through organized camping or canoeing, but men required different encounters. Modernity was perceived to have taken a greater toll on men, "rendering them overly rational, soft, a breed prone to nervous exhaustion and incapable of being men" (Loo 2001, 100). These modern men were seen as incapable of being decisive or aggressive, and, without a war, hunting was perceived as the best way to return this bourgeois masculinity to its former status. As a writer noted in the Canadian magazine *Rod and Gun* in 1905, men who hunted would "go into the woods with delicate white hands and soft bodies and come out again in a fortnight brown, hale, and hearty, able to eat like a horse and work like a Trojan" (*Rod and Gun* 1905, 503, cited in Loo 2001, 11). At the heart of these anti-modern sentiments was the idea that nature and wilderness were separate from modern life, instead a part of a lost pre-modern existence.

While for bourgeois men, hunting served as a way to regain a lost masculinity, the same was not true for lower-class men of the time, who were perceived instead as hypermasculine and uncivilized. Hunters such as Roosevelt celebrated the connection with a primitive nature that hunting allowed, but they also brought to the activity Victorian values of fairness and restraint (Williams 2015). Because the decline in wildlife numbers during the end of the century was partly due to excessive commercial hunting, for the well-off hunters of the era the sportsman identity was also constructed in contrast to racist and classist negative public opinions surrounding such hunting. The hunter-naturalist identity was specifically portrayed in opposition to commercial hunters whom hunter-naturalists presented as lower-class, uneducated, and hypermasculine (in contrast to the restrained middle-class masculinity shown by the hunter/naturalist). Commercial hunters, for instance, often killed many wild animals at once for personal profit. They also, according to

sportsmen, did not respect the "fair chase" ethic of affording the prey an opportunity to elude the hunter, and furthermore they did not strive for an understanding and appreciation of the wildlife they hunted. Illustrating these class-based ideologies, Roosevelt, once said, "All hunters should be nature lovers. It is to be hoped that the days of more wasteful, boastful slaughter are past and that from now on the hunter will stand foremost in working for the preservation and perpetuation of wild life" (Jones 2015, 278).

Similarly, while hunter-naturalists drew on and valorized Indigenous knowledge, the emerging identity was fundamentally white and middle-class. Native American subsistence hunters, whom sportsmen represented as being "savage"—in line with racist ideologies of the time—were not seen as hunter-naturalists (Jones 2015; Vibert 1996), particularly because Native Americans from some tribes actively fought against the incursion into their traditional lands by non-Indigenous people, including the hunter-naturalists of the era (Dray 2018). A distinction was thus constructed between ethical hunters—"true" sportsmen—and those seen as insufficiently moral: market hunters, subsistence hunters, and wanton adventurers. Through this distinction, hunter-naturalists constructed themselves as the true champions of wildlife conservation, justifying policies changing hunting access throughout the nation, including the removal of lands from Native American control for wildlife conservation purposes (Reiger 1975). Furthermore, the early regulations on hunting and fishing often stripped tribes of their economic bases. These reforms were championed by reformers hoping "to assimilate Indians and wed them to the ostensibly civilizing traditions of agriculture" (Williams 2015, 200).

In order to reinforce their positioning as civilized, moral hunters, bourgeois hunters and fishers of the time also drew on ideologies of both class and gender to create an identity that was seen as in civilized and ethical opposition to lower-class, hyper-masculine commercial and subsistence hunters. Prominent magazines such as *Outdoor Life* and *Forest*

and Stream dedicated columns to "Lady Sportsmen" and often published letters from female hunters, portraying them as important members of the community (although the magazines did not often support issues such as women's suffrage) (Smalley 2005). These columns showed an ideologically feminized version of hunting, more concerned with contemplation of the wild and introspection than the conquest of wild animals (Jones 2012). By drawing on ideologies of gender and class and their relationships with the natural world, hunting magazines of the era reinforced the "civilized" and ethical nature of the sportsman identity.

Eventually, growing prosperity smoothed out class-based divisions over the nature of ethical hunting. By the 1920s, most working-class and rural Americans had adopted the sport hunting culture that had once been the purview of upper-class urban men, and the number of licensed hunters doubled (Williams 2015). During this period new organizations emerged, such as the Izaak Walton League (1922, named for the popular author of *The Compleat Angler*) and Ducks Unlimited (1937), drawing their membership from more diverse socioeconomic groups. This democratization of hunter-naturalist culture continued after World War II, with returning soldiers dedicating themselves to sport hunting. In the decade immediately after World War II, the number of hunters in the United States almost doubled, going from fewer than eight million to nearly thirteen million. By 1975 that number had increased even further: there were more than twice as many American sportsmen as there had been at the outset of World War II (Williams 2015).

Indigeneity and hunting and fishing

The 1970s also brought a unification of the white sportsman identity in opposition to Indigenous groups' assertion of hunting and fishing treaty rights. During the Civil Rights Era, Indigenous groups began to assert their treaty-granted hunting and fishing rights through "fish-ins" and other unauthorized hunting, challenging subsequent arrests in court

(Shreve 2009). This activism culminated in a 1974 Court decision that Washington Indigenous fishers were entitled to 50% of the yearly harvest, as well as the use of traditional fishing methods such as gillnets.³ The Washington Attorney General refused to enforce this decision, but the U.S. Supreme Court upheld the verdict in 1979. In magazines of the era, white hunters and fishers drew on colorblind discourses (Bonilla-Silva 2017) to protest treaty hunting and fishing rights that were different for Native hunters than non-Native sportsmen. They also mobilized racist ideologies to criticize tribe members' use of these treaty rights, painting Indigenous hunters and fishers as greedy, grumbling, dissatisfied, and opportunistic. Writers urged Congress to act to protect the "heritage and birthright of American Sportsmen" (Williams 2015, 203). A writer for Outdoor Life argued, "my tax-paying, license-buying kids are just as entitled to catch fish as old 'Throwing-the-Bull's' free-loading kids are" (Starnes 1979, 15). Another article by the same author highlighted similar ideologies in his assertion that "Indian tribes ... help themselves" to public resources while "the rest of us are asked to pay" (Starnes 1977, 8). Editorial writers also portrayed Indigenous activists as perpetuating violence towards non-Native hunters and wildlife. Tribal claims to culturally important sites were "raids ... on national forest lands" (Williamson 1984, 78), and hunts by Indigenous hunters were characterized as "bloodbath[s]" (Conley 1984, 5), "grim slaughter[s] of helpless big game," and "massacre[s]" (Williamson 1984, 33). One editorialist, Lonnie Williamson, suggested that non-Native hunters should "put the wagons in a circle and fight off another raid" (1984, 78), drawing on racist rhetoric from early colonial practices, portraying Indigenous treaty rights as a continuation of the history of violence between the United States and Native tribes

³ Gillnets are a type of fishing net that consists of weighted vertical panels of netting hung across a river or stream by a line with regularly spaced floaters. Fish who swim through the net are typically caught when the twine is entangled in their gill covers. Gillnetting is considered a very effective

(Williams 2015). This period of tension shaped many current ideological and community divisions among white and Native hunters. Some scholars have even pointed to the backlash of the Washington fishing protests as "the roots of the modern anti-Indian movement" (Cohen 1986, 15). When other tribes, such as the Chippewa in Wisconsin, asserted their own treaty rights and were victorious in the courts, they often faced racist slurs and physical violence from non-Native local fishermen (Pearson 1996). Outdoor writers additionally constructed Native hunters as anti-conservation. George Reiger, for instance, argued in a column entitled "Bury My Heart At Western District Court," "For men of all races who love the outdoors, these are disconcerting times" (1975, 102).

Similar discourses are still mobilized today by hunting- and fishing-focused media as well as my research participants in Washington state. For twenty-first-century non-Native hunters and fishers, Native American groups are subject to the classic duality of the twin Western traditions which simultaneously "idolize and savage the primitive" (Ellen 1986, 8). Contemporary hunters admiringly mention ancient Native hunters, portraying them as perfectly in tune with nature. These discourses, however, tend to draw on Indigeneity positively only to refer to pre-colonial Native hunters, who are viewed as harmoniously part of the natural world, but existing only in the past. Non-Native hunters in several regions still show a great deal of resentment towards Indigenous hunters and fishers. Several of my interviewees stated that they felt traditional fishing practices, such as gillnetting, were not ethical, and one sarcastically contrasted the practice with the perception of Native Americans as "stewards of the land." Some interviewees from northern states drew an explicit distinction between what they saw as an older, more authentic version of Indigeneity, which "would have a lot to teach contemporary hunters," and modern tribe

form of harvesting fish and therefore environmentally-dangerous and potentially unethical. The practice is also heavily regulated in most areas.

members, whom they saw as having lost their culture, and hence their "connection to nature," through the ravages of drugs and alcohol. The resentment and division between Native and non-Native hunters varies somewhat by region, however, as Colorado and Utah hunters in my study did not express similar resentment towards Native hunters, even mentioning positively that some reservations allow hunting and trapping by non-Native people, often with less strict regulations than on state or federal lands.

Contemporary western hunters

Defining the exact parameters of the contemporary community of sportsmen can be somewhat challenging. Traditionally, the term includes both people who hunt and fish, and institutions and media tend to conflate the two outdoor activities, as seen in the titles of popular media such as *Field and Stream*, informal terms such as "the hook and bullet crowd," and so on. While hunting itself is a practice engaged in by many people—at least 11.5 million who purchased hunting licenses in 2016 (USDFW 2016), plus those who participate in any type of small-game hunting for which a license is not needed—the hunter or sportsman persona is based on not only practices but also institutional discourses and ideological orientation. For many participants in this study, practices were the primary determinant of the hunter or sportsman category, as illustrated by a participant who stated that she did not identify herself as a hunter because, although she frequently went hunting, she had not yet succeeded in killing an animal. Other participants reported practice-based meanings for the label *sportsman*, specifically, as opposed to *hunter*. Sportsmen were stated to be those who act ethically towards wildlife and the land, particularly adhering to the fairchase morals set down by early hunter-naturalists.

Within discourses produced by the hunter media as well as the participants in this study, several subsets of the hunting community are commonly discussed, including "legacy

hunters," those who come from hunting families, began hunting as children, and who tend to affiliate with the sportsman persona; "adult-onset hunters," those who began hunting as adults, some of whom identify with the sportsman persona and others who do not (Cerulli 2011); and "hipster hunters," primarily urban younger people who are politically-liberal, describe their motivation for hunting as a desire for reconnection with the origins of their food or for cleaner food, and do not use the term *sportsman* or participate in hunting-oriented NGOs or consume hunting-oriented media (Marris 2012). The latter two constituencies are in a somewhat uneasy truce with legacy constituencies within the hunting community, as illustrated by a post on the *Field and Stream* blog, The Gun Nuts, which urges legacy hunters to welcome to hipster hunters, saying, "We might find hipsters annoying, but adding a bunch of locavores to our ranks is a net positive for hunting's image" (Bourjaily 2015).

Because the number of people who participate in hunting is falling—a 14.6% decrease between the 2011 and 2016 U.S. Department of Fish and Wildlife surveys—members of the community are very concerned with "R3": recruitment, retention, and reactivation. Many of my interviewees mentioned falling hunter numbers as their greatest concern about hunting and wildlife conservation, either because a lack of hunters will lead to a lack of funding or because negative public perceptions and anti-hunting activism will lead to regulations outlawing hunting practices. Because of the decline in hunters and the focus on "R3," sportsmen often discuss how to recruit new hunters, women hunters, and non-white hunters (Durkin 2019). As illustrated by the blog post by Bourjaily, this focus on R3, along with fear of negative perceptions of hunting, leads many hunters to embrace any new members, even those who may differ in their orientation to rurality and their political ideology.

The hunting and fishing community, however, is defined not only by practices, but also by institutional discourses and affiliation with sportsman persona. While hunting and fishing are different activities and not all sportsmen practice both (substantially more people fish than hunt, although, in my experience, most hunters also fish, at least occasionally), they are consistently conflated by sportsmen media and NGOs, the majority of which aim to serve both hunters and fishers. Similarly, media and corporate representations of hunters often reinforce the persona of the sportsman as a rural, white, working-class, truck-driving man's man, a characterization that individuals who hunt and fish orient to in greater or lesser ways. For instance, as one author writing about hipster hunters stated, many people just learning to hunt are alienated by the perception that "all hunting is somehow the cultural property of jerky guys with big trucks and a fondness for country music and Republican candidates" (Marris 2012). In this study, however, I focus on those hunters who affiliate with the term *sportsman* and consider themselves members of the hunting community, characteristics which are less common among hipster hunters and adult-onset hunters in general, especially those who do not identify with the conservative political ideologies portrayed as typical of the sportsman person-type.

Of the hunters who participated in this study, the majority were men (32 of 42), white (40 of 42), and over fifty years old (22 of 42), a demographic breakdown which is typical of the broader hunting community: the U.S. Department of Fish and Wildlife's 2011 survey found that over 90% of those who purchased hunting licenses in that year were men, and 96% were white (a complete summary of the participants is included in the next chapter in Table 3.1). Many of the younger hunters who participated in my interviews were more formally-educated than the older generation—many had undergraduate or advanced degrees in natural sciences—but almost all affiliated with the term *sportsman*, and most were active members of hunting-oriented NGOs. In this study I also focus on individuals and

organizations that concentrate mainly on hunting, although most individuals also participate in fishing and most sportsman organizations include fishing within their missions. I found that people who exclusively fish are less likely to adopt the *sportsman* label and orient to the sportsman persona and that the more fishing-oriented media and NGOs often stray further from the indexical field in which the sportsman persona is situated.

In the next section of this chapter, I describe the sportsman persona and its circulation and reproduction through opposition to anti-hunters, participation in hunter education classes and other socialization processes, and discourses of non-governmental organizations (NGOs) and hunting-oriented media and corporations.

The sportsman persona

In addition to hunting and fishing practices, the sportsman persona is constructed through its relationship to other social categories, especially class/region, gender, and race. While the hunter-naturalist person-type originally emerged as an upper-class identity, the conceptualization of the sportsman was democratized in the wake of World War II. Current hunters and fishers align themselves with the working class and see hunting as, in some ways, constitutive of that class positioning, regardless of an individual's financial resources. In the 1983 country music song "Redneck at Heart," for instance, Ronnie Milsap argues that even men with white-collar jobs could be rednecks if they read *Field and Stream* during their breaks, singing, "I'm a redneck, well, a two-piece suit don't change what's deep inside ... I sneak off on a coffee break and read my Field and Stream." Similarly, Donald Trump Jr. has described himself as a "closet redneck" because of his outdoor hunting and fishing activities. In a 2012 interview with "The Six Pack" (a radio show hosted by DJ Ben Harvey and comedian Dave Rubin), Trump said, "I'm kind of a closet redneck. I shoot competitively, I'm an avid fly fisherman, big-time hunter, bow hunter, rifle hunter, so I do

all of that. ... I try to do what I can to decompress and get out of the New York City life in what little free time I have and try to expose my kids to that. Because I think the city's great, but I think it can also get you in a lot of trouble" (The Six Pack 2017). Research participants in this study similarly aligned the hunter person-type with the working class, though less explicitly. One interviewee, Colton, describing how sportsmen think about environmental problems, contrasted those with a "full-time job taking care of their family," meaning blue-collar sole breadwinners, with those who have the time to "go research" for themselves. Another participant, Gene, contrasted hunting lifestyles with a "city mentality," which is associated with a "glamorous materialistic life" and makes people "lose touch with reality." While many interviewees acknowledged that hunting can be expensive both as an activity and as a source of food (depending on the price of the license for the game animal, the travel required, and whether the individual processes the meat themselves), others asserted that it was a less expensive way for them to feed their families, especially compared with the cost of purchasing commercial meat of similar quality (i.e., organic and freerange). In many ways, contemporary hunters map class more closely onto geography than to financial resources, seeing positively-valued white working-class identities such as redneckness, hillbillyness, and white trashness as exclusively properties of rural Americans, presumably especially those who hunt and fish, rather than those with fewer financial resources.

The sportsman persona is also a heavily gendered persona, despite the presence of female hunters within the community. Gender itself is both incessantly talked about and studiously avoided within the hunting and fishing community. As described earlier, gender ideologies have played an important role in the constitution of the hunting and fishing identity since the early emergence of hunter-naturalists in the nineteenth century (Jones 2015), and for contemporary hunters, the perception that hunting is a way to portray

masculinity is still prevalent. The most common self-designated term for the identity within the community is the gender-specific *sportsman*, especially within institutional contexts, while hunter is common in informal conversations. While occasionally sportswoman is used in academic and special institutional materials, it is more common to see sportsmen and women as a collocation rather than sportswomen alone, and women hunters often identify with the umbrella term *sportsmen*. One woman hunter and media figure that I interviewed, Beth, said that women hunters had "tried to make sportswomen work, but it just didn't sound good" and that she had now accepted the term sportsmen as a term referring to all hunters. Nevertheless, at a basic demographic level, the community is overwhelmingly male. Recent statistics suggest that more than 90% of those who bought hunting licenses in 2016 were men (U.S. Department of Fish and Wildlife 2016), and while there is a strong push to encourage more hunting by women, resulting in funding for workshops, events, and other coordinated efforts to increase women's participation in hunting and fishing, this number has not changed significantly in the past ten years. For instance, in a sportsmanrelated conservation event I attended in February 2019, the Western Hunting and Conservation Expo in Salt Lake City, there were several panels specifically aimed at women hunters. These panels were promoted by the event organizers and were the only panels without corporate sponsorship. The panels were very poorly attended, even at an event with tens of thousands of attendees. In fact, at one of the women-hunter-focused panels, I was one of only two audience members.

Hunting is traditionally a patrilineal practice, passed on from fathers to sons, and the gendered perception of hunting socialization has persisted among contemporary hunters (Littlefield & Suzanne 2011). On the popular hunting podcast *The MeatEater*, for instance, the host stated, "If females are to get into hunting via their fathers it's usually because they don't have a brother." In my own family, this observation is somewhat true. My mother,

who grew up hunting with her father, did not have any brothers. During my childhood, however, I was mostly socialized into hunting culture by my uncle (my mother's brother-in-law), who, it seemed to me at the time, approached taking me on hunts as part of his civic duty to ensure a moral education in the next generation, similar to making sure we went to school and church. While my uncle did have sons, because my own father did not come from a hunting family and did not enjoy hunting, my uncle was the one who provided this education for my sister and me. Within the participants of this study, though, only one of the women had learned to hunt from her father; the majority had started hunting because of their husbands.

While they may draw on traditional femininity at other moments, most women hunters I observed and interviewed preferred to background their gender in hunting contexts. A common bumper sticker, for instance, reads "Pretty in pink, dangerous in camo," illustrating the division between perceptions of traditional white femininity and the hunting persona. However, femininity in hunting is often emphasized by male hunters. One interviewee, Aaron, for instance, said that he had noticed a "fetishization" of women as hunters since his wife began hunting (I did not have a chance to interview his wife). Relatedly, several state legislatures recently passed laws—opposed by national women's hunting groups—to legalize the use of blaze pink high-visibility hunting apparel, as well as the traditional orange. One woman hunter, writing for *Outside Online*, ridiculed the bills, saying, "Oddly, I haven't met any women who've said they'd go hunting if only the safety color wasn't limited to that dreadful orange. Could it be that training, scouting, shooting practice, buying a tag, 4 a.m. wake-ups, crawling around inhospitable wilderness areas stalking wary prey, killing a living creature, field dressing, and laboriously packing hundreds of pounds of meat while covered in blood and dirt would be more broadly appealing with more feminine safety colors?" (Mander 2018). Femininity within hunting

can also be eroticized, to the frustration of the women hunters I spoke with. On one Western Conservation and Hunting Expo panel about women in hunting, all six panelists expressed frustration with the term *huntress*, which they said was used by scantily clad women on social media who claim to be hunters. In that vein, the Outdoor Channel premiered a controversial show in 2017 called *For Love or Likes*, in which "Instafamous" female hunters—young, conventionally attractive women who have many Instagram followers—compete in a series of hunting challenges, guided by a male host. While femininity has a complicated position within the hunting community, many female hunters do affiliate with the prototypical sportsman persona. In the next section, I describe four main discursive contexts in which this persona is constructed and circulated: through expressed fear of, and opposition to, anti-hunters; within hunter education courses; through NGOs and other membership organizations; and in media and brand-created content.

Constructing the sportsman persona

While participants in this study were from widely dispersed geographic areas within the western United States, they expressed a mostly cohesive set of conservation-oriented ideologies and affiliation with the sportsman person-type described above. A number of factors contribute to the cohesiveness of these ideologies: (1) Hunters tend to have a strong sense of collective identity constructed in perceived opposition to "anti-hunters"; (2) Hunters are socialized into the practices and larger cultural context through hunter education courses and other community activities geared towards recruiting young and female hunters, such as youth hunts and mentorship organizations; (3) Many hunters belong to one or more of the many membership-based organizations that serve the community, and these institutions conduct frequent events; (4) Sportsmen tend to consume similar media and organization- and brand-created content. In the following sections, I examine the function of

each of these factors and the ways in which they construct a cohesive set of hunting ideologies as well as the widely-known sportsman persona.

Anti-hunters

The legal history of hunting in the past forty years has contributed to a sense of a unified hunting and fishing community. Within this time period, hunters and fishers have been embroiled in a series of legal battles, all of which have played a part in creating this feeling of community identity. As discussed earlier, conflicts over the allocation of fish and game harvests with Indigenous groups within the U.S. and concerns about the assertion of Indigenous treaty rights have been a unifying force within the white hunting and fishing community for decades. Furthermore, and most importantly for contemporary community self-perception, for the last 40 years hunting groups have been involved in legal and discursive conflicts with parts of the environmental movement. During the 1980s, as antihunting activism gained in popularity, groups such as Greenpeace and the Humane Society began to practice a type of activism that they called "hunt sabotage" and that hunters called "hunter harassment." Grassroots activists would follow hunters, making noise as they walked through the woods to scare off game animals. Others would go onto public lands and drive deer onto private property, where hunters were not allowed access. In some, more drastic, cases, protesters would place themselves between a hunter and their quarry (Williams 2015). In response, many states passed laws outlawing this type of anti-hunting activism. While these laws were later found to be in violation of the protesters' First Amendment rights, and direct anti-hunting activism has been less common during the beginning of the twenty-first century, the context of both legislative and grass-roots antihunting activism has been influential in creating the link between hunting, rights, and citizenship as an important ideology in hunting's public culture. Hunters' self-image as "a

discrete class of citizen with legitimate rights-claims of their own" developed in tandem with the modern environmental movement (Williams 2015, 198). Grassroots anti-hunting activism still occupies a large place in the minds of contemporary hunters. Several participants in this study researched my background online before agreeing to participate, to make sure that I did not belong to any groups such as Greenpeace or the Humane Society, and others asked for confirmation at the outset of the interview that my goal was not to make hunters "look bad." In addition, many hunter media organizations and organizations frequently publish tips for dealing with "antis," short for *anti-hunters*, and hunter education classes discuss how prospective hunters can prevent negative public opinion, such as by not posting pictures with harvested animals on social media, being courteous to hikers in the woods, and covering harvested animals in their trucks when driving home.

Hunter education/safety classes

The institutionalized aspects of the hunter socialization process also contribute to a fairly unified set of ideologies and practices among the hunting community. In order to buy a hunting license in the United States, prospective hunters must take a hunter education course, colloquially known as "Hunter Ed." In this ten-hour class, prospective hunters learn about hunting regulations, firearm safety, wilderness survival, and conservation history and best practices. While the course varies somewhat from state to state, the core curriculum is standardized. The courses are taught by volunteers and are offered in languages other than English, such as Spanish and Hmong, in areas where there are volunteer instructors available to develop and deliver the course in those languages. The state-level Departments of Fish and Wildlife administer the courses, with substantial participation from the National Rifle Association. Courses can be taught in person or online, but online courses must also include an in-person session with "live fire," or the use of loaded firearms with bullets for

training in safety procedures. In addition to hunter education courses, state Departments of Fish and Wildlife, in collaboration with non-governmental organizations, often offer young hunter recruitment and retention events, such as youth hunts and mentorship programs.

NGOs and membership organizations

Non-governmental organizations are very active within hunting and fishing contexts and are another primary way in which cohesive hunter identities and ideologies are produced and circulated. Almost all of the participants in this study were involved with one or more hunting NGOs in some way, a pattern that is fairly typical of the wider hunting community. Since the emergence of the hunter-naturalist identity at the turn of the twentieth century, NGOs have played an important part in the organization of the community. The earliest organization, the Boone and Crockett Club, is still active today, along with many others (see Chapter 5 for more information about sportsman-oriented NGOs).

McCorquodale, writing in the *Wildlife Society Bulletin* about the importance of these organizations for the hunting community, calls NGOs "the organizational embodiment of our recreational hunting culture" (1997, 569).

One especially important non-governmental organization in this context is the National Rifle Association. Politically, the association between the sportsman identity and contemporary conservative political ideology emerged in the 1970s after the passage of the Gun Control Act of 1968. During the early 1970s the National Rifle Association (NRA)—which had previously existed mainly as a community of hunters and target shooters—began advertising heavily in outdoor magazines, encouraging hunters to become members of the organization by "warning sportsmen that 'the opponents of individual freedoms press forward on every front" (Williams 2015, 189) and that "the people who hate hunting ... have decided that we hunters ... are a helpless minority" (2015, 190). In this period, the

organization also formed a lobbying arm and began to focus on politics. After the election of a politically-conservative Association president and board members in 1977, the NRA began to expand its membership by concentrating primarily on political issues, creating coalitions with conservative politicians (Utter & True 2000), and becoming a politically-mobilized social movement (Leddy 1987).

Currently, the majority of sportsmen politically identify as either Republicans or Independents and name "gun rights" as either the most important issue facing sportsmen or as one of the most important issues along with conservation (National Wildlife Federation 2012). The association of the sportsman identity with political conservatism continued to grow stronger in the 2000s as the geographic political polarization of the United States increased (Fiorina & Abrams 2008). The sportsman ecocultural identity includes strong orientations to sparsely populated spaces and rural, or "country," culture, stances which have become increasingly synonymous with conservative political ideology in the United States.

In the contemporary United States, an alignment with the hunting person-type is situated in a field of indexicalities (Jaffe 2016) or a semiotic alignment (Chandler 2007) with other rural, or "redneck," personae. The contemporary NRA, as well as other membership organizations such as musician and conservative activist Ted Nugent's Hunter Nation, work to consistently strengthen the links between firearms, hunting, and right-wing ideologies such as limited government regulations, anti-union sentiment, white supremacist ideologies, and anti-LGBTQ positions. Figure 2.1 shows the "Hunter Nation Constitution," a document which defines the goals of the organization and is designed visually to index the U.S. Constitution. The final purpose listed in the document is to "promote the ideals of God, Family, and Country, including the founding principles of the Constitution of the United States of America." In addition, the home page of the Hunter Nation's website reads:

Unfortunately, hunting, which was once an honored and respected tradition in America, is under attack by the Left who wants to destroy our way of life. These are the same people that want to take our guns, that mock our faith in God, that want open borders and want to destroy the very moral fabric of America. Well, we as proud American hunters will not let that happen! That is exactly why we have joined together to form Hunter Nation! Just like our Nation's earliest patriots, we ask you to unite and join Hunter Nation to help defend our Traditional American Values. (https://hunternation.org)

This construction of links between the hunting identity and other right-wing ideologies was also found in many of my interviews. When completing a demographic questionnaire about themselves after the interview, for example, the study participants often reacted similarly to questions they perceived as affiliated with liberal, university contexts. The questionnaire asked participants to identify their gender by including only the word *gender*, followed by a colon and a blank line instead of asking participants to identify as *M* or *F*, or having the researcher assign binary gender on the basis of perception. While I had hoped that the format would be a fairly unmarked way to ask for the information, almost every participant commented on the format, identifying such a question about gender with liberal and urban groups. Overall, hunting- and fishing-oriented NGOs are a prevalent way in which the sportsman persona and the ideologies related to that persona are circulated within the hunting community. Several NGOs, such as the NRA and Hunter Nation, especially work to reinforce the indexical field in which the sportsman person-type is situated, particularly the associations between the persona and conservative political ideologies.

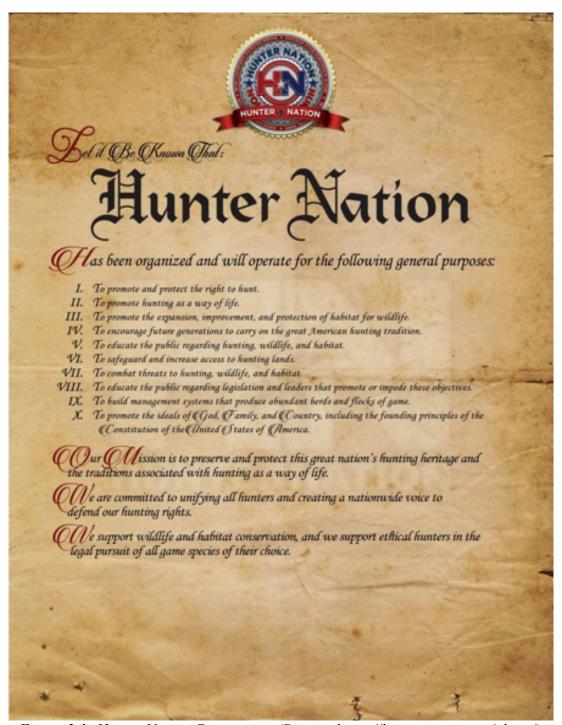


Figure 2.1: Hunter Nation Constitution (Source: https://hunternation.org/about/)

Hunting regulations and events

In addition to membership organizations, regulations and events surrounding hunting licenses and license-related events also function to reproduce and reinforce cohesive

ideologies within the hunting community. Contemporary hunting of most game animals in the United States requires a license, called a "tag," which is available for each game species at levels set by ecological criteria. The Department of Fish and Wildlife (DFW) in each state primarily decides the number of each species in a given area, the number the region can healthily support through the winter, and what levels of non-human predation are expected.⁴ With this information, the state DFWs decide how many licenses to issue for that species in each district in each season. If the game animal is plentiful, certified hunters may be able to buy a license "over the counter" at local stores. If the DFW has determined, however, that fewer animals should be taken than the number of people who would like to hunt them (factoring in the average success rate of hunts), then tags are awarded through a lottery system and, in most western states, a points system. Each person who submits an application is entered into the lottery for that year. If they are not selected, the next time they submit an application to hunt that game species, they will receive an extra "preference" point, or bonus point, and thus have a better chance to be selected. For certain rare species (such as desert big horn sheep) and special districts (like those with restricted hunting and thus larger wildlife) the chance to receive such a tag is very small, and each hunter is limited to receiving only one in their entire life. States also often retain such highly desirable tags to award via auction, a method used for raising money—sometimes millions of dollars across licenses—for both state wildlife management institutions and NGOs that are involved with wildlife management work (usually the species-specific organization for the auctioned game license).

Often these auctions are conducted during events that raise money for wildlifefocused NGOs through ticket sales as well as the auctioning of game licenses, donated gear,

-

⁴ The name of this institution can vary by state, and according to treaty rights, many federally-recognized Indigenous nations govern their own hunting rights and regulate their own members.

guided hunts, photographs, and other items. One of the biggest of these events is the Western Hunting and Conservation Expo, which I attended in Salt Lake City, Utah in February 2019. The organizers estimated that over 40,000 people attended, as well as hundreds of vendors selling gear, guided hunts, assistance in navigating the license system for different states, taxidermy, and so on. On both Friday and Saturday nights (the event is Thursday-Sunday), there are large and expensive catered dinners with guest speakers, live bands, and extensive auctions. Figure 2.2 shows the well-attended Saturday night dinner and auction event, held in a large ballroom.



Figure 2.2: Saturday night dinner and auction at the 2019 Western Hunting and Conservation Expo in Salt Lake City, Utah.

Saturday night featured several prominent guest speakers, including the Republican Governor of Utah, Gary Herbert—who spent much of his speech contrasting Utah with a stereotypical caricature of "liberal" California. Herbert described California state's purported financial woes as being due to Democratic Governor Gavin Newsom's response

to a coyote attack, in which, according to Herbert, after Newson's dog was attacked by a coyote, he commissioned an expensive study rather than taking action to protect his dog. Herbert then offered a contrasting response by Republican Texas Governor Rick Perry, who shot a coyote who threatened his dog during a jog. Herbert finished the story by saying, "That's why California is broke, and Utah is not." Herbert's speech then went on to reinforce these semiotic links between hunting and other rightwing ideologies. He described his gratitude for gun rights, for instance, saying that the United States has been shaped by guns, from "fighting off Indians" to "beating Hitler," and finished his speech by expressing his thankfulness for President Donald Trump's appointees to the U.S. Department of the Interior, as they "speak our [i.e., sportsmen's] language," the language of conservation. The MC of the event then introduced the next speaker, Donald Trump Jr., as "one of us."

Community fundraising events thus intentionally work to strengthen the fields of indexicality surrounding the hunting person-type in the United States and to circulate unifying ideologies.

Media and brands

Another context in which these ideologies are reproduced is in hunting- and fishing-oriented media and corporations and brand-created content. Hunting and fishing-related media have long been influential in the construction of the hunting person-type (see Chapter 5). The outdoor writers of the 19th century created, from "mythologies of heroic and self-sufficient frontier hunters," an image of "intrepid hunter-naturalists, and conservation-minded sportsmen" (McGuigan 2017, 920). Contemporary magazines and television shows also shape the "social imaginary" of the North American hunter (Dunlap 1988, 53–54; Loo 2001, 102, 121). The earliest popular hunting and fishing magazine, *Field and Stream*, has been in circulation since 1895, while other forms of media, including television, gained

more popularity in the late twentieth century. The Outdoor Channel—the first television channel devoted primarily to hunting—was started in 1993, with the Sportsman Channel following in 2003. Both channels have a sizable viewership—they are available in over 35.8 million households and 34.1 million households, respectively—and both have seen growth in viewership numbers, especially among men in the 18-54 audience bracket (Nielsen Company 2015). In addition, NGOs and hunting and fishing brands also create widely consumed content, with the most popular "brand ambassadors" reaching up to three quarters of a million followers on social media platforms such as Facebook, YouTube, and Instagram. Popular media depictions of hunters often align with the hunter persona, further contributing to the circulation and reproduction of the persona and the creation of a cohesive sense of sportsman identity across widely varying practices and individuals. These portrayals consistently represent the prototypical hunter as close to nature, knowledgeable, and conservation-minded, but, as we have seen, the meaning of conservation can vary across communities. To that end, the next section describes the ideologies surrounding conservation within the hunting community.

Hunting and conservation ideologies

As previously illustrated, the contemporary sportsman persona is tightly associated with conservation, a link which arose concurrently with the hunter-naturalist identity.

According to the required hunter education classes that all new hunters take and which I attended as part of this study, sportsmen and women are responsible for galvanizing and sustaining the wildlife conservation efforts in the United States. The script of the course describes how, during the nineteenth-century decline of many wildlife species, hunters of the time mobilized and took several actions that ultimately contributed to wildlife conservation. They created the North American Model of Wildlife Conservation, as

mentioned previously, and promoted the Pittman-Robertson Act of 1937, affectionately referred to by contemporary hunters as the "PR funds," a law which included an 11% tax on firearms and other hunting equipment, the proceeds of which are required to be used for wildlife conservation efforts. This tax is contemporarily taught to be a "self-imposed" burden accepted by hunters to help wildlife—seen as "self-imposed" in that sportsmen are taught that their predecessors were the original lobbyists for the act and that they themselves are the ones bearing the brunt of the tax. These policy efforts have been, according to hunter education instructors, very successful, funding state DFWs and some federal lands administrations, among other projects, and eventually causing a significant resurgence in wildlife populations. The act has been amended several times, but still remains in effect, generating hundreds of millions of dollars a year that supporters say allow for substantial habitat preservation and other conservation efforts (U.S. Department of the Interior 2018).

In addition to the historical conservation efforts and money generated through the Pittman-Robertson Act, contemporary sportsmen in my study cited their continued support for game-specific conservation groups such as Ducks Unlimited, Rocky Mountain Elk Foundation, and others, as evidence of their deep commitment to conservation. Participants also mentioned hunting itself—which they see as a way to maintain healthy populations of wild animals—as an act of conservation.

Contemporary hunters define *conservation* in opposition to the idea of "preservation"—that is, of maintaining natural systems in a form of stasis, separate from any sort of human involvement. In this regard, interviewees often cited Gifford Pinchot's name and the "conservation ethic" he developed, a concept taught in hunter education courses. Pinchot was the first Chief of the U.S. Forest Service, starting his term in 1905.

According to interviewees, he developed the definition of conservation as "wise use," rather than what they viewed as the false division created between humans and the environment by

the preservation discourses espoused by environmentalists. Almost every interviewee quoted the definition of conservation as "wise use," a phrase used both in hunter education courses and in materials produced by NGOs and circulating widely in the community. Several interviewees described hunting as a "consumptive" activity, but argued that other outdoor activities, such as hiking and camping, also impact the environment when done in great enough numbers. Generally speaking, while the importance of conservation, and the central role played by sportsmen in bring it about, is espoused by almost all hunters and fishers, the practices identified as acts of conservation within this community can vary widely from those seen in non-hunting discourses surrounding environmental conservation.

Conservation discourses in the western U.S.

This dissertation focuses on the conservation discourses of hunters in the western United States. This context differs from southern or eastern hunting in ways that impact both the sportsman persona and the conservation ideologies espoused by hunters. One feature that distinguishes hunting in the western states is the prevalence of federally-owned public lands upon which anyone can hunt with a license. While some western hunters hunt their own lands or request permission to hunt on privately-owned lands, the majority of discussion and education around hunting in the west concerns public lands. For this reason, public land management has been one area in which hunters and fishers, despite the association between the hunting identity and right-wing political ideology, have resisted, fairly successfully, GOP platforms in western states such as Utah and Wyoming calling for the transfer of ownership of these lands (Randall 2019). Another aspect that distinguishes the West is the prevalence of elk and other big game species less common in other regions, such as pronghorn antelope, mule deer, and black bears.

While typical game species vary from state to state throughout this region, several hunting practices are fairly consistent. The main focus of many western hunters, for instance, is big game species such as deer and elk, the seasons for which occur in the fall. Typically, archery seasons open earliest, historically coinciding with the mating season in order to grant archers an advantage: bowhunters can more easily use calling techniques to approach deer and elk during mating season (see Chapter 3). Seasons for other types of weaponry open later (often with muzzleloader season next, for similar reasons) and rifle season is the latest of the year. During deer and elk seasons, hunters and their families often camp in areas near their favorite hunting spots within the districts allowed by their hunting licenses. These camps are seen as an opportunity for developing and strengthening friendships and are especially important for the formation and reinforcement of male bonds (Boglioli 2009). Other game animals commonly hunted throughout the west are wild turkeys, which, in many states, have seasons in both the spring and the fall; waterfowl; and upland birds, such as pheasants. The primacy of elk and turkey hunting in the imagination of western hunters is attested by bugling competitions (in which contestants mimic the sound of a bull or cow elk) and gobbling competitions (in which contestants mimic the sound of a male turkey), both of which are often held during NGO events and expos.

Within the western hunting context, several practices were consistently identified by interviewees as "ethical" actions for promoting conservation. One practice which is consistently taught in hunter education courses as well as mentioned by participants as crucial to being an ethical hunter is only taking shots that are surely fatal. Hunters often describe their greatest fear as wounding an animal and not being able to find it afterwards; they reported that this does happen on occasion. Interviewees also often mentioned not leaving trash in the woods or picking it up when they come across it. Some participants, but not all, also brought up the practice of shooting the weakest-looking animal in a herd, saying

hunters should act as other apex predators would, taking the slowest and sickest prey. Other participants justified shooting the biggest animals, which they believe to be the oldest. When participants spoke of unethical hunting practices—actions like leaving a dirty hunting camp, taking bad shots, and even poaching—they largely blamed "new guys," if they themselves were older, or "old guys," if they were younger. Both groups aligned unethical practices more closely with qualities of hyper-masculinity and lack of education in either young men (such as getting "kill crazy" and lacking experience) or old men (such as drinking too much and littering). This generational division also contributes to tension between the previously described "newer constituencies" of hunters, who are more willing to work with other outdoor hobbyists towards their conservation goals, and "legacy constituencies," who are more likely to prefer conservation goals that focus solely on hunters' goals. Although there is quite a bit of overlap between the two groups, and the categorization of "newer constituencies" versus "legacy constituencies" is not clear-cut, these generational divides can be influential is several ways. They are reflected in preferences for different hunter-related NGOs, corporate brands, and media sources, as well as the contestation of a number of conservation-related ideologies, as described in the next section.

Contested ideologies of conservation

While all participants in this study largely agreed on some conservation ideologies, especially the position of hunters and fishers as the primary drivers of conservation in the U.S., there are also several contested conservation-related ideologies within the hunting and fishing community. One such conflict emerges in the management of public lands. Arising from the Sagebrush Rebellion at the end of the twentieth century—a movement which protested the federal control and management of lands in western states (Cawley 1993)—

Republican lawmakers at the federal and state levels have aimed to transfer federally-owned and managed lands to state or private ownership. This goal is opposed by a number of conservation organizations, including many of those to be discussed in Chapter 5. Given these organizations' opposition of a GOP policy priority, as well as their willingness to work with non-hunting-oriented corporate outdoor brands such as Patagonia, some NGOs namely the Izaak Walton League, the Theodore Roosevelt Conservation Partnership, Trout Unlimited, Backcountry Hunters and Anglers, and the Bull Moose Sportsmen's Alliance have been branded "green decoys." Figure 2.3 illustrates the discourse of inauthenticity wielded against these groups via the website greendecoys.com. The website was created by the Environmental Policy Alliance, which is in turn a project of the Center for Organization Research and Excellence, formerly named the Center for Consumer Freedom, a group that lobbies for the fast food, meat, alcohol, and tobacco industries (Mayer & Joyce 2005). While it is not clear how much traffic the website receives, its articles on prominent NGOs are not infrequently linked to in other hunting forums, and the term green decoys is often contested, and used ironically, by the organizations named by the website and their members.

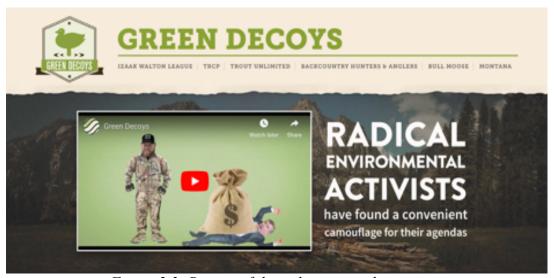


Figure 2.3: Banner of the website greendecoys.com

The term green decoys is a hunting allusion. Duck decoys are traditionally wooden figures carved and painted to look like ducks. They are typically placed in the water near a hunter to attract live ducks to land by the decoy. The authors of greendecoys.com appear to be using the phrase to imply that "radical environmental activists" are manipulating the named organizations to lure authentic sportsmen to land in the waters of environmentalism and act against their best interests. These discourses are sufficiently common that the Backcountry Hunters and Anglers organization has responded in the form of a purchasable shirt, shown in Figure 2.4. This shirt depicts a green version of a duck decoy surrounded by the phrase "the real green decoy," which presumably is a play on the phrase "the real McCoy," often used to mean something is genuine. It also signifies that the "real green decoy," like that featured on the shirt, is used by the wearer in duck-hunting, showing their authenticity as hunters. The brand Hunt to Eat sells a similar shirt with the explanation, attributed to hunting media personality Randy Newberg, that "If an unwavering commitment to hunting, conservation, and public lands make me a 'Green Decoy,' I'll gladly own that tag, a farce created by the DC dark money lobbyists. I have no use for the politicization of these truly American ideals I hold dear: hunting, conservation, and public access. Yeah, I am a #RealGreenDecoy" (https://hunttoeat.com/products/duck-decoy).



Figure 2.4: Men's shirt for sale at Backcountry Hunters and Anglers (https://backcountry-hunters-anglers.myshopify.com/collections/mens-t-shirts/products/mens-green-decoy-shirt)

The controversies manifested through the "green decoys" accusation and response deal primarily with public land ownership, extractive industry leases on public lands, support for environmental regulations such as the Clean Water Act, and predator management strategies. The divide in the hunting and fishing community also correlates somewhat with generation, but not necessarily partisan lines, with 70% of Backcountry Hunters and Anglers members identifying as Republican or Independent, and two-thirds under the age of 45.

One area in which more explicitly rightwing NGOs differ from those branded as so-called "green decoys" is in the management strategies for predator wildlife. "Legacy constituencies" often tend to be hostile to predators and resist their reintroduction or restrictions in their hunting permits and seasons. In southwestern Colorado, for instance, interviewees discussed the Parks and Wildlife's then-recent decision to limit mountain lion hunting. In the interviewees' perception, the reasoning was to encourage mountain lions' predation of wild horses, which were currently a large problem. This policy was misguided,

however, interviewees argued, because the greater numbers of mountain lions had instead actually increased the predation of deer, which were easier targets, and the deer population had decreased to the point that hunters now needed two preference points just to receive a license. In Washington, older hunters were similarly opposed to the reintroduction and protection of wolves, although younger hunters, who often had more formal scientific training, argued that the introduction of wolves was necessary to maintain herd health in the face of diseases such as hoof rot (which attacks elk's hooves, but might affect herds less if wolves eliminate sick animals early on) and Chronic Wasting Disease (similar to Mad Cow Disease), which are both spreading throughout deer and elk populations across the nation. Despite these contentious issues, there are three main conservation-related ideologies that hunters and hunting organizations on both sides of the generational divide draw upon in grounding their rhetoric about hunting and conservation. The next section details these ideologies.

Unifying ideologies about hunting and conservation

The three main unifying ideologies within the contemporary hunting and fishing community are the following: (1) that hunting and fishing are primarily ways to be closer to the non-human world and are the only ways to truly engage in that world; (2) that embodied experience is the most reliable way to understand and know about the non-human world and that knowledge acquired through personal experience is deeper and more complete than other ways of knowing; and (3) that the past wilderness is the only way to achieve this experiences, but is disappearing.

As a continuation of the anti-modernity discourses of the turn of the century, modern sportsmen and women perceive hunting as the only way to achieve a true connection with the "outdoors." Many of the hunters I interviewed, for instance, stated that they hunt in

order to spend more time in the wild and feel closer to nature. Similarly, many interviewees reported that their primary motivation for, or favorite aspect of, hunting was "just being in the woods." In South Dakota, Gigliotti illustrates similar ideologies in a study of hunters' motivations, finding that "to enjoy nature, the outdoors, and the beauty of the area" was the most popular motivation for hunting (2000, 38). Although to an outsider it may seem counterintuitive to appreciate the beauty of nature through what could be seen as the destruction of life, many hunters view the "harvesting" of animals not as destruction, but as an integral part of the natural cycle. Every interviewee said that they took no joy in the killing of a wild animal, but often portrayed themselves as natural predators, seeing outside criticisms as mistakenly subject to anthropocentric ideologies about the role of humans in natural ecosystems. Exemplifying this ideology, one participant, Mary, said, "I have never felt more a part of nature than I do when I'm hunting." Similarly, a much-circulated quote from hunter media personality Randy Newberg states, "Hunting is the truest form of participating in the natural world, probably because it is the oldest and most instinctive way of participating" (quoted by the Rocky Mountain Elk Foundation at https://elknetwork.com/why-i-hunt-participating-in-the-natural-world/). Several participants explicitly contrasted hunting as a form of participation in nature with other forms, such as photography, which they saw as more removed and thus as not a true interaction with the natural world.

The second unifying ideology holds that embodied and experiential ways of knowing allow one to understand and know about the non-human world more than other forms of knowledge. This ideology emerges from both the valorization of authentic experiences of engaging with the wilderness and hunters' legal history of conflicts with antihunting activists. In the 1970s, for instance, as Hollywood was perceived to be taking up the cause of anti-hunting, and hunters of the time saw themselves as "outgunned in the court of

public opinion" (Williams 2015, 188), one outdoor writer protested that hunters were "slandered by every actress or 'celebrity' who substitutes emotion for knowledge and becomes an instant ecologist whenever the cameras turn on" (Page 1972). Among contemporary hunters, the prioritization of embodied experience also interacts with negative discourses about anti-hunters. In a 2018 tweet, for instance, one hunter, Shane Jeakins (@s_jeakins), says, "I'll have a convo [conversation] with an anti hunter if they put out half the money I do for conservation, and have half the knowledge I do on the animals. But then they won't be an anti hunter, because they'll understand the important role that hunting has on keeping healthy numbers"

(https://twitter.com/s jeakins/status/951526837665984512?s=20). Another hunter on twitter, Ian Carmody (@Irishhunter16), describes their first experience of being confronted by an anti-hunter, finishing the tweet by saying, "I live in a liberal state with a bunch of cidiots (city-idiots)" (https://twitter.com/Irishhunter16/status/1059203066291982336?s=20). Here Carmody maps access to embodied experience, and therefore knowledge, onto rurality. Through the creation of the portmanteau *cidiots*, Carmody creates the association between living in a city and being unknowledgeable, or an idiot. The privileging of embodied experience also interacts with the third underlying ideology, the importance of the wilderness-past. This ideology asserts the value of the outdoors, rurality, and especially a nostalgia for the rural past as imagined by the hunting community: a racially-homogenous past reminiscent of the post-World War II era. This ideology emerged extensively in interviews. Several participant expressed this nostalgia, variously lamenting that the "structure" of the United States was changing, that people are no longer "tied to the land," that "we're three generations removed from the land"—by which he meant that, for many families, it has been three generations since they worked as farmers or ranchers—and that people have "lost touch with the outdoors." While no participants explicitly mentioned race

in connection with their concerns about changes in the U.S., this ideology echoes racialized ideologies of a previously homogenously white nation (discussed further in Chapter 5). A humorous mobilization of this ideology can be seen in the Instagram post in Figure 2.5, in which hunter media personality Steven Rinella (discussed further in Chapter 4) jokes, "many photographers find that it's hard to capture me and @signs west [another hunter media personality] in color because we're so old school. No matter what equipment they use, we come out in black and white." The accompanying photo is in black and white.



Figure 2.5: Instagram post by Steven Rinella emphasizing his "old school" qualities

Overall, these three ideologies provide the basis through which contemporary hunters make sense of environmental issues such as climate change (Chapter 3), discursively construct themselves as authentic members of the sportsman community while taking environmental stances (Chapter 4), and reinforce the chronotopic organization of the prototypical sportsman persona (Chapter 5).

Conclusion

This chapter has detailed the historical trajectory of the sportsman persona, showing its genesis as the hunter-naturalist at the turn of the nineteenth century and its progression to the contemporary sportsman person-type. It also situates the hunter persona with respect to other social categories, such as race, gender, and class, and describes three major groups within the broader hunting community and their relationship to the sportsman persona. Finally, in this chapter I describe the primary ideologies surrounding conservation among hunters and fishers and the processes through which these ideologies are reproduced and circulated. I highlight the way that conservation and interactions with the more-than-human world have been a fundamental aspect of this community since its inception. In the following chapters, I show how the positioning of the hunter/fisher person-type with respect to these categories, as well as space, time, and non-human animals, is important in the discursive construction of climate change at the individual level, in the stylization of a mediatized hunting persona, and in hunter-oriented media discourses surrounding climate change.

Chapter 3: "What about the trout?": The discursive construction of climate change and identity among sportsmen

Today, we're on course to leave the coming generations a world in environmental peril, where food production will be a challenge, where oceans won't be dependable sources of fish and where hunger for millions could very well become a reality.

But those are global consequences. What about the trout? What does climate change have in store for them? And for those of us who pursue them?

—Chris Hunt, *Hatch Magazine* (December 7, 2018)

Introduction

Within the past few decades, climate change communication scholars have extensively documented the polarized understandings of climate change shown by different groups within the United States, not only by partisan affiliation (Goebbert et al. 2014; Dunlap & McCright 2016), but also by race and gender (McCright 2010; McCright & Dunlap 2011). Less scholarship, however, has examined the importance of local identities for making sense of environmental issues such as climate change. To an extent, climate communication researchers have discussed this phenomenon implicitly for many years, advising scientists and journalists that, according to research on effectively increasing people's concern about climate change through communication, messages need to be personal, and communications should focus on how a changing climate will affect people's immediate lives, rather than more removed effects or abstract facts (van der Linden et al. 2015). So far, however, research in this area has focused primarily on understanding the effects of the represented temporal and spatial distance in media on climate change concern (Chu & Yang 2018; Jones et al. 2017). Conversely, within the context of a rapidly changing global ecosystem, some scholars have begun to consider interactions with the more-than-human world as an important site for the emergence of identities (Milstein and Castro-Sotomayor forthcoming). However, linguists have rarely examined how identities can emerge through interactions,

both discursive and material, with the natural world.

In this chapter, I aim to contribute to these areas through the examination of the discursive construction of the changing climate within one community of practice. I argue that discursive constructions of environmental change are a type of stancetaking, inherently positioning the speaker with respect to the natural environment and other social categories and providing a context in which social identities emerge. The chapter aims to explore such discursive interactions with the natural world through the analysis of ethnographic interviews, examining how members of one community of practice—hunters and fishers in the western United States—make sense of the changing climate they are experiencing, and, furthermore, how their sportsman identity necessarily emerges through the construction of these changes as they position themselves with respect to the natural world, other social actors, and structures of power. The hunting and fishing community in the United States is a productive group within which to analyze the construction of environmental changes and identity, as its relationship to the natural environment is one of the fundamental building blocks of this person-type, as described in Chapter 2.

This chapter proceeds in the following manner. I first give an overview of previous research on the discursive construction of climate change as well as the construction of the natural world within the hunting and fishing community. I next describe the contexts in which the data were collected, recount the procedure through which the interviews were analyzed, and present some typical examples of discourse which highlights themes that arose consistently in community members' constructions of climate change. I argue that hunters and fishers' discursive production of climate change is both shaped by and shapes the persona of the sportsman. One way in which this figure emerged was in the interviewees' conceptualization of climate change through wildlife behavior, such as salmon migrations, elk rut timing, and elk and deer migrations. I also show that through these

constructions, sportsmen and women positioned themselves as the group most connected with the natural environment—as opposed to most participants in modernity or the "non-hunting public"—and therefore portray the risks of a changing environment as primarily borne by wildlife and the hunting community, thus erasing the effects on flora such as forests, on agriculture, and on other vulnerable human and more-than-human communities. One contested aspect of these constructions of a changing climate was the positioning of science by hunters and fishers: some participants aligned themselves closely, while others positioned themselves in disalignment, situating climate science as affiliated with "anti-hunters." This chapter thus illustrates the construction of identity and environmental change through environmental stancetaking. It also shows the importance of local identities for shaping the conception of appropriate personal and policy responses to the climate crisis.

Sportsmen and the construction of the natural world

Scholars have long known that people's experiences of the natural environment are not only experienced materially, but also constructed symbolically and linguistically (Cronon 1995; Fill & Mühlhausler 2006; Halliday 1992; Levi-Strauss 1973; Macnaghten & Urry 1998) and that this construction can vary across groups. Researchers have documented both hunters' and fishers' discursive and material construction of the environment in the nineteenth and twentieth centuries. Loo (2001, 104), writing primarily about Canada, points out that:

Like all arts, the art of [wild] game management was imaginative. It was a way of thinking about space. Making Canada into a modern paradise for sportsmen began with mapping. The sportsman's paradise was, to use John Berger's phrase, "a way of seeing," in which the land was imagined and constituted in terms of the administration and exploitation of wild animals by tourists.

Loo points out that the science of conservation in this time was used not for documenting

and conserving a wilderness of the pre-European settlement era, but for controlling and managing the environment to create the wilderness that early hunters desired, using techniques that have become the modern discipline of game management. Both past and contemporary hunters have constructed their environments discursively and materially. One contemporary discursive construction employed by several participants in this study, for instance, portrays modern hunters as apex predators, implicitly erasing other apex predators such as wolves, which can then be materially eradicated. Other non-game species that are not part of the constructed ideal of the wilderness have also been subject to systematic elimination. As Loo (2001, 107) reports:

Finally, removing unwanted birds and animals was as important as importing wildlife and making sure it was in the right place in creating a sportsman's paradise. "Noxious" creatures or "vermin" were eliminated routinely by means of a bounty system. There was literally a price on the heads (more often the skins, noses, or tails) of particular birds and animals. It wasn't uncommon for game wardens to supply ammunition to local clubs so members could get rid of vermin, to organize vermin-killing contests for children (especially for gophers, crows, magpies, and owls), and to spend part of their time developing more efficient poisons and baits. (pg. 107)

Expanding understandings of both the discursive and material constructions of the natural world has become a particularly urgent topic now, as people across the world experience and make sense of changing natural environments and debate appropriate responses to those changes. Within mainstream media, for instance, producers struggle to conceptualize the causes, effects, extent, and victims of climate change, asking to what degree events such as storms, fires, and droughts are attributable to climate change or not. Accordingly, many scholars have begun to document how communities discursively produce understandings of these changes (Masco 2009; Nerlich et al. 2011). Research within this vein has often focused on mediatized discourses—especially in Europe and the United States—examining the representations of science (Carvalho 2007), political agency

(Carvalho 2010), and the impact of visual imagery (DiFrancesco & Young 2011). Another productive vein of research has emerged in the analysis of ecocentric versus anthropocentric environmental discourses surrounding climate change (Bäckstrand & Lövbrand 2006; Milstein & Castro-Sotomayor forthcoming), as well as how the construction of climate change causes can foreground some solutions and leave others in the background (Rogers-Hayden et al. 2011). This research, however, often analyzes discursive constructions at the level of the nation-state, and little research has examined the construction of climate change within local communities.

Another well-established field of communications research explores discursive constructions of climate change in an indirect fashion, through experimental studies of perceptions of differing framings of the effects of climate change (also see Chapter 1). Such studies examine the impact on audiences of highlighting different consequences of the climate crisis, such as those on public health, national security, or environmental disasters (Myers et al. 2012; Nisbet et al. 2013). Researchers in this tradition have also explored the effects of emotions (Nabi 2003) and perceptions of temporal and physical distance (Scannell & Gifford 2013; Spence & Pidgeon 2010).

While in some ways coming from disparate research traditions, the majority of this scholarship has largely viewed the discursive construction of climate change as one-directional; that is, institutions or actors produce texts about climate change which shape public understanding of the phenomenon. These texts are not analyzed, however, as in turn affecting the positioning or identity of the institution or actor who produced the text.

Accordingly, this research has not examined the relationship between the construction of climate change and the identity of those who construct it, with the exception of their political ideology, and even then, such scholarship tends to assume a causal, rather than reciprocal, relationship among the positioning of the communicators and the construction of

climate change. Furthermore, while research on the discursive construction of climate change takes place in many disciplines, it largely lacks a coherent theorization of the relationship of communities of practice, environmental discourses, and constructions of the non-human world and environmental changes. This chapter suggests that linguistic theories of identity production and stancetaking can be fruitfully applied in this context, illustrating not only a fuller understanding of the construction of climate change discourse for environmental communication, but also, within linguistics, the importance of considering positioning with respect to the more-than-human world when discussing identity, style, and community.

Data source and methodology

This chapter takes an ethnographic and discourse-analytic approach to investigate the construction of climate change and the sportsman identity. Between 2014 and 2018, I conducted participant observation research with hunters in several contexts: in hunting camps in Colorado (sites where hunters, friends, and family typically camp for several days to several weeks near hunting areas); during a hunter education course in Colorado; during a youth pheasant hunt in Washington (an event in which experienced volunteers work with groups of interested youth to hunt released pheasants, showing them how to work with bird-hunting dogs to locate the pheasants, accurately and safely shoot them, and clean and prepare them for cooking); and during a hunting and conservation convention in Utah (an event in which industry and non-profit organizations meet for four days to sell hunting gear and raise money for conservation organizations through ticket sales, meals, raffles, and auctions). I also observed hunters butchering elk after they had returned home from a hunt and, in other cases, preparing family meals from game meat. I chose these events in order to observe hunting practices and socialization as well as community events dedicated to the

circulation of conservation discourses. In addition, these locations encompass a variety of natural and sociopolitical ecosystems, which allows for an observation of how individual practices and ideologies remain consistent or vary across regions and social contexts.

I also conducted a total of 42 ethnographic interviews in southwestern Colorado, eastern and western Washington, northern Utah, Idaho, South Dakota, and eastern California. The contexts of these interviews differed somewhat, but the majority took place at the participants' houses or in public libraries. Participants were largely recruited either through their participation in hunting mentorship groups or via the snowball sampling method (Noy 2007). The pseudonyms, estimated age range, occupation, and state of residence of the participants is listed in Table 3.1. The hunting mentorship NGO through which I recruited many of my participants, the First Hunt Foundation, maintains publiclyavailable lists of active volunteers who are willing to serve as mentors. After receiving permission from the NGO's director, I contacted volunteers to ask if they would be willing to be interviewed. During interviews, I also asked if participants knew others who would be interested in participating. The 42 people who participated tended to be older and retired; 22 out of 42 were over 50 years old. Participants also skewed heavily white (40 out of 42) and primarily male (34 out of 42). These trends are in line with the overall demographics of people participating in hunting activities, but also probably are in part a reflection of who has time to participate in research projects and volunteer with hunting-related groups.

Table 3.1: Interview participants

Pseudonym	Age	Gender	Occupation	State
Aaron	35-50	Male	Biologist	Washington
Andy	35-50	Male	Biologist	Washington
Austin	35-50	Male	State employee	South Dakota
Ben	50+	Male	Retired	Washington
Beth	25-50	Female	Hunting industry	Colorado
Brad	35-50	Male	Plumbing	Idaho
Carol	50+	Female	Retired	Colorado

Carson	25-35	Male	Forest Service employee	Colorado
Clint	50+	Male	Real estate appraiser	Colorado
Colton	25-35	Male	National Guard	Washington
Dale	50+	Male	Retired	Washington
Darryl	50+	Male	Retired	Washington
Dean	25-35	Male	Ecologist	California
Dennis	50+	Male	Retired	Colorado
Denny	50+	Male	Retired	Washington
Dick	50+	Male	Retired	Washington
Doug	50+	Male	Retired teacher	Colorado
Frank	50+	Male	Construction	Colorado
Gene	50+	Male	Retired law enforcement	Washington
George	35-50	Male	Unknown	Washington
Gordon	35-50	Male	Conservation NGO	Utah
Harry	50+	Male	Construction	Colorado
Jared	35-50	Male	Hunting industry	Utah
Jeff	50+	Male	Conservation NGO	Utah
Joel	35-50	Male	Unknown	California
Jordan	35-50	Male	Firefighter	Colorado
Julian	35-50	Male	Hunting industry	Washington
Keith	50+	Male	Taxidermist	Utah
Kelly	35-50	Female	Healthcare	Colorado
Kurt	50+	Male	Conservation NGO	Montana
Lacey	25-35	Female	Unknown	Washington
Larry	50+	Male	Retired	Washington
Laura	50+	Female	Real estate appraiser	Colorado
Linda	50+	Female	Facilitator	Colorado
Mark	35-50	Male	Firefighter	Washington
Mary	35-50	Female	Conservation NGO	Colorado
Randy	50+	Male	Retired law enforcement	Washington
Richard	50+	Male	Retired	Washington
Rick	50+	Male	Conservation NGO	Utah
Savannah	35-50	Female	Healthcare	South Dakota
Tyler	25-35	Male	Ecologist	Utah

In addition, I drew from digital ethnography methods to carry out a semiotically-grounded media analysis (Coleman 2010; Varis 2016). Because many of the members of this community will never meet in person, its unifying discourses and ideologies circulate primarily through technologically-mediated communication, making an exploration of this media an important component to understanding the circulation of social meaning within the hunting and fishing community. Furthermore, participants consistently recommended

hunting media and social media figures to follow during interviews, and I therefore began consuming the recommended media, such as the state-level hunting and fishing forums, *Field and Stream*, and *American Hunter*; following popular hunters on social media platforms such as Instagram, the most widely used platform by sportsmen and women; and listening to hunting podcasts, such as *Wired to Hunt, MeatEater*, and *The Hunting Public Podcast*. Given my interest in conservation practices and ideologies, I paid particular interest to the media created by hunting and fishing conservation organizations.

When introducing myself to potential participants, I presented the research project as an analysis of the ways that hunters participate in, and talk about, conservation. I positioned myself, in some ways, as a member of the community, saying that I grew up in rural Colorado as part of a hunting family, a self-presentation that helped alleviate participant perceptions that university-based researchers were likely to be "anti-hunters." Even so, as mentioned in Chapter 2, three participants told me that they first researched me online to make sure that I was not a member of an anti-hunting group before agreeing to participate. Other participants, however, expressed their desire to participate in this project as a type of service to the community of hunters and fishers and said they were happy to see a young woman interested in hunting and fishing because young people, and women especially, are less likely to hunt and affiliate with hunting culture. Many participants were also extremely generous with their time and resources, from inviting me to eat a dinner with their family, to taking their car to lead me back to the highway to make sure I didn't get lost, to giving me game meat and fish because I was traveling away from my family.

Many of my observations about the sportsman identity are informed by my experience growing up in a hunting family in southwestern Colorado. In an area with extensive open spaces and public lands, hunting and fishing are common recreational activities for many members of the community, as well as a source of revenue for outdoor

supply stores and for locals who work as hunting guides. As a girl, I was not expected to participate in the tracking and hunting of game animals as much as the boys in my family were; however, I grew up attending hunting camps, occasionally accompanying adults on hunts, and participating in the butchering and cooking of game meat from harvested wild animals. As someone who identifies as a member of a rural community and is affiliated with sportsmen, I seek to situate this analysis as a respectful representation of the community while still highlighting what I consider problematic discourses and practices. To that end, throughout the research planning and analysis process, I discussed my preliminary findings and interpretations with participants and other sportsmen, and I intend for my final findings to be shared with members of the community as well as academic audiences.

Once all the interviews were completed, my team of research assistants and I indexed the interview recordings as well as the field notes from my participant-observation experiences. While many of the themes that emerged as salient were expected—conservation, rurality, ethics—others were unanticipated, such as the centrality of antihunters, metaphors of distance between humans and nature, generational differences in conservation ideologies, and the importance of embodied experience in understanding the natural world. Some of the prominent ideologies have already been discussed in Chapter 2; this chapter primarily analyzes the discourses that emerged as participants discussed climate change. Because this dissertation primarily analyzes the interaction of language use, identity, and environmental ideologies in the context of climate change, in this chapter, I focus on the discursive element of the ethnographic interviews. I found that the topic of climate change did not emerge during my participant-observation data, and therefore in order to analyze the understandings of climate change constructed by the hunters in this study, I will rely mostly on an analysis of interview data. In future work, I hope to investigate the material dimensions of hunting, including embodied practices and

interactions between hunters and non-human animals.

Stancetaking, intersubjectivity, and identity

This chapter uses a linguistic-anthropological approach to the analysis of the discursive construction of climate change. Most communication about environmental change involves a stance—that is, it necessarily takes some sort of evaluative or affective position toward the phenomenon. According to Du Bois (2007, 163), a stance is "a public act by a social actor, achieved dialogically through overt communicative means (language, gesture, and other symbolic forms), through which social actors simultaneously evaluate objects, position subjects (themselves and others), and align with other subjects."

Importantly for this chapter, Du Bois' understanding of stance entails that taking any stance inevitably positions the stancetaker, as well as the stance object and other subjects. To illustrate this process, Du Bois proposes the image of a triangle (2007, 163), which demonstrates the way in which taking a stance necessarily locates a subject with respect to the stance object and also, through their alignment or disalignment with other subjects, with respect to those subjects (Figure 3.1).

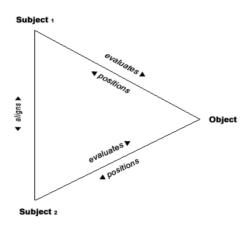


Figure 3.1: Du Bois' stance triangle (2007:163)

This chapter also draws on linguistic-anthropological theories which hold that identity,

rather than being an innate characteristic of an individual, emerges in interaction. According to this approach, identities are important at both the macro (societal) and micro (community of practice) levels, emerge in a given context, and are created in interaction with other social actors and with respect to structures of power (Bucholtz & Hall 2005). This understanding of identity highlights the importance of intersubjectivity and the collaborative and negotiated nature of identity. Linguistic approaches to intersubjectivity, up until this point, however, have largely limited their analysis to human actors. In contrast, within environmental anthropology, scholars have theorized a "more-than-human" intersubjectivity (Abrams 2012), which analyzes interactions between human and non-human actors (Hartigan 2014), or between non-human actors (Kohn 2013). This chapter is informed by these approaches to intersubjectivity, examining how the sportsman/woman identity emerges in discursive constructions of environmental changes.

While a perspective on identity informed by both environmental and linguistic anthropology might argue that interaction or apparent non-interaction with the more-than-human world is crucial to the emergence of identities of all kinds, for sportsmen and women, more-than-human intersubjectivity is especially salient. Interactions with non-human animals or wild places are highlighted by interviewees as the primary context in which the sportsman/woman identity emerges, and the experience which separates hunters and fishers—those who are close to the natural world—from other outdoor hobbyists, who are more removed from nature. For instance, one interviewee, Mary, a female hunter from Colorado, expressed the following view (see Appendix A for transcription conventions):

Example 3.1

- 1 Mary: For the non-hunter,
- 2 it's difficult for them,
- 3 for a non-hunter to understand,
- but I have never felt more a part of nature
- 5 than I do when I'm hunting.

6	As far as—
7	I bow hunt and I've had the most amazing experiences with wildlife,
8	when I've been in the field with my bow,
9	because you have a heightened sense of awareness.
10	It's different than when you're just hiking or when you're behind
	a camera,
11	and there are many times when I've been surrounded by a herd of elk
12	that didn't know I was there,
13	other than they could smell me,
14	so I feel that we're very much still a part of the outdoor world,
15	and those are just experiences that can't be duplicated outside of hunting.

Relatedly, many participants construct non-hunters as "distant" from the land, mentioning that people are "no longer tied to the land," or that they are "generations removed from the land" or have a "removed" perspective. Almost all interviewees used some kind of metaphor of distance to represent the lost relationship of non-hunters and city-dwellers to the natural world. In example 3.2, for instance, Doug, a retired white high school teacher from southwestern Colorado, said:

Example 3.2

1 Doug:	I think the biggest challenge that we are facing today
_	
2	is the change in the structure of the United States.
3	So many people are not tied to the land,
4	and don't have a clue what goes on out in the sticks.
5	They just don't have a clue.
6 Jessi:	Does that threaten the sport of hunting?
7 Doug:	Mmhm it does.
8	Because they don't understand the need for it.
9	They don't understand the usefulness of it,
10	the depth of it.
11	They just don't understand.
12	We're getting out more and more away from it,
13	consequently it's harder to keep good regulations in place,
14	that are helpful to the animals.

Indeed, hunting does allow many close interactions with wildlife and undeveloped lands, and these types of interactions develop extensive knowledge about animals and their habitats. During an elk season visit to hunting camp in the mountains of Colorado in Fall 2017, I accompanied one participant on a walk foraging for wild mushrooms. As we walked, he pointed out bear tracks to me and explained the animal's sex, age, and time that it had passed by. Other participants shared information they gleaned from different types of animal sign, like scat, (animal feces) or elk rubs (places where elk rub their antlers against trees to remove the velvet. Hunting practices also often involve communicative interactions with wildlife, such as "calling in" elk—imitating the sounds of either a rival bull or a cow elk in heat to encourage an elk to approach. In one hunting workshop at the Western Hunting and Conservation Expo, the presenter demonstrated how a hunter might create the sounds of a bull elk bugling or a cow elk barking, then humorously emulated both parties in an interaction that a bull might have with a cow. Other interactions with wildlife involve preventing communication to the game animal of the hunter's presence or location by, for instance, wearing camouflage, staying downwind of potential prey, disguising one's scent and position by taking along pack animals such as goats, and using scent-masking detergents.

Many hunters also said that they extend the time period in which they seek out interactions with wildlife outside of designated hunting seasons by in a number of ways, such as conducting research throughout the summer on animal movements and numbers; "shed hunting," or looking for fallen antlers (deer and elk grow a new set of antlers each spring); setting and observing trail cameras; and growing "food plots" to make land attractive to wildlife. Relatedly, waterfowl hunters often pointed to their experiences working with bird-hunting dogs as particularly close and rewarding experiences with non-human animals. One participant who expressed this sentiment, Julian, proudly gestured to a trailer full of dogs he had brought as a volunteer for the youth hunt in eastern Washington. The dogs sat in crates stacked one atop each other in the trailer but hopped out happily when

Julian opened the crate door and set off with the youth participants to track the pheasants through the dusty fields once one of the youth took a shot. After the hunt, I conducted Julian's interview in the dusty cab of his truck, and he reported that training bird dogs allowed him to feel close to nature year-round, an experience he enjoyed so much that he made it a second career.

In addition, the consumption of game meat allows for the discursive construction of closeness with nature, prompting the re-telling of memorable experiences with the harvested animal, and the consumption itself is often portrayed as a continuation of those experiences (see Figure 3.2). One participant, George, who spoke with me while he was butchering a recently killed elk, told me how, before successfully "taking it," he had tracked the animal and "bedded it down," meaning he had observed where it and the herd lay down to rest during the middle of the day, waiting for the animals to re-emerge before taking a shot. Figure 3.2 illustrates a similar discourse in an Instagram post by the conservation organization the Theodore Roosevelt Conservation Partnership. The post shows a "harvested" deer, a term often used to refer to animals killed for food which portrays hunting as similar to agriculture, aiming to prevent unfavorable impressions of hunting among non-hunters. In this post, the Theodore Roosevelt Conservation Partnership expresses hope that hunters are "taking the time to get out and be one with nature. Then filling that freezer and tasting that nature all year round."



Figure 3.2: An Instagram post by the Theodore Roosevelt Conservation Partnership asserting hunting as a way to "be one with nature."

While non-hunters obviously can and do experience "close" interactions with non-human animals and undeveloped spaces, within hunting discourses, these experiences are not seen as equally authentic to hunting encounters. One participant, Gene, for instance, specifically mocked the wilderness observation skills of "backpackers" and "birdwatchers." While discussing his experience leading the search and rescue program in his eastern Washington county, he stated that the "guys and gals who hunted and fished" were very observant, while non-hunters and fishers typically walked past obvious signs like blood and hair. Reflecting this ideology, in order to join the Washington state hunters' online forum recommended to me as a site read by a lot of Washington hunters (hunting-washington.com), I had to answer questions testing my knowledge about black-tailed deer and salmon. Presumably these questions are meant to weed out inauthentic hunters or "anti-hunters," who are not perceived to have as much knowledge of these species. Given my regional background, I was not familiar with black-tailed deer, and I had to conduct some

quick online research about black-tailed deer in order to answer one of the questions correctly and ensure that I was granted access to the forum.

Similar discourses of the hunter identity as arising from, or being reinforced by, intimate experiences with the land and wildlife are also common in mediatized discourses surrounding hunting. In Figure 3.3, for example, a Twitter post by hunting personality and brand ambassador Nikki Boxler, Boxler states that what she enjoys about hunting is the observation of wildlife in close quarters, in this case, deer and wild turkey. The text is paired with a video of turkeys fighting that she filmed during a hunting trip.



Figure 3.3: An Instagram post celebrating a hunter's interaction with wildlife

This focus on wildlife-human intersubjectivity also arises in the discourse of reciprocal relationships between game species and hunters, as illustrated by Figure 3.4. This

figure shows an Instagram post jointly created by the National Wildlife Federation and Artemis Sportswomen, two hunter-focused conservation NGOs. The post is part of a genre highlighting how much hunters have done since the nineteenth century to preserve wildlife habitat and ensure healthy game populations. This was a very common ideology among my interviewees as well: all interviewees, even the few who expressed a conflicted affiliation with the term *sportsman*, asserted that hunters and fishers are the primary contributors to wildlife conservation in the United States. One interviewee, Randy, when discussing why the declining numbers of hunters made him "pessimistic," said that with expanding human populations and needs, the needs of wildlife would not be prioritized, since "animals don't vote, people do." He went on to predict that, with fewer hunters to represent these animals, their needs would be less prioritized in the future.



Figure 3.4: An Instagram story celebrating a wildlife "ambassador," or a hunter who does a great deal to help wildlife.

As these examples illustrate, the importance of more-than-human intersubjectivity for

the sportsman/woman persona is regularly circulated through individual and media discourses which portray hunting as a form of authentic connection with the more-than-human world in which a reciprocal relationship is enjoyed by hunters and wildlife. This positioning also sets the stage for hunters' and fishers' discursive representation of environmental changes and problems.

Making sense of climate change

Because climate change is a complicated and interconnected process, it is subject to widely varying interpretations and understandings (Nerlich et al. 2011). This fact is highlighted by the long-standing and heated debates on the correct terminology with which to describe the phenomenon (Yoder 2019). In the early 2000s environmentalist terminology shifted from *global warming* to *climate change* in order to capture the effects apart from rising temperatures. This shift was also promoted, however, by conservative politicians and think tanks as a way to background the negative effects of a warming earth (Lee 2003). Contemporary environmentalist discourses, in contrast, use wording such as *climate disruption*, *climate breakdown*, or *climate crisis* in order to highlight the urgency and risk involved in this situation (Yoder 2019). The complexity of interpreting climate change is also seen in the research on how to best translate climate science-related terms to promote the fullest understanding of the issue among citizens (Müller Gjesdal 2017).

Within the interviews, participants made sense of many different aspects of climate change. No participant in this study claimed not to have observed changes in weather patterns and temperatures, but there were many different interpretations of these directly experienced changes. Portrayals of climate change within the hunting and fishing community, as well as within mainstream discourses, vary in their construction of the phenomenon along several dimensions, including causes, effects, time frame, responsible

parties, impacted parties, and possible solutions.

One aspect of the phenomenon which is subject to widely varying interpretations is the causes which contribute to climate change's existence and progression. Participants in this study, for instance, tended to highlight non-anthropogenic, "natural" causes of climate change over anthropogenic causes, or else they backgrounded the importance of the causes in general.

The effects and intensity of a changing climate are also subject to contested representations, with many recent well-known examples involving debates about the extent to which fires, extreme storms, and droughts are attributable to climate change (Cordner and Schwartz 2019; Öhman et al. 2016). Other examples include discussions of wildlife loss, ice melt, heat waves, changes in seasons, and so on. Participants in this study, in contrast to mainstream narratives, largely focused on the effects of climate change for wildlife (see Analysis section for a more in-depth discussion).

The timeframe in which climate change has been occurring is also constructed discursively. While the majority of academic discussions around this phenomenon revolve around the presentation of the risks of climate change either as primarily in the future or as already occurring in the present (Jones et al. 2017), the participants in this study tended to construct the effects of climate change as having already occurred, minimizing future risks. (A more in-depth discussion of this phenomenon is included in Chapter 5).

The actors with the responsibility for creating and/or mitigating climate change and its effects are discursively constructed very differently within different communities. Within the hunting community, including my study participants, and to an extent in the broader context of right-wing climate change discourses, the responsible parties are often erased or backgrounded from discussion.

Wimilarly, the human and non-human actors who are or will be impacted by the

effects of climate change differ widely across discursive representations. Research within the environmental social sciences, for instance, has examined the effects of portrayals of various impacted parties on the audience's perception of climate change (Chu & Yang 2018). Scholars have argued that early framings of climate change as primarily a risk for distant animals, such as polar bears, have created a context in which Americans see climate change as a remote phenomenon which does not impact them (Spence & Pidgeon 2010). Within the hunting and fishing community, the primary impacted parties are portrayed as vulnerable game species, such as ducks, trout, moose, and so on, and by extension, the hunters and fishers who interact with them.

Werhaps most contested within mainstream climate discourse, after causes, are the possible solutions to the climate crisis. Within academic research, scholars have explored how various interpretations and discourses constrain the possible solutions to the problem through depoliticization (Peppermans & Maeseele 2016), reliance on technical innovations (Fløttum et al. 2016), and perceptions of inevitability or preferences for adaptation (O'Brien et al. 2007). Within the interviewees in this study, as well as institutional hunting and fishing discourses, possible solutions are largely backgrounded in favor of discourses of wildlife protection and adaptation.

This chapter argues that, in constructing climate change with respect to these dimensions, communities simultaneously position themselves and produce their own identities with respect to the natural world as well as to other social actors. Within the interviews, this positioning saliently occurred along two dimensions. First, interviewees, in their construction of climate change, emphasized their closeness and connection to "wildlife and wild places," using phrases such as "We are the ones who see" and "We are the ones who have the most at risk." Similarly, through this discursive construction they positioned others' relationship to the natural world as nonexistent or remote. Second, because "climate

change," as a phrase and a concept, is indexically associated with left-wing political ideology, many interviewees positioned themselves relative to this political context through their discursive construction of climate change. Interviewees stated that "anti-hunters are the ones pushing that view of climate change," or, contrastingly, that "science should never be politicized." Interviewees also positioned "science" as a construct with respect to these political ideologies, either as a beneficial and wrongfully politicized entity or as a tool for left-wing ideology.

In the next section, I analyze four participants' discursive constructions of climate change—chosen for their representativeness of the larger group—with respect to the above-mentioned dimensions. During the interviews, I first asked participants to talk about their own experiences hunting, then asked about the relationship between hunting and conservation, how conservation ideas are taught to hunters, and finally what they saw as major environmental issues were currently affecting hunting. Since most interviewees did not mention climate change as a current major environmental issue, I explicitly asked if climate change was something hunters were concerned about.

Data analysis

I begin the analysis with the construction created by an older retired hunter, Larry, who lived in western Washington. Although the area was fairly close to major population centers, he affiliated with ideologies of rurality, at one point saying, "urbanites don't care about the woods." Throughout the interview, Larry emphasized how much time he spent outdoors as a hunter and fisher, and he had explicitly rejected the possibility of non-hunters (e.g., me) spending sufficient time outdoors to develop a similar connection with the natural world.

Example 3.3

1. Jessi: Do you think it [climate change] is something hunters are worried about?

2. Larry: What do you call climate change in your world.

3. Global warming, yeah the earth is tipping.

4. Read back if you study any type of earth history,

5. it's happened like four times,6. the earth has flipped over.

Everything that was warm is cold.Everything that's cold is warm.

9. Jessi: So it's like some sort of, like a natural cycle?

10. Larry: It's a natural cycle.

11. You know.

We can study it.We can predict it.

14. We can blame somebody.

15. We can't stop it.

16. There's nothing you can do but bitch about it.

17. I'm aware of that because I fish.

18. I salmon fish.

19. I'm aware that the fish are coming in later and later every year.

20. The fish are later,

21. because the silvers should be in by now.

22. They're not here yet.

In his response, Larry, who described himself as very politically-conservative, portrays climate change as an event which has occurred before and that is attributable, in his opinion, to the earth having "flipped over" (line 6). He agrees with my clarification that climate change is "some sort of, like a natural cycle" (line 9) and attributes his stance on climate change to the fact that as a fisher he observes fish behavior (lines 17-21). Larry produces an understanding of climate change as not created by human activity, as taking place on a very long timescale, and as, at least at the moment, primarily impacting salmon and salmon fishers. Larry's construction of climate change also positions himself, and by extension, other hunters and fishers. He contrasts what climate change means in "your world"—an urban, presumably politically-liberal world—with his world, which is closest to the salmon. What he knows about climate change, he says, is due to his contact with fish. As part of the

This portrayal could be attributable to a misunderstanding of geomagnetic reversal—the phenomenon in which the earth's magnetic field reverses (Bannerjee 2001). It is not a climate denial discourse that I have previously encountered.

natural world, rather than apart from it like the rest of the modern world, he understands that humanity does not have the power to impact "natural cycles" such as climate change. For instance, he draws a parallel between what "we" can do: "study it" (line 12), "predict it" (line 13), "blame somebody" (line 14) but "we can't stop it" (line 15). He then shifts into the generic second person to discuss what "you" can do, which is "bitch about it" (line 16).

Larry's positioning of the non-hunting public with respect to the natural world is in line with that constructed by hunters in non-environmental discourses. In my interview with an older hunter, John, in eastern Washington, he described the difference between hunters and non-hunters in the following way:

Example 3.4

- 1. John: You know if I'm thinking about the difference between,
- 2. say,
- 3. a hunter and a photographer,
- 4. going to the same place,
- 5. doing the same thing,
- 6. with the exception that one takes a picture and one shoots something.
- 7. The main difference that I see is that one is an observer.
- 8. The photographer is coming out and he's not really in it,
- 9. he's an observer of some action,
- 10. whereas the hunter is actually a participant,
- 11. he's becoming an element of that cycle.

The next example comes from Gene, a retired hunter in his 60s. Gene grew up in Georgia but now lives in rural western Washington, and he emphasized his ideological affiliation with rurality, in contrast with mainstream perceptions of western Washington as an urban, liberal area. Gene also categorized himself as politically-conservative and as strongly identified with the sportsman identity, which he represented as in opposition to "new guys," that is, new hunters, who often commit unethical hunting behaviors because of "buck fever." After he described human encroachment on undeveloped spaces as the most pressing environmental issue hunters face, I asked him about climate change.

Example 3.5a

1. Jessi: Do you think it [climate change] is something hunters are worried about?

2. Gene: Well, I don't disagree that the environment's changing

3. I mean, the climate's changing.

4. But don't forget in 1900,

5. what was that a hundred and twenty years ago,

6. Niagara Falls froze solid.

7. Jessi: Wow.

8. Gene: You've got pictures on the internet,

9. of people standing,

10. on the ice,

11. at the bottom of Niagara falls.

12. In 1900. So ..

14. You know in a hundred and twenty years we- .. we haven't seen it freeze

again,

but it's been pretty cold in the winters around here.

Gene begins by saying that he thinks there have been changes, presumably mostly to do with the temperature, but he also brings up cold temperatures from 1900 and more recently (lines 4-6, 15), casting those examples as opposed to mainstream discourses of "climate change" through the framing "don't forget" (line 4).

In the next part of our interview, he portrays climate change as part of a natural cycle and situates his knowledge of a changing climate as arising from his interactions with wildlife, specifically elk.

Example 3.5b

- 16. So climate change happens.
- 17. Right now .. the elk should be in rut up there.
- 18. But it's too hot.
- 19. So the archers.
- 20. which go in the woods this weekend,
- 21. are not going to have the advantages they normally do because the elk are ruttin'.
- 22. When I go in October,
- 23. October sixth,
- 24. we may see 'em in the rut.
- 25. Unless-.. unless it doesn't get cold.
- 26. Because it's the daylight hours and the temperature,
- 27. are what turns on the estrus in the cows.
- 28. And .. um ..
- 29. so we've seen it take longer for the winter to come in,
- 30. and for the elk to start getting into estrus.

In this example, Gene described how his observations of elk behavior have led him to conclude that the average temperatures are warmer later in the year than they used to be, saying that "the should be in rut up there, but it's too hot" (lines 17-18). Through his descriptions, Gene situates himself as very knowledgeable about elk: he performs great familiarity with elk's patterns and routines and uses specialized terminology such as *estrus* (lines 27, 30), which refers to the period of time in the fall (the "rut") when cow elk are fertile and sexually-receptive. The elk rut is important for hunting practices, because a common form of hunting, especially for male elk, is to mimic the calls that bull elks produce to attract females. By mimicking these calls, the hunters attract the bull elk, who think the call is from a rival. This technique is especially useful for archers and black powder musket hunters, who cannot accurately shoot as far as rifle hunters.

In the last section of his response (Example 3.5c), Gene states that this change in temperatures is due to a "natural course of events" (line 32), which has been repeated for millennia (lines 33-37). He then, however, considers the idea that the number of cars on the road, and the emissions they produce, could be having an effect on the earth (lines 39-49).

Example 3.5c

- 31. [Hx] And ...
- 32. But it's- it's the natural course of events over thousands of years,
- 33. things have done.
- 34. You know the- the ice came in
- 35. and then it went back.
- 36. And now it's coming in,
- 37. and now it's going back @again @@.
- 38. So.. uh..
- 39. Granted there's a lot of cars on the road,
- 40. I thought about that yesterday .. coming back from [redacted].
- 41. It was bumper to bumper for nineteen miles.
- 42. And that's just on a two lane highway over here.
- 43. I 5 and all those—
- 44. I mean you think about the number of automobiles that are on the road
- 45. Every day twenty four hours a day.
- 46. There's a lot of .. stuff.
- 47. lot of stuff,

- 48. So .. how much impact we are having,
- 49. I don't know.
- 50. I'll be dead in twenty years so it don't matter.
- 51. (a)(a)(a)
- 52. I hope not but maybe.
- 53. So I can testify that there's changes,
- 54. because of the way the elk season's rutting takes place.

While in this section Gene does consider the possible effect of automobile emissions in affecting the climate, in the end he avoids giving the topic too much consideration, saying, "how much impact we are having, I don't know" (lines 48-49) and adding jokingly, "I'll be dead in twenty years so it don't matter" (line 50). In his dislike for discussing causes and responsible parties of climate change, Gene is in line with every other interviewee in my study. To wrap up his discussion, Gene returns to the importance of his interactions with elk, saying that he "can testify that there's changes [to the climate], because of the way the elk season's rutting takes place" (lines 53-54).

The next two examples, which are from younger hunters, both in their twenties, portray the discursive constructions of climate change more typical of the younger hunters in my study, who also tended to be more formally-educated. Example 3.6 comes from an interview I conducted with Carson, a hunter from western Colorado, who categorized his political beliefs as "Independent" and "Libertarian." The interview took place during the hunting expo in Utah, in the main exhibit area, where he was working at a booth selling hunting packs and apparel. Carson grew up in western Colorado, was currently working for the U.S. Forest Service, and had been a hunter his entire life. In the first section of the interview, Carson talks about prevailing attitudes towards climate change among hunters, saying that the majority think of it as "natural" (line 14) and not as something to worry about, believing that the "environment will take care of itself" (line 13).

Example 3.6a

1. Jessi: Do you think it [climate change] is something hunters are worried about?

- 2. Carson: I think so.
- 3. um, probably a very low amount.
- 4. I'd say that if you took a poll here an- you know,
- 5. an- you know, yes or no climate change,
- 6. um ..
- 7. you'd probably get an eighty percent no.
- 8. And it may not be a no like it doesn't exist,
- 9. like there—there's actually like not that many like deniers anymore,
- 10. it's like more of a ... more of a ...
- 11. ok but I don't care,
- 12. or ok but it's not gonna actually-,
- 13. ok but the environment will take care of itself,
- 14. you know it's natural.

In this response, Carson positions himself as someone concerned about climate change through his use of the term *deniers* (line 9), and he later mentions his degree in environmental science has influenced his views. In the second part of the interview he explicitly positions climate change and climate change science as outside of the political binary, which he sees as regrettably influencing the majority of hunters, saying it is "very fueled by political motivations" (line 16), and not treated, as it should be, as "an objective thing" (line 18). Carson also constructs himself as disaligned with both left-wing and right-wing political ideologies, saying in line 45 that he "can't stand agendas either way to be honest," and spending 35 seconds discussing his strong stance that "science should never by politicized, ever" (line 48), thus situating science as outside of the negatively-evaluated political binary.

Example 3.6b

- 15. So, an- and unfortunately it is-
- 16. it is very fueled by political motivations,
- 17. now, whereas it should be-
- 18. it should be an objective thing looked at on the basis of science.
- 19. Um, so I actually have a degree in environmental science and fire ecology.
- 20. Jessi: Oh interesting, so this is something you've thought a lot about.
- 21. Carson: Yeah exactly, yeah.
- 22. Um .. and I- I can't stand agendas either way to be honest.
- 23. Like I don't like that it's politicized.
- 24. I don't think it should be.
- 25. Science should never be politicized, ever.

- 26. [30 seconds of discussion of science and politics]
- 27. So it's very sad to me that the perception of climate change or whatnot,
- 28. is a political motivation and not an objective thought.

In the last section of the discussion, when pressed about whether, in his opinion, hunters should care about climate change more than he has stated that they do, Carson, like other interviewees, constructs the effects of climate change through the lens of its effects on game animals. He portrays more negative effects than do Larry and Gene in examples 3.4 and 3.5 above, which were solely observations of changing behavior, but he does not believe that all the effects on wildlife will be negative.

3.6c

- 29. Jessi: Do you think hunters should care more about climate change, as a risk?
- 30. Maybe specifically to hunting?,
- 31. or just in general?
- 32. Carson: Um, yeah probably, um,
- 33. but .. [sigh]
- 34. yeah ..
- 35. most likely yes, they-
- 36. probably there needs to be more attention like,
- 37. attention paid to the issues behind climate change ...
- 38. whatever that may entail.
- 39. Uh, because it- it will affect the animals, no doubt.
- 40. Where they can live is going to change, um .. you know,
- 41. it could totally extinct some species,
- 42. but it could proliferate others.
- 43. That's the other thing.
- 44. you could open up-
- 45. you could open up habitat, potentially,
- 46. like, actually, they're proving that-
- 47. interestingly enough,
- 48. so get this,
- 49. crazy.
- 50. The elk herds and deer herds have been moving north in Canada,
- 51. because, pro:bably something to do with g:enerally warmer winters.
- 52. But here's the other thing.
- 53. Gas pads,
- 54. and oil pipelines have opened up enough range for them to forage and move.
- 55. Jessi: Because they're-
- 56. wait-
- 57. can you walk me through this?
- 58. Carson: But you could say, that, potentially climate change,
- 59. less snow ..

- 60. warmer winters, whatnot,
- 61. and oil development
- has allowed for the dispersion and increase in deer and elk populations north.

In this portrayal, Carson constructs climate change as in line with scientific representation, but he backgrounds the causes and responsible parties. Although he implicitly acknowledges fossil fuel consumption as related to climate change by bringing gas pads and oil pipelines into the conversation (lines 53-34), he highlights positive aspects that these technologies might have for certain species of wildlife while erasing the negative effects which they also have. Carson, like many other interviewees, foregrounds climate change's effect on wildlife, saying that hunters should probably care more about climate change because "it will affect the animals, no doubt" (line 62). He does not construct climate change as purely negative for wildlife, however, saying that while it may "extinct" some species (line 41), it will be good for others, increasing their numbers by extending the habitat available to them (lines 42-51). By foregrounding the potentially positive effects on elk and deer, species of particular importance to Colorado hunters, Carson portrays climate change as compatible with hunting and hunters' interests, unlike most other interviewees.

The last example is also from an interview with a hunter in his twenties. Colton grew up in Washington, served in the Armed Forces, and at the time of the interview was serving in the National Guard while pursuing a college degree. Colton categorized his political affiliation as "Conservative," and his wife, whom I also interviewed, described them both as "very Republican." The interview took place at a mostly empty coffee shop near the Army base in western Washington. During the first part of the interview, Colton expressed his strong stance toward ethical stewardship of animals, saying that he would not purchase commercial meat that had been, in his opinion, unethically raised on "factory farms." He also brought up his respect for hunting personality Steven Rinella (who is the focus of Chapter 4) and the work he does to promote an ethical relationship with food.

Example 3.7a

1.	Jessi:	Do you think hunters see that [climate change] as a problem?
2.	Colton:	I don't know.
3.		Um,
4.		it seems like a lot of hunters don't believe in it.
5.		Um,
6.		you know they-
7.		they don't-
8.		Honestly I think again it's all a perception.
9.		I think sometimes it's blown out of proportion?,
10.		Um, the climate is- is changing,
11.		you can look at-
12.		you know,
13.		there's- there's a lot of evidence to show that.
14.		Whether or not people are doing it, or you know, I'm-
15.		beside the point,

In the first part of his response to my question about climate change, Colton echoed Larry's point from example 3.2 that for many hunters, "it's all perception" (line 8). He begins by saying he thinks "a lot of hunters don't believe in [climate change]" (line 4), a common perception of group attitudes among interviewees. He uses "they" (lines 6, 7) during this description, distancing himself from "a lot of hunters" (line 4) and the "average" hunter (line 21 in Example 3.7b below). This distance could be age-related, as earlier in the interview Colton describes conservation as a concern "especially among younger hunters," but it could also be related to education status, as he implies in example 3.7b, line 30 below, saying the average hunter "doesn't have the time to go research." Colton does go on to say that "the climate is changing" (line 10) and "there's a lot of evidence to show that" (line 13), but he dismisses the causes as unimportant, saying, "Whether or not people are doing it" is "beside the point" (lines 14-15).

In the next section, Colton primarily constructs an understanding of climate change that is not his own, but that reflects what he sees among average hunters. This understanding positions climate change primarily with respect to a polarized political context in which concern about the phenomenon is an ideological stance used by "anti-hunters" (line 47) to

create negative effects for hunting (line 48).

Example 3.7b

16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44.	Jessi: Colton: Jessi: Colton: Jessi: Colton:	but, um I think it's so many anti hunters are the ones pushing that- that view of- of climate change. So you know your average hunter who, you know, is working a full time job taking care of his family, he doesn't have the time to go research himself, um, so he's just- because they are anti hunter, you know, they just dismiss it out of hand. An- and it goes both ways, but you know, I think that's the biggest effect climate change is having on hunting, is just the- the way it's perceived, and By non hunters? By- [yeah]. [Or the way] it's perceived [by:—
		I think the biggest effect for hunters themselves is their
45.		they- they just dismiss it out of hand as being,
46.		just another another false thing,
47.		put out by- by anti hunters just to-
48.		for a way to stop hunting.

In line 20, for instance, Colton positions "that view of climate change" as aligned with "anti hunters" (line 19). It is unclear what "view," specifically, he means, potentially a viewpoint that holds humans largely responsible for a changing climate, but he suggests that its affiliation with anti-hunters causes "your average hunter" (line 21)—whom he portrays as a primary breadwinner—to "dismiss [concerns about climate change] out of hand" (line 30). Colton's discursive construction of climate change differs from that of other interviewees'

in his lack of focus on wildlife. He implies that he personally believes the climate is changing, although he says it is unimportant "whether or not people are doing it" (line 14). For the broader hunting community, however, Colton perceives the primary effect of concern about the climate to be an ideological tool of "anti-hunters." He discursively constructs the idea of climate change as strongly associated with people who oppose hunting and therefore as disaligned with the average hunter.

Discussion

Overall, interview participants' discursive constructions of climate change and the hunting person-type occurred through three consistent stances as well as two contested positionings. One theme that consistently arose was hunters' interpretation of environmental changes through their interactions with wildlife. When taking a stance toward climate change, most interviewees positioned fish and game species as the affected parties, rather than humans, non-game animals, plants, or holistic ecosystems, and many, especially older hunters, framed their knowledge as arising from their interactions with these species. This stance was very consistent across interviews and, as seen in the following segments, was missing only from Colton's description:

The prioritization of wildlife

- 1. Larry (Example 3.3, lines 17-19): I'm aware of that because I fish. I salmon fish. I'm aware that the fish are coming in later and later every year.
- 2. Gene (Example 3.5c, 53-54): So I can testify that there's changes, because of the way the elk season's rutting takes place.
- 3. Carson (Example 3.6c, 36-39): Probably there needs to be more attention like, attention paid to the issues behind climate change .. whatever that may entail. Uh, because it- it will affect the animals, no doubt.

This portrayal is fundamentally shaped by the interviewees' identity as hunters, and it also functions to further reproduce and reinforce the hunting persona. First and foremost, members of the hunting and fishing community are seen the ones most "in touch" with

wildlife and wild places, a stance that is constructed explicitly, by contrasting their own experience and knowledge with that of the non-hunting public, as when Doug, in Example 3.2, emphasizes that those who are no longer tied to the land "just don't understand" (line 31). This discursive construction also reinforces the positioning of hunters as anachronistic in the modern world (discussed further in Chapter 5), while non-hunters are portrayed as part of urban modernity and thus unable to interact with or understand the natural world. Within this construction, the risks of climate change to non-hunters are minimized or erased. Some of the interviewees' focus on the impacts of climate for primarily wildlife and hunting, as a lifestyle, is probably attributable to the form of my original question ("Do you think hunters see climate change as a problem?"). I felt it was necessary to ask the question in this way— about the interviewee's perception of community attitudes, rather than their own—to decrease their discomfort with taking a stance on such a politicized issue. The form of the question undoubtedly shaped the responses, but participants' focus on wildlife, and, by extension, hunters, as the primarily impacted parties in a changing environment is also in line with the common discourses in the wider discussions of climate change within the sportsman/woman community and is furthermore seen in the climate change discourses of the hunting media and conservation organizations (as discussed in Chapter 5).

Another stance object that arose in almost every construction of climate change in the interviews was the relationship of the hunting community to structures of partisanship and/or "anti-hunters," who were largely seen as affiliated with left-wing political parties. This construction was the most contested among interview participants, however, with some participants, specifically younger, more formally-educated interviewees portraying climate science as a concern that hunters and fishers should align with, but that has been unjustly polarized (e.g., Carson), and others portraying climate science as in disalignment with the hunting community because of its affiliation with "anti-hunters" (e.g., Colton).

Climate change and political polarization

- 1. Carson (Example 3.6b, lines 15-18): So, an- and unfortunately it is- it is very fueled by political motivations, now, whereas it should be- it should be an objective thing looked at on the basis of science.
- 2. Colton (Example 3.7b, lines 43-48): I think the biggest effect .. for hunters themselves is their .. you know ..they- they just dismiss it out of hand .. as being, just another .. another false .. thing, put out by- by anti-hunters just to- for a way to stop hunting.

Lastly, and importantly for possible solutions to climate change, a consistent stance throughout the interviews was the positioning of hunters as a part of nature, an element of the ecosystem, rather than separate from it. In accordance with that position, many hunters, especially older participants, represented humans as unable to affect global natural systems, and accordingly constructed climate change as part of a natural cycle.

Nature as unaffectable by humans

- 1. Larry (Example 3.3, lines 10-15): It's a natural cycle. You know. We can study it. We can predict it. We can blame somebody. We can't stop it.
- 2. Gene (Example 3.5c, lines 32-37): But it's- it's the natural course of events over thousands of years, things have done. You know the- the ice came in and then it went back. And now it's coming in, and now it's going back @again @@.
- 3. Carson, describing his perception of other hunters' stances (Example 3.6a, lines 9-13): There's actually like not that many like deniers anymore, it's like more of a.. more of a.. ok but I don't care, or ok but it's not gonna actually-, ok but the environment will take care of itself.

This portrayal of the human relationship to ecological systems, as well as the relationship of climate change stances to broader partisan identities within the United States, is also reproduced through interviewees' avoidance of discussing the causes of climate change; when they do discuss the issue, they dismiss its importance for shaping possible responses to the crisis:

Avoidance of attributing causes

1. Gene (Example 3.5c, lines 39-50): Granted there's a lot of cars on the road, I thought about that yesterday .. coming back from [redacted]. It was bumper to bumper for nineteen miles. And that's just on a two lane highway over here. I-5 and all those— I mean you think about the number of automobiles that are on the road, every day twenty-four hours a day. There's a lot of .. stuff [being released into the atmosphere]. lot of stuff, So .. how much impact we are having, I don't know. I'll be dead in twenty years

- so it don't matter.
- 2. Colton (Example 3.7a, lines 10-15): Um, the climate is- is changing, you can look at-you know, there's- there's a lot of evidence to show that. Whether or not people are doing it, or you know, I'm- beside the point.

Figure 3.5 visually represents the construction of climate change created by interviewees. According to this construction, climate change is taking place in undeveloped wilderness—not in places with human populations—and is thus framed as affecting primarily game species, with a more contested effect (represented by the lighter arrow) on hunters through reduced populations of wildlife, or potentially more political power for "anti-hunters." The non-hunting public is positioned as living in urban areas with no connection to the wilderness where climate change is taking place. There is also no directional effect on climate change from either hunters or the non-hunting public. Climate science has a contested positioning, either aligned with the hunting community or the non-hunters, depending on the interviewee.

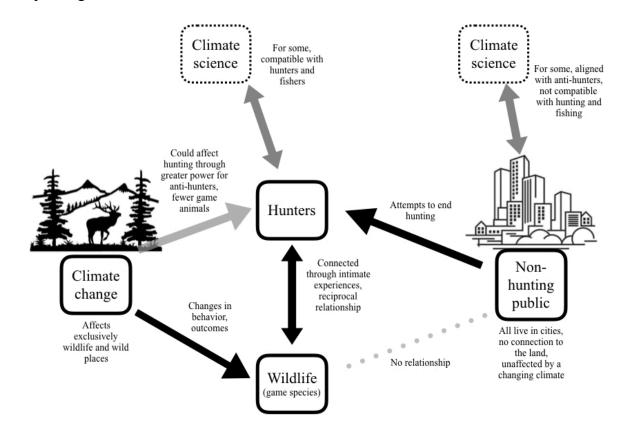


Figure 3.5: The discursive construction of climate change by interviewees.

The construction of the hunting and fishing identity through these environmental stances also holds a great deal of relevance for ideological understandings of urbanity and rurality in the United States. The construct of rurality has been shown to be important for the construction of sociolinguistic styles and language ideologies in both the western and southern U.S. (Hall-Lew and Stephens 2012; Johnstone 1998; Podesva et al. 2015), but it is generally not theorized in terms of more-than-human intersubjectivity. Furthermore, examining the construction of climate change through a stancetaking framework illuminates how identities emerging in interaction with the more-than-human world can shape our understanding of and responses to environmental crises. These constructions of identity and climate change therefore have significant implications for the solutions and responses that are considered plausible in any given portrayal of climate change. For instance, while interviewees in this study were generally reluctant to propose specific solutions to the phenomenon (although Larry mentioned there is nothing that can be done), many of the conservation-focused hunting and fishing NGOs are in fact working towards climate change mitigation strategies, and several already have projects underway to address some of the effects of a warming planet.

Because the causes of the current environmental crisis are largely erased in sportsman discourse, the typical response is not to address the causes and responsible parties, but rather to pursue mitigation strategies. Ducks Unlimited, for instance, anticipates rising sea levels which will threaten duck habitat along the coasts. In response, it is purchasing and preserving land slightly inland of the coast, with the expectation that this space can become new wetland once the original habitat is submerged. Other NGOs have undertaken projects like installing water features in the desert, to help animals such as big-horned sheep to survive prolonged droughts and participating in fire prevention efforts and habitat

restoration after fires occur. This focus on adaptation—and adaptation specifically for game species—also minimizes policy solutions at the governmental level, especially those that target climate change mitigation. This effect is reinforced by the positioning of climate change as mired within a polarized political context, with very few NGOs urging their members to contact their representatives or to vote as part of the solution to the climate crisis.

While adaptation projects are undeniably important given the global crisis, a focus on adaptation, especially for wildlife, can contribute to the erasure of environmental injustice within human populations (Osborne 2015). Such discourses can furthermore be mobilized in defense of unjust solutions to the climate crisis, such as restrictive immigration policies. While within the context of environmental communication, my inclination, along with that of many scholars (Yale Climate Connections 2019; Yale Program on Climate Change Communication 2019), is to celebrate any nascent discussions of the climate crisis by politically-conservative communities, I worry that this impulse can also lead to the minimization of harmful discourses and a lack of emphasis on environmental justice. Environmental movements in the United States have always been prone to white supremacist and anti-immigrant discourses (Gottlieb & Dreier 1998), and understandings of environmental crises that center rural white citizens and erase other vulnerable populations, like those constructions produced by the participants in this study, can be problematic in this context. I write this reflection in the aftermath of two mass shootings carried out against immigrant groups in the name of environmental protection and resource protection for white residents, one in Christchurch, New Zealand, and the other in El Paso, Texas. With a growing number of climate refugees forced from their homes, and even greater population displacements predicted (Warner et al. 2010), it is crucial for scholars of environmental discourses to examine how constructions of the climate crisis and the identities they

reproduce are mobilized in the perpetuation of unjust responses to environmental problems and harmful policies towards vulnerable populations.

Conclusion

This chapter has examined an urgent question for environmental communication: how sportsmen discursively construct a changing climate and its effects on local weather events and ecosystems, and furthermore, how members of these communities position their identities through their discursive constructions of climate change. I investigated this phenomenon through an analysis of ethnographic interviews, finding that community members' discursive constructions of climate change are fundamentally shaped by their identities as hunters and fishers. Interviewees described climate change through the lens of wildlife behavior—reporting changes in the timing of the elk rut or the arrival of the salmon—and similarly made sense of the risks of climate change through its effects on wildlife and wildlife habitat, discussing the impacts of lower water levels on fish or the effects on winter habitats for deer and elk. Furthermore, hunters and fishers discursively constructed the appropriate scope of responses to the climate crisis through their selfidentification as stewards of wildlife. Through these constructions, sportsmen simultaneously produced their own identity as connected with nature, as removed from modernity, and as those with the most to lose from a changing climate. Through an analysis of U.S. hunter and fisher discourse around climate change, its effects, and the appropriate responses to it, this chapter thus illustrates the simultaneous construction of local identities and changing environments.

For linguists, this analysis shows the ways in which reported interactions with the more-than-human world function in the production of identities, illustrating the need to further understand the role of more-than-human intersubjectivity in linguistic theories of

identity. This analysis also illustrates how the linguistic framework of stancetaking can allow for nuanced analyses of the interaction between identity and understandings of environmental crises such as climate change. Finally, the chapter has demonstrated how identities produced in interaction with the more-than-human world can shape perceptions of possible and justified responses to environmental crises. It thus shows the importance of bringing together environmental- and linguistic-anthropological approaches in understanding the intersection of identities and discursive engagements with a changing climate and highlights the potential for an environmental linguistic framework to contribute to both theoretical and applied questions within the environmental social sciences.

Chapter 4: Talking about climate change: Identity, stance, and variation Introduction

In the previous chapter of this dissertation, I considered the construction of environmental problems and person-types within ethnographic interviews. This chapter analyzes the interaction of sociolinguistic style and environmental stances in a different context: the mediatized representation of a sportsman persona. As seen in Chapter 2, from the early division between hunter/naturalists and "pot hunters," or lower-class subsistence hunters, sportsmen have long considered the conservation of wildlife and wild lands to be an integral part of their identity and have celebrated hunters as the original and most authentic conservationists. Reinforcing this ideology, many contemporary hunters and hunting organizations use the hashtag #originalconservationist on social media platforms to tag hunting-related posts about their personal experiences, community events, and brand-related content.

The emphasis on conservation as an aspect of the sportsman persona, however, has grown more nuanced in recent years. Conservation as a goal, and especially more politicized topics such as climate change, have grown more associated with liberal political ideology (McCright and Dunlap 2011a), and, accordingly, less homologous with white, rural, working-class identity. Sportsmen taking stances on conservation-related issues must therefore also be mindful of maintaining an authentic "country" identity. Because of this, the sportsman persona, as a sociolinguistic style, is a particularly interesting opportunity both for sociocultural linguists and for scholars of the communication of environmental messages to understand how ideological stances interact with other elements of sociolinguistic styles, and furthermore to understand how speakers manage their identities

when constructing highly enregistered environmental messages. To that end, this chapter analyzes the speech of a popular sportsman media figure, Steven Rinella, during two videos, one in which he urges sportsmen to take action about climate change, and the other in which he explains the North American model of wildlife conservation. The chapter has two aims. First, it endeavors to examine the relationship between sociolinguistic styles and non-homologous stances, arguing that ideological stances are integral parts of the semiotic bundles that form styles or social identities. Second, it aims to investigate the interaction between a speaker's sportsman identity and a indexically-disaligned environmental message.

Sociocultural linguists have long known that speech not only reflects identity but also constructs it. Even large and seemingly immutable social categories such as race, gender, class, and so on, are constituted through individual and group uses of linguistic resources at all levels, phonetic, grammatical, and discursive (Alim 2004; Bucholtz 2001, 2015; Eckert 1989, 2000), and scholars have shown the diverse ways in which speakers use linguistic resources to create and manipulate these sociolinguistic styles (Bucholtz 2011; Eckert 2000; Podesva 2007; Zimman 2015). Linguists have also investigated the linguistic resources through which speakers take stances (DuBois 2007; Englebretson 2007), but little attention has been given to the interaction of style and ideological stances, although the latter are a significant way in which speakers position themselves and others. Accordingly, this chapter aims to describe the variation in a sportsman's sociolinguistic style, examining how it interacts with the environmental stances that he takes in conveying environmental messages. Scholars of environmental behavior and communication have shown that the perception of environmental messages is fundamentally influenced by both the identity of the source of the message (Wald et al. 2017) and the identity of the listener/receiver (Gromet et al. 2013; Kahan et al. 2011). As certain environmental stances have become indexically associated with specific political ideologies, taking these stances has become, in itself, constitutive of such political identities. Researchers and environmental communication practitioners now work in a context in which not only does the source of an environmental message influence its perception, but the content of a message also influences the perception of its source (Kahan et al. 2011).

Scholars have tested a number of ways to deconstruct the indexical associations of climate change messaging, finding some strategies, such as public health framing (Maibach et al. 2010) and past-focused messaging (Baldwin and Lammers 2016), to be at least somewhat successful. Generally, however, this research has been performed via opinion surveys or in lab conditions, and little is known about how such messages are crafted and received in naturalistic conditions. Furthermore, such research often considers identity categorically and in terms of broad demographic and ideological categories. Respondents must, for instance, categorize themselves by their political ideology, gender, age, and so on, and the identity of the source is often represented as either liberal (e.g., MSNBC) or conservative (e.g., Fox News). To complement such research with a naturalistic, community-of-practice perspective, this chapter analyzes the interaction of one media personality's identity with the environmental stances he takes. While the current study does not examine listeners' perceptions of the speaker, it illustrates how this environmental communication practitioner navigates the interaction of identity and environmental messaging in the current political context, setting the stage for future research.

This chapter is structured as follows. It first discusses the use of style and stance in sociolinguistics and the role of identity in communicating environmental messages. It then describes the focal speaker, Rinella, and the context in which he constructs his mediatized persona and provides an acoustic analysis of his vowel qualities as he takes two environmental stances: one in which he explains the value of the North American model of wildlife conservation and the other in which he urges sportsmen to take action about climate

change. I find that the speaker uses a significantly fronter variant of the BOOT vowel, indexically associated with a rural, working-class persona, while arguing for climate change action. I therefore argue that environmental stances—and by extension ideological stances—are integral parts of the semiotic bundles that form styles or identities and therefore interact with phonetic variation and discursive stylistic resources. The analysis also shows the interaction between a speaker's identity and their production of an environmental message, highlighting the need for scholars of environmental communication to view identity as gradient and produced in interaction (Bucholtz and Hall 2005). This study lays the foundations for future research investigating the effect of such sociophonetic variation on the perception of environmental messages, highlighting the potential of linguistic methodologies to contribute to studies of environmental ideologies and communication.

Sportsmen and sociolinguistic style

In the United States, the close links between the sportsman style and white working-class masculinity manifest themselves in the linguistic features used to construct the style. While the majority of hunters do not live in the South, aspects of Southern English have become indexical of a rural identity across regions, or what Podesva et al. (2015, 178) refer to as "supralocal features" and part of the "Country Talk" of U.S. popular imagination (cf. Bucholtz et al. 2007; Hall-Lew & Stephens 2012; Niedzielski and Preston 2003; Preston 1989), which is associated with personae connected to the land (Hall-Lew & Stephens 2012) and rural working-class masculinity. Sociophonetic research has identified variables associated with rurality through matched-guise techniques and both intra-speaker and interspeaker analyses. Alveolar productions of the (ING) version, for instance, have been found to increase the perceived strength of a Southern accent and are associated with white, rural working-class personae such as "rednecks," while velar productions are associated with urbanity (Campbell-Kibler 2007). Similarly, retracted /s/ has been shown to have

associations with rurality and southernness (Campbell-Kibler 2011). Podesva et al. (2015) and Hall-Lew (2005) have both found that fronted BAT and BOOT vowels are associated with a country orientation in inland California and Northern Arizona, respectively. In both areas, where aspects of the Southern Vowel Shift coexist with the California Vowel Shift, speakers with an ideological orientation to rurality or Countryness used a more fronted production of BAT and BOOT, in accordance with the Southern Vowel Shift. Contrastingly, speakers oriented towards urban centers, or "Townies," produced a fronted BOOT vowel but a backed BAT vowel, signaling a participation in the California Vowel Shift.

The speaker examined in this chapter perceptually uses many of the linguistic variants associated with working-class rural identity. He shows syllable reduction patterns and other prosodic features associated with rural vernaculars, a higher frequency of glottalized coda /t/ (Eddington and Channer 2010), and alveolar (ING). He also employs some vowel qualities associated with Country orientation, such as fronted BAT and BOOT, which are the focus of the acoustic analysis portion of this chapter.

Style and sociolinguistics

Since Labov's (1963) classic study of Martha's Vineyard, sociolinguists have demonstrated the integral connection between a speaker's orientation to particular identities and their linguistic production of certain phonological variants (Eckert 2000). Building on this and other work, scholars have increasingly focused on speakers' dynamic use of variants to construct identities and styles, defined here as holistic sets of linguistic and non-linguistic features in which each linguistic element creates different meanings depending on co-occurring features (Bucholtz 2015; Zimman 2015). Linguistic work recognizes styles as presentations of the self (cf. Coupland 2001; Goffman 1978) and thus as performances of social affiliations and identities (Rickford and McNair-Knox 1994), focusing in particular

on the role of linguistic variation as a resource in the construction of individual and group styles (Eckert 1989, 2000). Sociolinguists have also emphasized the stylistic agency shown by speakers in exploiting semiotic variation, including linguistic variation, in the construction of identities and social meaning (Alim 2004a; Bucholtz 2001; Eckert 2000). Speakers have been found to vary their style based on audience (Bell 1984, 2001), setting (Podesva 2007, 2011; Kiesling 1998), orientation to social categories (Mendoza-Denton 2008), and rhetorical goals (Blom and Gumperz 1972; Gumperz 1982).

In an early study, Ervin-Tripp (1972) recognized that stylistic features tend to cooccur, noting that styles can have both phonetic and morphosyntactic features which tend to align in groupings and ways of speaking. Bucholtz (2015) expands on this theorization of stylistic bundles by pointing out that styles are composed not just of linguistic features, but also of all other socially meaningful variables or "modes of semiotic action" (p. 32). Speakers' choices of how to talk, dress, walk, gesture (Hoffman-Dilloway 2011), and, even more generally, where to position themselves geographically (Bucholtz 2011; Eckert 1989) are all resources through which they socioculturally situate themselves with respect to other styles and culturally relevant indexical fields (Eckert 2008). Speakers may also use a process of recombination or bricolage, drawing on features from widely varying styles to adapt or create new styles (Eckert 2000; Hebdige 1979). Furthermore, Zimman (2015) has shown that certain elements of a speaker's style can affect their realization of other linguistic features associated with that style. He found, for instance, that transgender men may use variants associated with femininity (e.g., high-frequency /s/), depending, in part, on their speaking pitch and other semiotic variables contributing to whether they were perceived by listeners as men. Eckert (2008, 454) has theorized this relationship between different indexical meanings as existing in indexical fields in which fields of ideologically related meanings exist and can be activated depending on the context.

Within sociolinguistics and related fields, scholars have investigated the construction of many types of styles, from social and peer groups (Bucholtz, 2011; Eckert, 1989), to ethnic and regional styles (Hazen, 2002; Gordon, 2000; Kiesling, 2005), to styles that unify across nation-state boundaries (Alim, 2004a), to styles that contribute to larger sociocultural constructs, such as gender (Zimman, 2017). The styles of larger socio-political identity groups, such as self-identified "sportsmen," however, remain an understudied area to which the current chapter aims to contribute. While rural styles and dialects have long been of interest to dialectologists and sociolinguists, rurality as a pan-regional sociocultural construct manifested through linguistic style has only recently begun to attract scholarly attention (Hall-Lew and Stephens 2012). Moreover, little is known about the interaction of stancetaking and such pan-regional socio-political styles. Because political ideology is increasingly organized around such identities, linguistic research can illustrate the ways in which speakers mobilize sociolinguistic styles when taking ideological stances.

Stance

There has been a great deal of linguistic research investigating the resources through which speakers take stances, including, but not limited to, sociolinguistic styles. Within this literature, stance has been defined as a "public act by a social actor, achieved dialogically through overt communicative means (language, gesture, and other symbolic forms), through which social actors simultaneously evaluate objects, position subjects (themselves and others), and align with other subjects, with respect to any salient dimension of the sociocultural field" (DuBois 2007, 163). From a sociolinguistic approach to the study of stance, a central goal has been to explore how repeated stancetaking practices are indexically linked with certain subject positions, identities, and personae (Bucholtz 2009; Jaffe 2009). Studies of the connection between sociolinguistic styles and stancetaking have

shown that stancetaking, by indexing sociolinguistic styles, is instrumental to the creation and maintenance of those styles. In particular, the indexical associations between ways of speaking and identities or person-types are built through repeated actions of taking stances (Bucholtz and Hall 2005; Eckert 2000; Kiesling 2004, 2009; Johnstone 2007). As Jaffe (2009, 14) states, "In short, patterns in the cumulative results of speaker stancetaking shape both what is understood to be indexed by particular linguistic forms or practices and, potentially, the language ideologies that underpin how people look at the connections between language forms and practices and the social world."

Relatedly, sociolinguists have shown that style can be a crucial resource for stancetaking, as sociolinguistic variables are often mobilized as resources in relational work, to position oneself or take evaluative or affective stances (Ervin-Tripp 2001; Rampton 2006; Zimman 2017). One example of the social function of such styles can be in the authentication of identities—the positioning of oneself as a "real" member of some community or identity. Sociolinguistic styles are particularly effective authentication strategies (Bucholtz & Hall 2005) due to ideologies of most speech as unperformed, or "real," often with social penalties for any speech perceived to be designed or intentional (Bucholtz 2003; Coupland 2003). This chapter explores a speaker's use of sociolinguistic style in a context where the authenticity of their style use could be challenged by the stances they are taking. As Jaffe (2009, 13) states:

Stance, as a form of indirect indexicality, also posits, presupposes, or proposes relationships that go beyond the social and interpersonal. So, for example, using a stigmatized or minority code in a formal register could be, simultaneously, an individual claim to specific social membership(s) and authority, an act of interpersonal positioning, and a political and

circulation (the language chosen, and the language not chosen)."

In the case analyzed in this chapter, for instance, Rinella's use of "country" style to claim social membership and authority while taking a pro-climate action stance indirectly indexes that such a stance toward climate change is also part of the cultural field within which this code—"country" style—is situated, an association

which is at odds with the prevailing indexical field for the "country"

ideological statement about the status and relationship of the codes in

Identity and environmental stances

sociolinguistic style.

The stancetaking analyzed in this chapter takes place within the context of environmental discourse, an area that has received little attention within linguistics and linguistic anthropology. Environmental stances, and their relationship to broader identity categories, however, have been well-studied within the environmental social sciences. In environmental psychology, for instance, scholars have examined the extent to which social identities can predict environmental behavior (Carfora et al. 2017; Sparks, Shepherd, & Frewer 1995; Whitmarsh & O'Neill 2010), studying, among others, the relationship of gender and race and environmental actions (McCright and Dunlap 2011b) and the effect of self-identification as an environmentalist (van der Werff, Steg, & Kaizer 2013). Scholars have further investigated which factors may influence or moderate this relationship, such as the visibility of pro-environmental behaviors (Brick et al. 2017) and the salience of one's political identity (Unsworth and Fielding 2014). Environmental psychologists have found that self-identification predicts certain types of environmental behaviors, such as recycling (Manetti, Pierro, & Livi 2004; Nigbur, Lyons, & Uzzell 2010), purchasing organic foods or other types of "eco-shopping" (Sparks & Shepherd 1992; Whitmarsh & O'Neill 2010), and

conserving energy (Van der Werff, Steg, & Keizer 2011). Taking a similar methodological approach, scholars have investigated the impact of certain macro-level identity categories on the perceptions of and responses to environmental information (Gromet et al. 2013; Hart and Nisbet 2012; Kahan et al. 2011).

Research on environmental identity or pro-environmental identity from this methodological framework, however, is limited with respect to the study of local identities such as hunters and fishers, for several reasons. First, such research often uses the enregistered term *environmentalist*, asking respondents the degree to which they self-identify as an environmentalist (e.g.,mStets & Biga 2003). Such studies also often use as proxies for pro-environmental behavior practices and stances that are indexical of an urban, liberal, upper-middle-class white identity, such as recycling (Manetti et al. 2004), or buying organic food (Sparks and Shepherd 1992), rather than environmental actions that hunters and fishers profess to be most important, such as donating to conservation organizations. As a consequence of these methodologies, this type of research often does not fully capture the nuances of local identities, especially those more affiliated with right-wing political ideology, such as hunters and fishers.

Within non-experimental research on environmental stances in the U.S., scholars have investigated both historical and contemporary aspects. Historians have examined how environmentalism, as a movement, has shifted in indexical associations from a masculine form of "woodcraft," à la Aldo Leopold, to becoming associated with left-wing political ideology (Turner 2002), and in some ways, even enregistered as a marker of an urban upper-middle-class white identity, or "granola-eating, Birkenstock-wearing tree-huggers who want to take your guns," in Jorgensen's memorable phrase (2011, 62). Within ecolinguistic and anthropological approaches, research has shown how contemporary environmental ideologies and practices interact with other sociocultural constructs that

relate to identities, such as masculinity (Stibbe 2004), Indigeneity (Nadasky 2005; Roy 1986), socioeconomic status and class (Hoelle 2017), and race (Blanton 2011). These questions, however, have received less attention from sociocultural linguistic approaches, and in this chapter, I argue that a unified linguistic and environmental anthropological approach can build on this research to provide a fuller picture of the relationship of identity and environmental stancetaking, showing the importance of local identities and sociolinguistic style in taking and perceiving such stances.

Data analysis

This chapter examines in depth the speech of prominent sportsman personality Steven Rinella. Rinella is a forty-three-year-old white man from rural Western Michigan. He is a public figure and television personality with a television show on the called MeatEater—originally on the Sportsman Channel, and now on Netflix—in which he hunts and cooks various game animals across the United States. He has also published several books about his experiences hunting in the United States and has started an online media company, also titled MeatEater, for which he and other prominent hunter conservation writers such as Remi Warren and Mark Kenyon, among others, write and produce videos and podcasts. As a high-profile public hunter, he has several corporate partnerships and he works with various conservation-oriented NGOs. Rinella is well-known within the hunting community—especially younger hunters—with several interviewees in my data bringing him up as an example of a media figure that they respect. One interviewee stated that, in his opinion, Rinella is one of the foremost representatives of a newer type of hunterconservationist—one that prioritizes the subsistence motivations of hunting and attempts to explain hunting lifestyles to a broader public. For that reason, he is also seen by many hunters as an effective spokesperson. The MeatEater media organization prioritizes content

about preparing and cooking game meat, but also publishes content about hunting experiences and conservation goals. It also promotes the goals and content of several NGOs with related aims, such as the Backcountry Hunters and Anglers and the Theodore Roosevelt Conservation Partnership. At times, Rinella and the MeatEater organization have departed from right-wing political ideology, urging, for example, hunters to vote based on both gun rights and public lands protection, rather than solely partisan affiliation. The MeatEater organization and Rinella's affiliation with other popular but occasionally controversial organizations like Backcountry Hunters and Anglers and the Theodore Roosevelt Conservation Partnership—called "Green Decoys" by more politically-conservative groups (see Chapter 2)—has been the cause some criticism by more conservative hunters, but Rinella remains an influential figure within the community.

Rinella reinforces his sportsman persona in many ways: he wears either camouflage or Carhartt-branded jackets (a line of clothing associated with sportsmen), he repeatedly refers to himself as an "American sportsman," and he uses a specialized lexicon when discussing matters of hunting, fishing, butchering, and cooking game meat.



Figure 4.1: Promotional image for Rinella's show on the Sportsman Channel in 2014 (http://www.multivu.com/players/English/7410351-sportsman-channel-meateater-6/gallery//image/92295783-5d1a-4f58-a005-d431ddcb6f4f.jpg).

This chapter uses an intraspeaker sociolinguistic analysis to examine the function of style in the mitigation of environmental stances that are non-homologous with the sportsman persona. Following Podesva (2007), I take intraspeaker analysis to be a productive way to analyze stylistic variation as an interactional resource. The data used in this chapter are two videos—one three and a half minutes and the other five and a half minutes long downloaded from the video-hosting website YouTube. The videos were produced by the Theodore Roosevelt Conservation Partnership (TRCP) for the consumption of selfidentified hunters and fishers. They are hosted by Steven Rinella, and their dual purpose is to raise money for the TRCP and to raise awareness of conservation issues affecting sportsmen. The TRCP is one of a number of conservation-oriented NGOs whose primary aim is the protection of wildlife habitat and the support of hunters and anglers. These organizations, among other endeavors, lobby political bodies, create conservation easements to protect land from development, and buy and protect private land, all with the primary purpose of ensuring that game species populations stay high and that hunters have access to hunting lands. They may also, to greater or lesser extents, advocate for solutions to climate change, resource extraction, and regulations on pollutant contamination in the wilderness.

Both videos are created in the same style: Rinella delivers a scripted text to the camera without interlocutors (Figures 4.2 and 4.3). There is music at the beginning and end of the videos, with unobtrusive instrumental background music throughout. Shots of Rinella speaking to the camera are interspersed with shots of wilderness, wildlife, sportsmen, and other images relevant to the topic.





Figure 4.2: "North American Model of Wildlife Conservation."

Figure 4.3: "Sportsmen and Climate Change."

The first video explains the "North American Model of Wildlife Management"—a system of wildlife management largely pioneered at the turn of the century. In this video Rinella lists seven principles of this wildlife management system, with the primary aspect being that wildlife are considered a publicly-owned and -managed resource held in trust for future generations. The celebration of the North American Model of Wildlife Management is an uncontroversial stance among American sportsmen. Accordingly, this video was positively received, with 100% of the YouTube comments being favorable. The comment in Figure 4.4 also illustrates the perception of the North American Model of Wildlife Management as uncontestedly ideologically-aligned with the hunter and angler identity. In the comment the poster wonders how 4 people could have downvoted the video, and another viewer responds "4 morons," implying that to disagree with this stance makes one an "moron." For context, hundreds of people had upvoted the video.

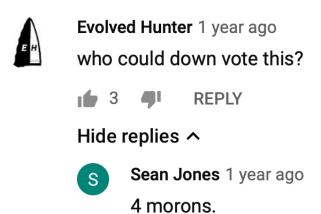


Figure 4.4: The first comment on the YouTube video "North American Model of Wildlife Conservation"

REPLY

Example 4.1 illustrates the script Rinella reads in the video, transcribed in intonation units (DuBois et al. 1992).

Example 4.1 (Source: https://www.youtube.com/watch?v=ukqzPNckrbg)

[guitar intro]

41

	[6]
1	During my time hunting here in New Zealand,
2	I realized just how differently,
3	different countries approach wildlife conservation,
4	and natural resource management.
5	It has made me especially appreciative of our own management strategy in the U.S.,
6	where wildlife is viewed as a public resource.
7	Hunting and fishing in North America,
8	and the management of the wildlife and fisheries upon which our lifestyle depends,
9	is characterized by a unique management and regulation system,
10	known as the North American Model of Wildlife Conservation.
11	The Europeans who first settled and explored our continent,
12	had all come from cultures where wildlife and wild lands were the property of the
13	elite, landed gentry.
14	The development of our nation,
15	was largely driven by North America's incredible wealth of renewable natural
16	resources.
17	There were few restrictions,
18	and the free access of the public to exploit these resources,
19	was critical to building the United States and Canada.
20	Today, the abundance of wildlife that we enjoy,
21	and its conservation and management,
22	are a reflection of the historic access to natural resources that our forefathers enjoyed.
	110

- 23 The combination of unrestricted access,
- 24 and the subsequent potential for overuse,
- 25 led to the founding of the wildlife conservation movement in the late nineteenth
- 25 century,
- and ultimately, the codification of the North American Model.
- 27 There are seven underlying principles,
- 28 upon which the North American conservation model is based.
- 29 First, wildlife is a public trust resource.
- 30 It is not owned by individuals,
- 31 but is held in trust by the government for the benefit of present and future generations.
- 32 The second principle is the elimination of commercial markets for wild game.
- 33 Historically,
- 34 unregulated and unsustainable commercial harvests of game animals.
- 35 and migratory birds,
- 36 led to federal and state laws that greatly restricted the sale of meat and other parts
- 37 | from these animals.
- 38 These restrictions have been so successful in restoring game populations,
- 39 that today we enjoy something of an overabundance of some species,
- 40 such as white tail deer and snow geese.
- 41 Third.
- 42 | we allocate the use and harvest of wildlife by law.
- 43 As a trustee.
- 44 the government manages wildlife in the interest of the beneficiaries,
- 45 | the present and future generations of the American public.
- 46 Laws and regulations establish frameworks,
- 47 under which decisions can be made.
- 48 These frameworks enable us to make decisions,
- 49 such as which species can be hunted,
- and which species cannot be taken,
- 51 because of their rarity or endangerment.
- 52 The fourth principle holds,
- that wildlife can only be taken for legitimate purposes.
- 54 The slaughter of our game for frivolous purposes will not be tolerated.
- Most states and Canadian provinces have forms of wanton waste laws,
- 56 that require hunters to salvage as much meat as possible from legally killed game.
- 57 The fifth principle recognizes wildlife as an international resource.
- A milestone in the implementation of this concept was the signing of the Migratory
- 59 Bird Treaty Act in 1960.
- 60 In addition to the realization that waterfowl had to be managed across international
- 61 boundaries.
- 62 | the protection of migratory songbirds was seen as critical,
- in the protection of agricultural crops against insect pests.
- This act was the first to affect many more species than just those that were hunted,
- and was the first treaty to provide for international management of our wildlife
- 66 resources.
- 67 The next principle holds that management of our wildlife resources should be
- 68 accomplished through science-based,
- 69 rather than purely emotional, standards.
- 70 | The application of this principle,

- 71 has led to most of the advances in the management of a diverse array of wild animals
- 72 and migratory birds.
- 73 The last,
- 74 and I would argue,
- 75 the most important principle underlying the North American Model of Conservation,
- 76 is what we call the democracy of hunting.
- 77 Theodore Roosevelt believed that society at large would benefit if all people,
- 78 regardless of origin or class,
- 79 had access to opportunities for hunting.
- 80 It is this concept that distinguishes the United States and Canada,
- 81 from many other nations,
- 82 where the opportunities to hunt are restricted to those who have special status,
- 83 | such as land ownership,
- 84 or wealth.
- 85 Those of us who've grown up hunting and fishing often take this for granted,
- 86 but it's worthwhile,
- 87 every now and then,
- 88 to stop and think about how fortunate we are,
- 89 to live in a society where our wildlife resources are collectively ours,
- 90 to use and enjoy.
- 91 If you want to find out more about what you can do,
- 92 to help secure hunting and fishing rights for future generations of sportsmen,
- 93 please pay a visit to the Theodore Roosevelt Conservation Partnership website,
- 94 at w w w,
- 95 dot T R C P,
- 96 dot org.
- 97 [guitar outro]

The second video analyzed in this chapter, "Sportsmen and Climate Change," presents evidence of climate change's impact on hunting and fishing and contends that sportsmen should take action to confront it (Example 4.2). This stance is considered ideologically non-homologous with the prototypical sportsman person-type (as seen in chapter 3). Not only is climate change action not aligned with conservative political stances espoused by the majority of sportsmen (National Wildlife Federation 2012), it is clear from both the framing of the video and the YouTube comments responding to it that the topic is in conflict indexical field in which the sportsman persona is situated. For instance, despite the video's title, Rinella does not actually say the words *climate* and *change* sequentially until the last sentence. Furthermore, in the first minute of the video, he avoids taking a positive or negative stance on the issue of climate change, saying only, "In this century,

nearly forty percent of the natural ecosystems on Earth will change to become something else. That means that nearly half of the forests, grasslands, and tundra, we sportsmen like to hunt and fish on, will change dramatically in our children's lifetime" (lines 5-6). By employing the value-neutral evaluation *something else*, Rinella avoids aligning himself with those who condemn climate change, and constructs a less ideologically-charged position.

Example 4.2 (Source: https://www.youtube.com/watch?v=QOsu1-ltKAY)

In 2010. 1 2 NASA completed an assessment of the Earth's climate, 3 and they arrived at a startling conclusion. 4 In this century, 5 nearly forty percent of the natural ecosystems on Earth, 6 will change to become something else. 7 That means, 8 that nearly half of the forests, grasslands, and tundra, we sportsmen like to hunt and fish on, will change dramatically within the lifetime of many now here. 10 11 As sportsmen, 12 we must ask ourselves what those changes will look like, 13 and why are they happening. 14 In the west, 15 answers to these questions are as varied as the geography, but we are certainly beginning to see evidence of the changes. 16 17 For example, 18 when you think of Montana's Yellowstone River, the longest free flowing stream the lower forty-eight, 19 20 you imagine cold pristine waters with trout hiding behind colorful rocks, 21 and when the explorer John Colter first laid eyes on the region in 1807, that is what it must have looked like. 22 23 24 However, in just the past twenty years, 25 smallmouth bass have moved up the Yellowstone nearly forty miles, benefiting from waters that are flowing warmer, slower, and lower, 26 27 and replacing trout. 28 Dryer and warmer weather patterns are having much of an effect across the Rockies. 29 In Oregon, we find that fire, 30 a natural force, 31 which is often friendly to nature, 32 has taken on a new meaning, 33 and it's not a good one. As Oregon's sagebrush steppe environment has become warmer, 35 fire frequency has increased.

36 Non-native cheatgrass quickly invades the spaces left by the fire,

- 37 and creates a mat so dense,
- 38 | that native plants used by wildlife cannot come back,
- 39 because the ground becomes so thoroughly covered by dying cheatgrass,
- 40 | it unnaturally burns again,
- 41 | creating a hot and vicious cycle.
- 42 They may not seem too threatening yet when,
- 43 looked at individually,
- 44 but when taken together,
- 45 they represent a clear trend and indicator of the ecosystem changes predicted by NASA.
- 46 What's more,
- 47 | their cause is tied to a changing climate that is impacting weather patterns,
- 48 | temperature averages, water levels, and wildlife movements.
- 49 Sportsmen,
- 50 those of us who are most often out on the land,
- are often some of the first to notice the effects that our changing climate is having on
- 52 | hunting and fishing opportunities.
- 53 The solution to the climate change challenge must include,
- 54 reducing the level of carbon dioxide and nitrogen being emitted into the atmosphere,
- 55 and managing habitat,
- to allow fish and wildlife to adapt to changing climate.
- What we and our policymakers do going forward to address these changes,
- 58 will have far reaching impacts on our ability,
- and the ability of generations to come,
- 60 to continue enjoying our incomparable outdoors and sporting traditions.
- 61 To learn more about how climate change is affecting fish and wildlife habitat,
- 62 and how you as a sportsman,
- 63 can help policy makers and state agencies adapt to those changes,
- 64 please pay a visit to the website of the Theodore Roosevelt Conservation Partnership,
- 65 at at w w w,
- 66 dot T R C P,
- 67 dot org.

The majority of viewers commenting on video "Sportsmen and Climate Change" frame Rinella's stance towards climate change action as not aligned with an authentic sportsman identity. Several commenters note that they "love Rinella's other work, but can no longer watch it," and 40% of the forty-four total comments are negative. In the comment shown in Figure 4.5, for instance, the poster says that Rinella has lost another viewer and fan, even though the commenter used to really respect Rinella and his work. He also explicitly constructs a stance towards climate change action as disaligned with the

sportsman identity, asserting that Rinella needs to "know [his] audience before taking a stand."



Jeff Kirkwold 5 years ago

I guess I wouldn't mind your opinion if you presented it as such. A theory. However, there is more than enough science to suggest otherwise. A debate is healthy, but I have not the time to get wrapped up in your liberal eco-mania mantra. You lost another viewer and fan Steve. Sorry, I really respected you and your work. You need to know your audience before you take a stand on what you believe to be fact.

1 1 REPLY

View 4 replies ∨

Figure 4.5: Comment on the YouTube video "Sportsmen and Climate Change"

Given listeners' expectations of homologous ideological stances within a sociolinguistic style, taking ideologically disaligned stances can often be seen as threatening to the perceived authenticity of the use of the disaligned style. One possible speaker reaction under these circumstances could be to draw on other semiotic resources, such as more extreme variants of the phonetic aspects of the style, to reinforce their performance as "authentic."

This chapter tests this hypothesis by looking at the frontedness of two vowels, BAT and BOOT in Rinella's speech in these two videos. These vowels are particularly useful in this case for a number of reasons. As mentioned above, they have been identified as markers of "country" orientation outside of the southern United States (Hall-Lew 2005; Podesva et al. 2015). They are also socially meaningful specifically for Rinella. In my previous analysis of Rinella's speech in other contexts (Love-Nichols 2016), I found that BAT and BOOT were significantly more fronted in contexts where Rinella's sportsman identity was highlighted—in conducting how-to videos for skinning and gutting game, for instance. Furthermore, BAT and BOOT occur fairly frequently even in a limited amount of speech. Since Rinella has only produced one video in which he talks about climate change, there are not enough instances of other key sociophonetic variants to provide a detailed analysis. Figure 4.6 provides an overview of Rinella's vowel space in the two contexts. Visually, it appears that both BAT and BOOT are produced with a more fronted vowel quality in the

ideologically disaligned context. It also does not appear that this frontedness is overall an effect of hyper-articulation in the disaligned contexts, as not all of Rinella's vowels in that context are produced in a more dispersed fashion, and many other vowel qualities appear fairly close across the two contexts.

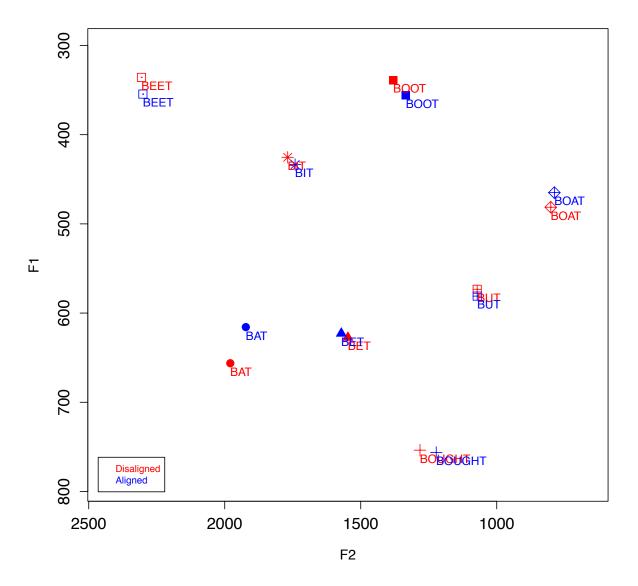


Figure 4.6: Rinella's vowel space by context. (Aligned: North American model of wildlife conservation; Disaligned: Sportsmen and climate change)

Videos were transcribed in Elan (Brugman et al. 2004), then aligned in Praat (Boersma 2011), and extracted with the Forced Alignment and Extraction suite (Rosenfelder et al. 2011). Pre-nasal tokens of TRAP were excluded due to their low numbers and their

tendency to pattern differently (Dinkin 2011), leaving 80 tokens of BAT and 51 tokens of BOOT. No instances of pre-lateral BOOT occurred in the text, but other possibly influential phonetic contexts for BOOT, such as following coronals or glides (Hall-Lew 2011), were included as fixed effects in the model. While relatively few tokens of BAT and BOOT remained after controlling for phonetic environments, no other videos of similar environmental stances exist in which a single, well-known speaker takes comparable stances, so greater numbers of tokens could not be included.

Statistical analysis

The data were analyzed in R (R Core Team 2015). Two linear mixed-effects models were created using the lme4 package (Bates et al. 2015), with the F2 value of BAT and BOOT as the dependent variables. F1 was not analyzed both because there was little change across contexts, and because the F2 value has been identified as the socially meaningful axis in previous studies of country orientation (Hall-Lew 2005; Podesva et al. 2015). Following Zuur et al. (2009, 127), the optimal random-effects structure of the model was first determined using restricted maximum likelihood estimation (REML), with the result that WORD was included as a random effect, as an adjustment to intercepts. Next, the fixed-effects structure was determined starting from a maximal model with all main effects and their pairwise interactions using maximum likelihood estimation (ML), with p-values calculated via the ImerTest package (Kuznetsova et al. 2017).

For the BAT model, the following features were included as fixed effects: the duration of the vowel, its position within the word, its chronological occurrence within the video, its sentence-level prominence, and the video topic (promoting climate change action versus espousing the North American model of wildlife conservation).

Table 4.1: Features included as fixed effects in BAT model

Feature	Description	Levels	
CONTEXT	Context, determined by media type	"Sportsmen and Climate Change" vs. "The North American Model of Wildlife Conservation"	
WORDPOS	Position of phoneme in word, determined as (n th phoneme)/(total number of phonemes)	0-1 (Continuous)	
TIMEPOS	Position in the media, determined as (time of occurrence)/(total time in media)	0-1 (Continuous)	
DUR	Duration of the vowel, measured in seconds	.053 (Continuous)	
PROMINENCE	Sentence level prominence	Yes, No	

In the final model, context was not a significant predictor of the F2 value. Although BAT appears further forward in the disaligned context in Figure 4.6, this difference is not statistically significant, which may be due to the low number of tokens available and the large amount of variation present in Rinella's production of the vowel. The only significant predictor of BAT frontedness was the duration of the vowel, with longer vowels having significantly higher F2 values (Figure 4.7).

Table 4.2: Predictors included in the final model for BAT

Highest-level predictors					
	DF	AIC	LRT	$Pr(\chi^2)$	
DURATION	1	1131.5	12.08	0.0005097	***
R ² m=0.1675517, R ² c=0.5497139					

DUR effect plot

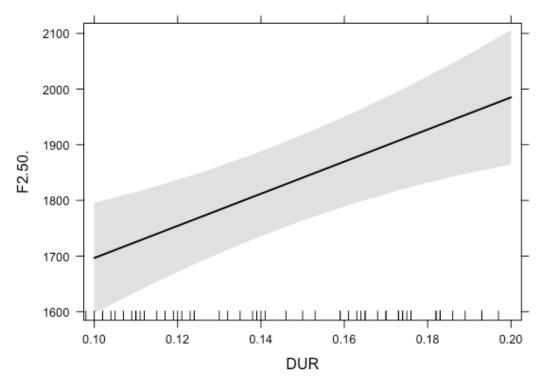


Figure 4.7: Plot of BAT F2 values by vowel duration.

In modeling the F2 of BOOT, the same fixed effects were included, but two more were added for phonetic contexts which have been shown to affect F2 values in BOOT in other work (Hall-Lew 2011): whether the vowel occurred after a coronal consonant, and whether it occurred after a glide.

Table 4.3: Features included as fixed effects in BOOT model

Feature	Description	Levels	
CONTEXT	Context, determined by media type	"Sportsmen and Climate Change" vs. "The North American Model of Wildlife Conservation"	
WORDPOS	Position of phoneme in word, determined as (n th phoneme)/(total number of phonemes)	0-1 (Continuous)	
TIMEPOS	Position in the media, determined as (time of occurrence)/(total time in media)	0-1 (Continuous)	

DUR	Duration of the vowel, measured in seconds	.053 (Continuous)
PROMINENCE	Sentence-level prominence	Yes, No
PRECEDING SOUND	Whether vowel occurs after a coronal consonant, glide, or neither	post-coronal, post- glide, neither

For BOOT, three significant predictors of the F2 value emerged from the model, including the context (Figure 4.8), the chronological occurrence in the video (Figure 4.9), and the interaction of the duration of the vowel with its position within the word (Figure 4.10). In the case of context, BOOT was produced with significantly higher F2 values during the video promoting climate change action. Furthermore, the F2 values were on average higher at the beginning of the videos and declined as the video progressed. They also showed less variance nearer to the end of the video, suggesting that Rinella may have been relaxing into a less performed production of vowels as the recordings finished.

Table 4.4: Predictors included in the final model for BOOT F2 values

Highest-level predictors					
	DF	AIC	LRT	$Pr(\chi^2)$	
CONTEXT	1	721.22	6.3138	0.011980	*
TIMEPOS	1	719.03	4.1238	0.042285	*
DUR:WORDPOS	1	721.73	6.8286	0.008971	**
R ² m=0.3478602, R ² c=0.3667271					

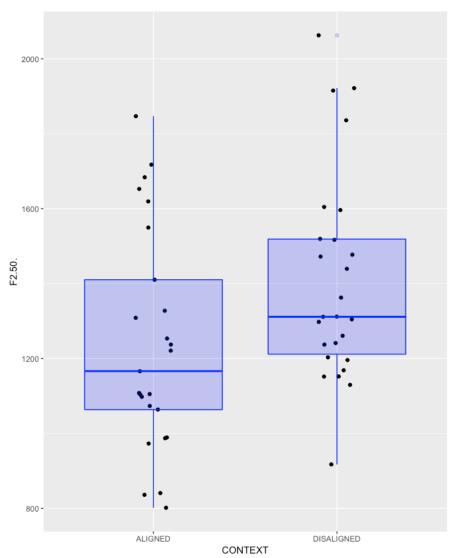


Figure 4.8: Boxplot showing the F2 values, by context, of BOOT at 50% of the vowel's duration

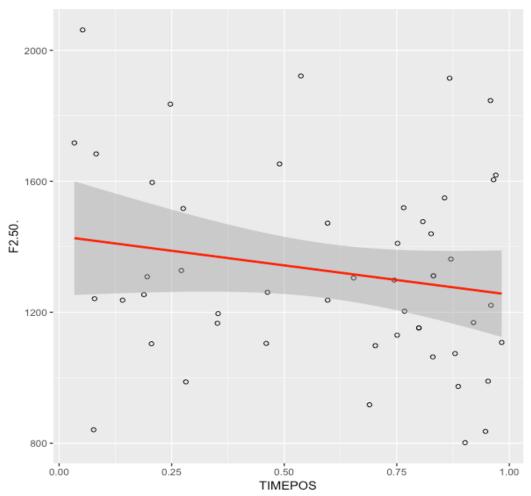


Figure 4.9: F2 values of BOOT by time of occurrence in video

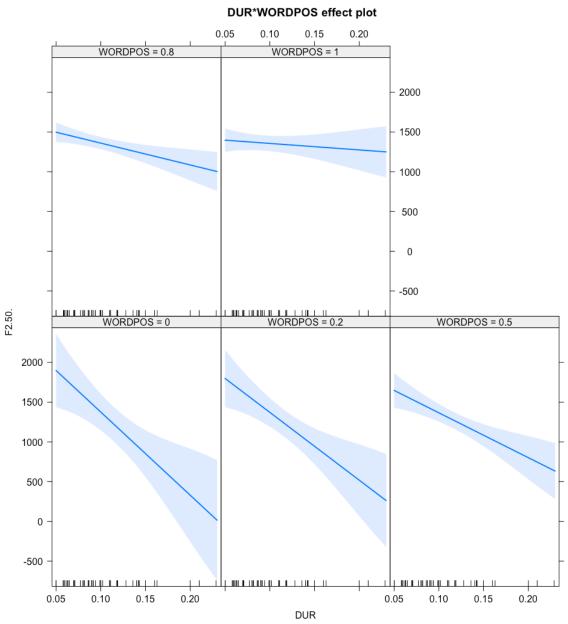


Figure 4.10: F2 values of BOOT by their position in the word and the duration of the vowel

Environmental stance and sociolinguistic style

When predicting the interaction of ideological stances and sociophonetic variation, there are two plausible outcomes. In the first, speakers might use more extreme variants of features associated with their own style when talking about topics and taking stances aligned with their style. A California surfer, for instance, might use a more highly backed BAT

vowel and fronted BOOT vowel when discussing wave conditions versus other sport-related conversations, as their surfer affiliation is made more salient in those contexts. Another not necessarily conflicting—hypothesis, is that speakers might use more extreme variants of their sociolinguistic style when taking disaligned stances, in order to reinforce their authenticity. Rinella's variation in BOOT seems to suggest the latter is happening in this case. While urging action on climate change, he uses a more fronted version of a vowel that, in this context, is associated with southernness or Countryness, to reinforce his authenticity as the source of the environmental message. By intensifying the frontedness of his BOOT production in certain contexts, Rinella claims the authority and membership in the community to take such a stance and use that code. As Jaffe points out, "culturally and historically specific social, institutional, and political formations structure people's access (as individuals and as categories of persons) to particular linguistic stances (especially valued ones such as authority, legitimacy etc.) as well as shape the stances that are attributed to them" (2009, 20). As the ideological fields in which the sportsman sociolinguistic style is situated constrain this mediatized sportsman figure's ability to take a stance towards climate change action—or at least to take such a stance in an unchallenged way—Rinella produces a more stylized form of the style, reinforcing his agency to take such a stance while using that code.

This conclusion is supported by the discursive measures through which Rinella reinforces his authentic claim to the sportsman sociolinguistic style. For instance, he includes himself in the category of sportsmen several times in the 3:30 minute video about climate change, saying, for instance, "we sportsmen," "sportsmen, those of us who are must often out on the land," and "as sportsmen, we must." In contrast, he does not explicitly mention his membership in the sportsman category in the wildlife management video, using first person plural pronouns without including the *sportsman* label. Furthermore, in his discussion of the evidence for, and the consequences of, climate change in the second video,

Rinella uses examples exclusively of wildlife behavior and wildfires, and describes TRCP's motivation for raising funds as helping "wildlife adapt to the changing climate." This frame is in line with both institutional and individual constructions of climate change and its effects within this community (see chapters 3 and 5). While Rinella uses discursive and phonetic strategies to authenticate his identity as a sportsman, his stance towards climate action is still not seen as authentic by all viewers—one commenter suggests that in order for him to "ease [his] conscience about [Rinella] taking up this issue" he has to believe that the only reason Rinella would do this—violate the boundaries of the sportsman ecocultural identity in this way—is that he is under some sort of authentic duress, that "the bill collector has got [him] by the nads," or that he is "just doing it to feed the wife and kid." The commenter works to reinforce Rinella as generally an authentic sportsman by emphasizing Rinella's masculinity, pointing out his masculine anatomy, "nads," and that he is embodying the masculine ideal of feeding "his wife and kid." The commenter also says he takes reassurance from the fact that Rinella does not "look too happy doing this one" and that he "is trying to be indirect when referring to climate change at the start," inferring that these are not the authentic ideological stances Rinella would take if he were not short on money.

For sociocultural linguists, Rinella's use of variation in this context illustrates a less-studied interaction between style and stance—the way that ideological stance can interact with intraspeaker phonetic variation—and provides evidence that these stances, as well as structural features and other semiotic self-representations, should be considered an element of stylistic bricolage. In certain cases, such as among pan-regional socio-political groups, in addition to other semiotic elements, the taking of homologous stances can form an important part of speakers' styles, and deviation from this norm requires adjustment of other elements of a speaker's code. In the case of the video "Sportsmen and Climate Change," the environmental stance that Rinella takes towards climate change action influences the

indexical fields in which the other semiotic resources he uses are both produced and perceived.

Rinella's use of variation furthermore illustrates that speakers orient to their identities when constructing environmental messages. He uses both discursive and phonetic resources to mitigate his stance toward climate change and reinforce his sportsman persona. These discursive strategies are clear to the commenter mentioned above, who notes that "Rinella does not look too happy about this one" and ultimately concludes that Rinella is not taking a stance in which he authentically believes. While speakers' orientation to their own identities while taking environmental stances is likely not surprising to scholars or practitioners of environmental communication, Rinella's use of sociophonetic variation in this context illustrates that scholars should theorize identity as a complex, emergent phenomenon. Furthermore, Rinella's sociophonetic and discursive reinforcement of his sportsman persona in ideologically-disaligned contexts demonstrates the possibility for such identities to be strengthened, foregrounded, and drawn on to greater or lesser extents within environmental stancetaking, and practitioners' anticipation that listeners perceive and/or are influenced by this intensification of their relevant identities.

Sociolinguists have shown that much sociophonetic variation exists at the edge of metalinguistic awareness (Babel 2016). Since sociolinguistic styles are bundles of linguistic variants, individual features are not available for conscious comment in isolation until they become enregistered, but each feature nonetheless varies in socially significant ways even when below the level of conscious awareness (Zimman 2017) and these features, even before enregisterment, can have measurable impacts on listeners' perception of a speaker's attributes (Campbell-Kibler 2007 2011). The realization of these sociophonetic features thus provides not only a new perspective for investigating speakers' affiliations and identities, but a method by which the identity of the source of an environmental message can be varied on a continuum rather than categorically. By observing and manipulating the sociolinguistic

variants present in an environmental message, scholars can have a more detailed lens through which to observe and analyze identity.

Conclusion

This chapter has aimed to examine the relationship between environmental stances and sociolinguistic styles through the analysis of Steven Rinella, a public sportsman personality, across two PSA video contexts—one which promoted climate change action and the other which explained the virtues of the North American model of wildlife management. An acoustic analysis of the speaker's BAT and BOOT productions in these two contexts showed that the speaker used a significantly fronter variant of BOOT, associated with a rural working-class persona, while arguing for climate change action. This chapter has thus argued that ideological stances—such as environmental stances—are integral parts of the semiotic bundles that form styles or identities and therefore interact with phonetic variation and discursive stylistic resources. The analysis also illustrates, for scholars of environmental communication, the need to view identity as complex and emergent, given the interactions between speakers' identities and their production of environmental messages. Finally, this study paves the way for future research investigating the effect of sociophonetic variation on the perception of environmental messages, demonstrating the potential of linguistic methodologies to contribute to studies of environmental ideologies and communication.

Chapter 5: The chronotopic organization of environmental stances Introduction

The previous analytic chapters in this dissertation have examined the co-construction of identity and environmental changes in ethnographic interviews and the interaction of sociolinguistic style and environmental stances. This chapter examines hunters' environmental rhetoric in a different context: mediatized environmental discourses, specifically the chronotopic representation of climate change. Recognizing that any type of environmental change is situated in both space and time, scholars in the environmental social sciences have thoroughly analyzed both temporality and spatiality in environmental texts. The importance of temporality, and especially the temporality of represented futures, has been analyzed extensively through both discourse-analytic and experimental approaches. This research has found that the primary temporal narrative within contemporary environmental writing in the United States is largely apocalyptic, but that this spatial and temporal orientation may not be the most effective for communicating climate risk and inspiring action (Baldwin & Lammers 2016; Killingsworth & Palmer 1996; Moser 2016; Spoel et al. 2008). Analyzing the importance of space and place within environmental texts, scholars have shown the connections between a sense of place, or feelings of connection to a certain location, and the environmental concern an individual experiences (Devine-Wright 2013; Scannell & Gifford 2011; Schweizer, Davis, & Thompson 2013), as well as how distance and proximity can impact the ways in which climate change messages are perceived (Hu & Chen 2016; Johnstone 2015; Spence & Pidgeon 2010).

Less research, however, has examined the relationship between space and time within environmental texts, or how space and time might be connected to social meaning within environmental discourses. This chapter examines environmental discourses through a chronotopic framework, in which representations of time are viewed as also necessarily representations of space, peopled with social types and ways of being. Through this

framework, analyses which approach representations of space-time as inseparable, or as chronotopes (Agha 2007; Bakhtin 1981), can enrich scholarly understandings of the role of spatiality and temporality within environmental texts. While this is not a commonly used framework within the study of environmental rhetoric, several studies illustrate the importance of seeing space and time as unified within environmental representations.

Peeples et al. (2014), for instance, argue that one overlooked form of apocalyptic rhetoric is "industrial apocalyptic," which the authors analyze as a discursive justification of industry efforts to resist environmental regulations.

Furthermore, against the backdrop of a rapidly changing climate and increasing political polarization of perceptions of environmentalism in the U.S. (Dunlap et al. 2016), new types of environmental rhetoric are emerging, even among communities that resist political affiliation with "environmentalists." This chapter identifies a new type of climate discourse among hunters and fishers in the United States. The effect of the indexical affiliation of environmental stances and political affiliation has been shown earlier in this dissertation (see Chapters 3 and 4), and it becomes especially impactful within mediatized institutional discourses. Because the majority of hunters consider themselves politicallyconservative, the association of pro-environmental attitudes with left-wing political affiliation can cause tension for hunting and fishing media figures taking stances for certain types of environmental action. For instance, one hunter conservationist concerned about climate change said in a media interview about his activism, "Say 'global warming,' say 'climate change,' and people are a bit reticent to sign-on. It's got a political agenda in this country, sadly, but here's the irony: You can take the most conservative person, the person who would never admit to climate change, and ask them if the weather has changed in their part of the world. And invariably they'll have stories about how the weather's not the way it used to be" (Sinclair 2013).

Within this context, many hunting- and fishing-oriented institutions and media outlets have begun to report on the risks of climate change for wildlife and habitats in North

America, creating an emerging form of climate rhetoric. The discourse created by this community of practice differs in several ways from mainstream climate rhetoric. In order to address this type of environmental rhetoric, the chapter addresses the following questions: 1) How do the stances taken towards time and space by hunters and anglers create chronotopic representations within their climate change discourse? 2) Which chronotopic representations are prevalent within this type of environmental rhetoric? 3) How do these chronotopes produce an understanding of the nature, risks, and effects of environmental change? 4) How do these texts reflect and reproduce the social meanings of space, time, and figures of personhood within this community?

In this chapter, I first provide an overview of previous literature on temporality in environmental rhetoric and chronotopic theory within linguistic anthropology. I next outline how I created the corpus of climate change communication used in the analysis and describe the prevailing chronotopic stances within these texts. I then illustrate the construction of the contemporary "sportsman" persona through the chronotope of the wilderness-past and show how this chronotope of the idyllic past wilderness is constructed through reminiscences about nostalgic imagined pasts, invocations of past heroic hunters, and the fear of a loss of hunting heritage and traditions. I argue that these chronotopic representations shape the construction of climate change, creating a racialized and gendered representation of spacetime, and influencing the perception of who is vulnerable to the risks of climate change.

Spatiality and temporality in environmental rhetoric

Any type of environmental change is inherently both spatial and temporal, and stances taken towards environmental changes must therefore be necessarily positioned within space and time. For this reason, temporality within environmental communication has received great interest. While some environmental rhetoricians have examined the representation of idyllic futures, or "green utopias" (Garforth 2005), a more common trend that has been identified is the representation of environmental decline or negative possible

futures, such as environmental apocalypticism (Globus 2008; Globus & Taylor 2011; Veldman 2012), a tendency which Foust and O'Shannon Murphy (2009, 164) find "permeates" environmental rhetoric. Killingsworth and Palmer (1996) coin the term "millennial ecology," which they use to describe this widespread feature of mainstream environmental discourse, and they show that, beginning with Rachel Carson's influential book Silent Spring (1962), apocalyptic narratives are "a standard feature of environmentalist polemic" (1996, 21). In one example of this type of rhetoric, Doyle (2007) shows that within the environmental organization Greenpeace's visual communications, the main orientation to temporality is through a type of millennial ecology, portraying an apocalyptic environmental future with a literal ticking time bomb. In more recent environmental work, Johnson (2009) argues that "tempered apocalypticism," such as that shown in the 2006 climate change documentary An Inconvenient Truth featuring former Vice President Al Gore—combining images of future destruction with rational scientific discourse—can provide the audience with a plausible plan of action to avert hopelessness. Due to the common use of environmental apocalypticism by left-wing politicians and organizations, such apocalyptic narratives have now become indexical of environmentalist identities and left-wing political ideology (Garrard 2001; McNeish 2017).

Outside of the study of environmental rhetoric, the role of temporality in environmental communication has been less of a scholarly focus, but there have been some relevant findings that inform this chapter. Within environmental psychology and political science, for instance, scholars have examined the effectiveness of different portrayals of temporality on perceptions of environmental risk and willingness to act on climate change. Most research has found that both spatial and temporal distance between message and audience can negatively affect audience perceptions of risk and intentions to act (Moser 2016; Spence and Pidgeon 2010), and scholars have therefore urged environmental communicators to focus on climate change effects geographically close to their audience and occurring in the present (Moser & Dilling 2011). Within linguistics, Fløttum et al. (2016)

have shown that in Norway an individual's age shapes their imagination—and evaluation—of possible futures. While a large amount of scholarly attention has been paid to future-focused temporality, less attention has been paid to past-focused representations within this genre of research. In one example of research examining past-focused representations, Rich (2016) has analyzed oil companies' use of "industrial nostalgia" (p. 302) in order to resist environmental regulations and tie Rust Belt identities to extractive industries in the past, present, and future. Strangleman (2014) has furthermore examined a similar phenomenon in the U.K., which he calls "smokestack nostalgia," and Halfacre (2016) has found nostalgia to be an important catalyst for conservation in South Carolina. Finally, in an experimental study, psychologists Baldwin and Lammers (2016) found that past-focused environmental communications were more effective in increasing concern about climate change among self-identified conservatives in the U.S.

Little scholarly work in environmental rhetoric, however, has examined space and time as a unified whole, instead seeing each of these as a "semiotic isolate" (Agha 2007, 320) that is analyzable independently. A chronotopic framework, however, as I discuss in greater detail in the next section, holds that a "living artistic [or rhetorical] perception which also of course involves thought, but not abstract thought, makes no such divisions and permits no such segmentation. It seizes on the chronotope in all its wholeness and fullness" (Bakhtin 1981, 243). Furthermore, most research in this genre does not fully consider the socially-meaningful nature of different space-time configurations. Baldwin and Lammers (2016), for example, analyze their finding that past-focused communications are more effective for politically-conservative U.S. Americans through the framework of political ideology, rather than community-based identities. This chapter aims to build on research on past-focused environmental representations by connecting the chronotopic orientations taken by hunters and fishers in environmental texts to social meaning outside of environmental communications, recognizing these temporalities as inherently linked to social structures such as race, class, and gender.

Chronotopes within linguistic anthropology

In the early twentieth century, the Russian literary scholar Mikhail Bakhtin theorized that within literary representations, the conceptualizations of space, time, and figures of personhood are always fundamentally connected. He coined the term *chronotope* to refer to this unit, writing that in literary representations "spatial and temporal indicators are fused into one carefully thought-out, concrete whole" (1981, 84). Typifiable personae, or "voices," in Bakhtin's terms, are also tied to a chronotope within literary genres, taking recognizable shape within the space and time of literary chronotopes. Scholars within linguistic anthropology have broadened Bakhtin's approach, applying the framework to all linguistic representations rather than just those found in literary works. Asif Agha (2007, 331), for instance, says that "encounters with chronotopes are encounters with characterological figures (or 'voices') embedded within spatiotemporalized (if not always determinately 'sociohistorical') locales, whether real or imagined, with which speech participants establish forms of alignment, and thus acquire (or lose) delegated forms of positionality (particular or generic) in the spatiotemporal world they inhabit." Such typifiable voices, Bakhtin points out, often arise from the readers' lived experiences: "out of the actual chronotopes of our world (which serve as the source of representation) emerge the reflected and created chronotopes of the world represented in the work (in the text)" (1981, 253). Agha (2007, 323) expands on this idea, saying that the chronotopes of the represented world serve as "frames of reference for subsequent—often ideologically saturated—forms of life." These characterological figures can become so widely recognizable that they are "grounded in large-scale cultural ideologies and sociopolitical formations" (2007, 324), as is the case for many such figures in the contexts in which chronotopes have been studied, such as in the co-naturalization of race and language in the United States (Rosa 2016) and the mobilization of masculinity and sexuality in South African AIDS education campaigns (Luphondo & Stroud 2012).

In illustrating how chronotopes can function at both macro and micro levels, Agha shows how chronotopes can function in "episodically mass-mediated cycles," informing both everyday interactions and mediated representations (2007, 234). Similarly, Blommaert (2015, 2017) illustrates the potential for chronotopic representations to shape the evaluation and interpretation of parts of everyday social lives, as actors construct and reconstruct these representations jointly with their ideological interests, and Karimzad and Catedral show the potential for "rechronotopization," the interactional reconfiguration that can occur "within social actors' imaginations of these spatiotemporal configurations" (2018, 296). In conjunction, these scholars show how media representations of chronotopes inform individual interactions and vice versa.

While linguistic anthropologists have used a chronotopic framework to broaden understandings of social relationships in many spheres—such as how speakers structure their relationship to language and ethnic or national identities through contrasting chronotopes (Karimzad & Catedral 2017; Koven 2016; Rosa 2016; Woolard 2012) and how conceptions of migration and transnational experiences are constructed through spatiotemporal frameworks (Arnold 2016; Dick 2010; Karimzad 2016)—very few linguistic anthropologists have analyzed environmental texts through a chronotopic lens. One exception is Blanton (2011), who has examined a Black community's use of past-focused chronotopes to resist environmental racism in Oklahoma. This chapter builds on Blanton's work to argue that a chronotopic lens can allow a more complete understanding of environmental texts. As Agha states, chronotopic representations can create "crosschronotope alignments between persons here-and-now and persons altogether elsewhere, transposing selves across discrete zones of cultural space-time through communicative practices that have immediate consequences for how social actors in the public sphere are mobilized to think, feel and act" (2007, 324). In the case of environmental rhetoric, it is often the goal to create cross-chronotopic alignment and empathy between social actors and a removed "zone of cultural spacetime," or some location and time which is experiencing an environmental crisis. This chapter thus examines the mobilization of space, time, and person-types in climate change communications by hunters and fishers, analyzing how the mobilization of a chronotopic person-type shapes environmental discourses and how those texts, in turn, can create a "rechronotopization" of that person-type (Karimzad and Catedral 2018). I argue that this process creates a co-constructed environmental chronotope and person-type: an idyllic wild past which cannot exist without the sportsman, and the characterological figure of the sportsman, which cannot exist without the idyllic wild past.

Hunting and fishing media

Hunting and fishing-related media have long been popular and abundant in the United States and have always played a large role in the construction of the "sportsman" persona. From the outdoor writers of the nineteenth century—who "assembled selectively from mythologies of heroic and self-sufficient frontier hunters, intrepid hunter-naturalists, and conservation-minded 'sportsmen'" (McGuigan 2017, 920)—to contemporary magazines and television shows, popular media have shaped the social imaginary of the North American hunter (Dunlap 1988, 53–54; Loo 2001, 102, 121). The earliest popular hunting and fishing magazine, Field and Stream, has been in circulation since 1895, while other forms of media, including television media, gained more popularity in the late twentieth century. ABC aired *The American Sportsman* from 1965 to 1986, showing famous athletes and entertainers hunting and fishing around the world (McGuigan 2017). The Outdoor Channel—the first television channel devoted primarily to hunting—was started in 1993, with the Sportsman Channel following in 2003. Both channels have a sizable viewership, are available in over 35.8 million and 34.1 million households, respectively, and have seen growth in viewership numbers, especially among men between the ages of 18 and 54 (Nielsen 2015). In addition, reality shows such as *Duck Dynasty* and *Country Buck\$* on A&E Network follow the families behind wildlife sporting empires and cater to a mainstream audience.

More recently, among critiques that traditional hunting shows are unrealistic, or even unethical (McGuigan 2019), newer platforms for hunting and fishing media have gained in popularity. Several interview participants in this study criticized the format of traditional hunting shows, citing the overrepresentation of "kill shots" and "grip and grins," photos in which a hunter poses next to a recently killed animal. Participants also mentioned that traditional hunting shows portray primarily trophy hunting and do not illustrate a true connection with nature, arguing that such shows reinforce negative perceptions of hunting within the "non-hunting public." Many participants prefer newer shows that portray more realistic and, in their perception, more ethical, forms of hunting, such as hunting for sustenance.

Another popular source of media within the hunting and fishing community is the writings and videos of non-governmental organizations. Hunting and fishing-focused NGOs are numerous—the most common type are membership organizations, of which the National Rifle Association is the best-known example—but there are also many species-specific membership organizations, as well as other issue-specific agencies and some nonmembership-based organizations. While species-specific NGOs mostly focus their efforts on habitat retention and improvement, placing easements on undeveloped land and fighting invasive species such as cheatgrass, for instance, they also often create their own publications. The National Rifle Association's magazine, American Hunter, reaches 1.05 million subscribers every month (Public Service Advertising Research Center 2011), and others also produce widely circulated media, such as the Rocky Mountain Elk Foundation's bi-monthly magazine Bugle, Trout Unlimited's quarterly magazine TROUT, and the YouTube videos and blog posts created by the Theodore Roosevelt Conservation Partnership. While many hunters I interviewed mentioned that they get a lot of their media from communal sources such as online forums, those sources are not analyzed in this chapter, which is confined to institutional, publicly-available texts.

Data and methodology

In order to contribute to the growing body of research on chronotopes in climate discourse within various communities, in this chapter I analyze a corpus of internet-based climate-change related media created by hunting and fishing organizations. I include videos, articles, and blog posts on sportsman-oriented media that discuss climate change, with 71 total texts. To be included, the text had to be publicly-available on the internet and produced by a hunting- and/or fishing-oriented organization. In order to create the corpus, I used a Google's site-specific search function using the regular expression "climate change" OR "global warming" within the sites of sportsman-oriented publications and NGOs. The organizations and publications included in the corpus are shown in Appendix C. After I conducted this search in March 2019, I identified 71 such texts, consisting of blogs, articles, and videos. The best represented-source was the *Field and Stream* site, with 34 texts from the blogs "The Conservationist," "Fly Talk," and "Field Notes." The next most frequent source of climate change-related texts was NGOs, with Ducks Unlimited, Trout Unlimited, and the Theodore Roosevelt Conservation Partnership each contributing several texts. The texts, along with their publication sources, are listed in Appendix D.

Once all of the media were assembled into the corpus, they were coded for instances of chronotopic stances as well as the function that these spatiotemporal orientations served. This coding enabled me to identify which chronotopic representations are most prevalent within this community, how the stances taken towards time and space create these chronotopes, the ways in which they shape the understanding of the nature, risks, and effects of environmental change, and how they reflect and reproduce the social meanings of space and time. I address each of these issues in turn in the following analysis.

Analysis

The most common chronotopic stances within the corpus fell into three main categories. The most frequent was a negative stance towards the wilderness present, occurring in 50 of the texts. The next most common stance was a positive evaluation of the wilderness past (34 texts), which frequently included more narrative exposition and development. The last of the common stances was a negative stance towards the wilderness future (21 texts), which largely occurred through data describing declining habitats, wildlife populations, and so on. Two stances that occurred extremely rarely were the positive wilderness present (found in only 8 texts, most commonly describing the projects NGOs were carrying out) and the negative wilderness past (found once in the description of a past drought). Finally, three of the texts took a satirical stance towards the phenomenon of climate change itself. None of the texts discussed urban, oceanic, or non-North American pasts, presents, or futures. Examples of the types of stances that emerged are below.

1. Examples of a negative present stance

- a) "Warming winters and summers have led to an explosion in mountain pine beetle infestations over millions of acres in many Western pine forests, causing a dramatic conversion of forest cover to grass and shrub meadows in elk habitat. This leads to changes in elk populations and distribution during hunting seasons." (TRCP)
- b) "Climate change is altering key habitats that are critical to wildlife survival and putting natural resources in jeopardy. As America's first conservationists, the National Wildlife Federation and sportsmen have been at the forefront of the climate debate to take significant action to protect wildlife." (National Wildlife Federation)
- c) "This past year alone, we saw iconic rivers such as the Yampa in Colorado and Madison in Montana closed to fishing due to high water temperatures. Likewise, we saw droughts in the Midwest dry up duck marshes, and wildfires of uncommon intensity burn more than 9 million acres of game habitat" (Wildlife Management Institute)

2. Positive-past stance

- a) "In fact, if I could fish anywhere in the world it would be Falling Springs in Chambersburg, Pa., in 1972. It was the epitome of true limestone-spring creek matchthe-hatch type of fishing, even better than out West, with awesome rainbow and brown trout that freely rose to incredible hatches. Unfortunately, it is gone now." (Theodore Roosevelt Conservation Partnership)
- b) "Living on sharpies and roosters in the morning, and greenheads in the afternoon, and cold as a son-of-a-bitch the whole damn time. Man those were the days." (Conservation Hawks)
- c) "Growing up in a family where the hunting heritage runs deep is a true gift that instills in children a pronounced respect for the outdoors and an appreciation of what it can provide. It is something that I have firsthand experience with, because I grew up in Minnesota in a family that loves to hunt. The most thrilling thing in the world to me was sitting next to my dad on a wooded hillside in tall, damp grass on a chilly November morning." (The Conservation Fund)

3. Negative-future stance

- a) "A new, peer-reviewed study shows rising stream water temperatures caused by climate change could cut Western habitat for trout in half over the next 70 years, sending populations of cutthroat, rainbows, brookies and browns plummeting" (Trout Unlimited)
- b) "Droughts are forecasted to increase in frequency and severity in many parts of North America. Such droughts exacerbate the impacts of water flow regulation in ways that affect people, fish, and aquatic systems." (Field and Stream)
- c) "Projections for the next 100 years indicate warming in most areas, changing patterns of precipitation, accelerating sea-level rise, declining snowpacks, and increasing frequency and intensity of severe weather. Consequences for waterfowl habitat could include changes in the timing and duration of when wetlands are wet, changes in land use, northward expansion of invasive species, and greater challenges for water management." (Ducks Unlimited)

Negative-past stance

a) "Waterfowl hunters who are middle aged and older will recall the mid to late 1980s, when the PPR [Prairie Pothole Region] experienced an extended drought. Seasons were very short, and in much of the United States the daily bag limit was three ducks. So, what impact might a changing climate have on the most important waterfowl habitats in North America?" (Ducks Unlimited)

Positive-present stance

- a) "Picture the scene: Your pointing dog is quartering the brush at a blistering pace, his nose combing the ground for scent like a vacuum chemically enhanced with human growth hormone. Suddenly, Ol' Gun Dog puts on the brakes, his head, like a statue, cants to the ground, his tail becomes erect. Game on." (Whitetails.com)
- b) "Beyond Season's End" focuses on the variety of projects and efforts already underway to safeguard fish and wildlife from climate impacts. From protecting cold, headwater habitat to removing dams and other in-stream barriers to fish migration to restoring riparian habitat, many already proven habitat protection and restoration activities will be vital for trout and salmon survival in a changing climate." (Trout Unlimited)

Satirical stances

- a) "Forget climate change, if you want to see a real ecological threat look no further than out your front window. Thanks to the pet and garden trade, as well as imported food markets, North America's flora and fauna landscape are changing at an unprecedented and perhaps irreversible rate." (*American Hunter*)
- b) "So the next time you lose your temper, remember: it's not your fault. It's just global warming." (*Field and Stream*)
- c) "Wintersteen had obviously read the story and, you guessed it, was doing his part to change the migration pattern of ducks and geese—adapting, if you will—since all he can ever get to fly over his ugly spread of decoys is a few divers, which in my book are hardly ducks at all." (*American Hunter*)

There was some variation in chronotope use by media type. For instance, media outlets that cater exclusively to anglers, such as Trout Unlimited, used more negative future orientations, while those more focused on hunting drew less on this frame. This may have to do with the fact that fish species, such as trout, face extreme challenges from rising temperatures and drier weather, but may also arise from fishing's wider audience base and participation levels, compared to hunting, and potentially looser ties to conservative political ideologies. A table presenting the texts included in the corpus, along with the organization that produced the media, the chronotopic stances that were present, the purpose of the text, and its intended audience is included as Appendix D.

Within these texts, the juxtaposition of negative stances towards the vanishing wilderness present and positive stances towards the wilderness past constructs and mobilizes a chronotope of an idealized wilderness past within climate change media. Often the past drawn on in these texts occurred within the author's childhood or young adulthood, but in some cases, it is an earlier past alluded to through references to early European explorers of the West and historical figures such as Theodore Roosevelt, and these representations of an idyllic past wilderness are often accompanied by a sense of loss. This chronotope is created and mobilized in three primary ways within the corpus: through a nostalgic description of a wild place that used to be better in many ways, especially for hunters; through invocations of well-known and heroically-presented past hunting figures, especially Theodore Roosevelt; and finally, through a contrast with a negatively-evaluated future, in which there may not be a way for hunters to perform their identity, entailing a loss of "heritage" and "traditions." Notably, the idyllic wilderness past chronotope is also often drawn upon in the construction of the sportsman characterological figure outside of climate change communication, as discussed in the next section.

The chronotopic organization of the sportsman person-type

Within a chronotopic framework, as we have seen, person-types are fundamentally located within representations of space and time. Within both media representations and interpersonal interactions, the sportsman persona is prototypically situated within the wilderness-past. This section describes the construction of the sportsman persona—and its connected chronotope—outside of climate change communications, in order to illustrate how climate rhetoric draws on the positioning created and reinforced in other, more well-established, genres and interactions. The construction of the prototypical sportsman within the past wilderness chronotope takes place in a number of ways. One way is through the common discourse of hunting as a "dying lifestyle." In Hunter Education courses,

instructors teach about the declining number of hunters and the ways that individual hunters can act to project a good image for the sport and support their "R3" efforts, as described in Chapter 2. A common response to the interview question "What do you think is the greatest threat to hunting?" was often an expression of concern that with declining numbers of hunters and negative perceptions of the practice among non-hunters, hunting would either fade away gradually or be regulated out of existence. Conservation-oriented NGOs, also reproduce this discourse, warning of dire decreases in the number of hunters and fishers, and the lower funding for public lands and outdoor organizations that this decline would entail. This discourse can also function to situate hunters as the last remnants of a premodern lifestyle, one with a true "connection to nature." It holds that hunting is the only way in which to have an authentic connection to the land, and thus, in some ways, to truly embody an authentic human experience untainted by modernity. Aldo Leopold also drew on this discourse in his classic environmental text, Sand County Almanac, writing, "Public wilderness areas are, first of all, a means of perpetuating, in sport form, the more virile and primitive skills in pioneering travel and subsistence" (1949, 192). He goes on to say, "I suppose some will wish to debate whether it is important to keep these primitive arts alive. I shall not debate it. You either know it in your bones, or you are very, very old" (1949, 193). According to the environmental historian James Turner, "Leopold envisioned wilderness as a refuge from modernity, where a working-knowledge of nature would reconnect people and the land" (2002, 462). Contemporary hunters celebrate Leopold's vision—he is still a wellknown figure among the community—and the conservation-oriented NGO formed in his memory, the Aldo Leopold Foundation, still has an active presence. One participant, Julian, pulled out his phone during our interview and read me a Leopold quote that he particularly liked and had saved as an image to be able to return to in the future. Contemporary hunters, following Leopold's view, portray hunting as the only true way to maintain this connection

(see Chapter 3), and worry that this connection is being increasingly lost. In one mediatized interview, for instance, the director of the NGO Conservation Hawks said, "It used to be that so many more people were outdoors, now it's just us" (Herring 2012).

Contemporary sportsmen position themselves within the wilderness-past by frequently invoking past figures, such as Theodore Roosevelt and Aldo Leopold, as examples of ideal hunters and conservationists. Many NGOs are named after famous past hunters and anglers, such as the Aldo Leopold Foundation, the Theodore Roosevelt Conservation Partnership, the Izaak Walton Foundation, and the [Daniel] Boone and [Davy] Crockett Club. Even organizations not named after historical figures frequently invoke them in conservation discourses. In Figure 5.1, for example, the organization Backcountry Hunters and Anglers appeals to the imagined ethics of a past "defender of our lands and waters, fish and wildlife," Theodore Roosevelt, in an Instagram post calling on its members to support the passage of a bill that included funding for public lands maintenance and projects. By asking "WWTRD" ("What Would Theodore Roosevelt Do?," an intertextual allusion to the Christian slogan "What Would Jesus Do?"), the organization constructs a direct parallel between Theodore Roosevelt and contemporary hunters, who, "in the spirit of TR," are defenders against an encroaching modernity.



Figure 5.1: An Instagram post by the NGO Backcountry Hunters and Anglers urging members to call their representatives to support a public lands bill.

Common visual representations also reproduce the chronotope, as in the picture included with the Instagram post in Figure 5.1, in which the text "WWTRD" in in an old-fashioned typewriter font, as though it is from the same era as the picture of Theodore Roosevelt. Similarly, the banner for the Sportsman TV Channel website also reinforces the connection between the sportsman persona and the wilderness-past. In it, two sportsmen figures are shown, one presumably the son of the other, both standing next to a truck that appears to be from the 1960s or 1970s era, with a faded paint job and weathered appearance. The picture is slightly faded, giving it a worn look, and suggesting that, while the figures shown are contemporary hunters, probably viewers of the Sportsman Channel, they are still prototypically situated within the wilderness-past.



Figure 5.2: The header for the Sportsman Channel website in 2014

Finally, in interpersonal interactions with me, sportsmen drew on and reproduced their position within the chronotope of the wilderness-past in discussions of possessions and activities, such as antique firearms or contemporary replicas of such. Many participants in this study also spoke of attending events like the Pacific Primitive Rendezvous, which is described on the website as "an historic reenactment of a rendezvous of the fur trade era. We try for authenticity in all aspects of the event. ... We have a great staff ready to host a fun-filled and challenging event as we step back in time" (Source: http://www.pacificprimitiverendezvous.com/2019/2019PacificPrimitive.html).

The idyllic past in climate change communications

In my corpus of climate change communication texts, the construction of the idyllic wilderness-past chronotope was most commonly accomplished through the nostalgic description of bygone wild places, often in stories about past hunting or fishing experiences (as in Example 5.1), but also in nostalgic descriptions of landmarks or regions (as in Example 5.2). One of the earliest widely-known environmental texts of this type is Leopold's *Sand County Almanac*, and environmental texts about all topics written by hunters often follow a similar model, sometimes even invoking Leopold's name. By

recounting past hunts or describing positively-imagined places, the climate change-related texts in this corpus fit into a well-established genre of environmental and outdoor writing popular among hunters and anglers, in which authors lament the current state of disappearing wild places, often railing against modernity and its effect on contemporary people, and share their personal efforts to maintain a connection with a more historic, authentic way of existing with the world. This creates a contrast with climate change rhetoric outside the hunting community, however, which has largely not embraced this tradition, generally placing more of a focus on negative possible futures (Killingsworth & Palmer 2012).

Example 5.1, the text of a video created by the organization Conservation Hawks in 2013, illustrates the mobilization of the wilderness-past chronotope within hunter-oriented climate change messages. The video begins with three older white men with "Country" accents wearing hunting camouflage and sitting on tree stumps around a campfire. They reminisce for about two minutes about the good times they have had while hunting, before the conversation shifts to lamenting that they can no longer have such experiences, due to the effects of climate change. The negative effects they cite—fires, beetle killed forests, and droughts—suggest that the video takes place in the Mountain West of the United States. As they bemoan their situation, a female voice is heard in the background asking one of the men to enter the house to fix the air conditioner. The viewer realizes that the campfire is in fact not out in the wilderness but rather in a domestic backyard. As the man walks to the house to fix the air conditioner, the woman adds that the dog has knocked over the Christmas tree, and Christmas music begins to play, indicating to viewers that it is hot enough to require air conditioning at night in December. As the man mutters, "Unbelievable," the text reads, "Unbelievable? No, it's climate change. Defend your future."

Example 5.1 (Source: https://www.youtube.com/watch?v=BXrf7v6c6Dw&t=5s)

	1	
		[owl hooting, laughter]
1	Man 1:	And so Jake thought he was bugling in two huge bulls,
2		but the second bull was some guy from @Grey @Falls.
3	Man 2:	Good thing that dude didn't have antlers.
4		@@
5	Man 3:	Wish I had a bull like that on my wall.
6	Man 2:	Remember when we chased that monster white tail up Bear Creek?.
7	Man 1:	The one you shot the last day of the season?.
8	Man 2:	@Yeah @that's @the @one.
9		Man we froze our asses off getting him out of that blizzard.
10	Man 3:	Yeah it still wasn't as cold as the time we jumped those ducks near
11		Lewistown.
12	Man 2:	Living on sharpies and roosters in the morning,
13		and greenheads in the afternoon,
14	Man 1:	And cold as a son-of-a-bitch the whole damn time.
15		(Pause)
16		Man those were the days.
17		(Pause)
18	Man 2:	Before the droughts moved in.
19	Man 3:	Yeah and before the beetles ate the forest.
20		and everything burned.
21	Man 2:	All these crazy damn storms.
22	Man 1:	When we still had some place to hunt.
23	Woman:	Honey,
24		the air conditioner's out again.
25	Man 1:	Unbelievable.
26	Woman:	And the dog knocked over the Christmas tree.
27		[Text reads: "Unbelievable? No, it's climate change. Defend your
		future."]
		[Christmas music begins to play]
	1	

This excerpt draws heavily on a positively-evaluated remembered rural past. In line 7, for instance, Man 2 reminisces, "Remember when we chased that monster whitetail up Bear Creek?" and in line 10, Man 1 says, "Man, those were the days." During the first portion of the video, when these three men are recalling past hunting experiences, the conversation is punctuated with laughter and smiles. In line 18, however, Man 2 changes the tone of the conversation, saying, "Before the droughts moved in." The next several lines (19-22)

involve the men taking turns sadly describing a negatively evaluated present in which "the beetles ate the forest" and "everything burned," there are numerous "crazy damn storms," and they no longer have anywhere to hunt. The video takes place in a chronotope in which the hunters do not fit. The video implies that heir natural context is the past they describe, one in which they were able to fully embody their identity, and which has been taken from them by the ravages of a changing climate. By humorously portraying these nostalgic men as domesticated, not truly roughing it, the video also gently mocks other men who are too masculine to concern themselves with a changing climate, but who will presumably end in the same situation.

The next examples (shown in Figure 5.3) also illustrates the invocation of the idyllic wilderness-past in climate change rhetoric. The example, quoted in full in Example 4.2, is the text of a second version of the climate-change oriented public service announcement created by the Theodore Roosevelt Conservation Partnership. The video begins with a view of the moon from space. Sounds of ducks quacking can be heard, and then a recording of Neil Armstrong saying, "One small step for man, one giant leap for mankind." Then, in a voice reminiscent Walter Cronkite-style news anchors, the narrator begins the announcement. In another version of this video, also produced by the TRCP, the same message is delivered by sportsman media personality Steven Rinella, who speaks directly to the camera wearing Carhartt clothing before a natural background (this video is analyzed in Chapter 4). In that version, the video intersperses images of him speaking with images of wilderness spaces. The texts of the two videos are almost identical, and the majority of the imagery for both videos are shots of undeveloped spaces.

Figure 5.3: (Source: https://www.youtube.com/watch?v=gYx_ncjJV0U)



The script of this video highlights the beauty of the positively-evaluated rural past, saying, "When you think of Montana's Yellowstone River, the longest free-flowing stream in the lower forty-eight, you imagine cool, pristine waters with trout hiding behind colorful rocks. And when the explorer, John Colter first laid eyes on the region, in 1807, that is what it must have looked like" (Example 4.2, lines 16-20). The PSA then contrasts this positively-evaluated rural past with the negatively-evaluated present, saying, "dryer and warmer weather patterns are having much of an effect across the Rockies. In Oregon, we find that fire, a natural force which is often friendly to nature, has taken on a new meaning, and it's not a good one" (Example 4.2, lines 25-26). The PSA states, "As sportsmen, we must ask ourselves what those changes will look like" (Example 4.2, lines 11-12), and then goes on to answer this question, offering examples which negatively compare the current wilderness situation with those of the idyllic past.

Heroic past hunters

The wilderness-past chronotope also emerged frequently in the corpus through the invocation of historical hunting figures such as Theodore Roosevelt. Example 5.3, for instance, illustrates this phenomenon in a section of the "Beyond Season's End" report prepared by a group of hunting and fishing NGOs. In this section, the text explicitly compares the challenges faced by contemporary hunters in fighting climate change with the challenges faced by the sportsmen of the "late 1800s" and "the early 20th century," and suggests that contemporary hunters can learn from those of the past, saying, "History clarifies the task ahead."

Example 5.3 (Source: https://www.cakex.org/sites/default/files/Beyond Seasons End.pdf)

History Clarifies the Task Ahead

Beginning in the late 1800s and continuing throughout the early 20th century, the sportsmen of America recognized how dire the threat of unrestricted commercial hunting and fishing was to the country's natural resources. They took steps to regulate those activities, creating the North American model of professional fish and wildlife management, establishing the public lands estate and encouraging investing in conservation.

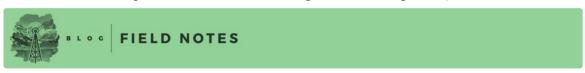
Today, fundamental alterations to the Earth's climate pose another profound threat to the country's fish and wildlife. Again sportsmen are called upon to act to ensure that fish, wildlife and their

habitats endure in the decades to come. This is the challenge of our generation.

This example also explicitly connects modern sportsmen to those figures of the idyllic wilderness past, saying, "Again sportsmen are called upon to act to ensure that fish, wildlife and their habitats endure in the decades to come."

Example 5.4 illustrates another instance of the invocation of heroic past hunters. In this post, a blogger asks his audience what Theodore Roosevelt would have thought about climate change. The example comes from the Field Notes blog—a subsection of the website of the magazine Field and Stream—and covers diverse topics, only some of which are related to conservation. The typical post is quite short. The following post, for example, consists of an excerpt from an interview with the historian Douglas Brinkley which was printed in a different news source (linked), with the addition of a question at the end asking for engagement from the readers.

Example 5.4: (Source: https://www.fieldandstream.com/blogs/hunting/2010/02/discussiontopic-where-would-tr-stand-global-warming-anwr)



Discussion Topic: Where Would TR Stand On Global Warming, ANWR?

BY DAVE HURTEAU FEBRUARY 12, 2010









From The Valdosta Daily Times:

_[A]sked how he thought Theodore Roosevelt would have responded to the climate-change debate, [historian Douglas] Brinkley says he believes the 26th President would have been on the side of science.

"He would have been on top of the latest science," Brinkley said in a recent phone interview with The Valdosta Daily Times_. "He was always up with that crowd._ _He'd be looking at the reports today. He would have championed the 'let it be' philosophy in Alaska. With ANWR (Arctic National Wildlife Refuge), he would have likely said, leave it all alone."

Brinkley makes this estimation based on his extensive research into the green side of Theodore Roosevelt. Brinkley is the author of the 2009 national bestseller "The Wilderness Warrior: Theodore Roosevelt and the Crusade for America."

I know we have some TR buffs out there. Your reaction?

Tags: Hunting, Fishing

In this post the author invokes the chronotope of the rural past by wondering what Theodore Roosevelt—a figure often invoked as an example of the person-type associated with the wilderness-past—would have thought of the "climate-change debate." No mention is made of the future in this post, and the present is only brought up as a stance object to be evaluated by the imagined Theodore Roosevelt. The nostalgic reminiscences of Examples 5.1 and 5.2 and the invocations of past heroic hunters in Examples 5.3 and 5.4 are two of the most prevalent strategies for the mobilization of the past wilderness chronotope. The next section describes the third, and final, way in which this chronotope emerges—concern for the future of hunting legacies and traditions.

The precarious future of the hunting heritage

The final way in which the wilderness-past chronotope commonly arises in the corpus is slightly different: in this rhetorical trope, the wilderness-past arises in contrast with negative possible futures instead with negative presents, and specifically with what may lie ahead for hunting and the hunting lifestyle. In Example 5.5, for instance, a blogger for the organization Ducks Unlimited—a conservation-oriented organization that works to preserve wetland habitat for ducks—wonders what the next decades might entail for duck hunting. Ducks Unlimited has supported both mitigation and adaptation approaches to climate change impacts on waterfowl—they have bought land at higher elevations, for instance, to replace wetlands that might be lost through sea level rise. In the following post, however, author Scott Yaich advocates action for climate mitigation.

Ducks 2050

What might the coming decades hold for waterfowl and duck hunters?



By Scott Yaich, Ph.D.

The prospects are sobering, but if we act now, we can change the future.

The average age of a Ducks Unlimited member is about 50, so not too many of our "average" readers will be around in the year 2050. And while those of us lucky enough to be on the "right side of the grass" 43 years from now may not be hunting as often, we will undoubtedly enjoy hearing about the many hunting adventures of our children and grandchildren.

But many of us can easily remember back 43 years to 1964 and realize that a lot has changed since then. Most notably for waterfowl hunters, there were about 12 million more acres of wetlands in the United States than there are now. Now, think about your duck-hunting family and friends for a second, and I'll bet you can quickly think of a few youngsters who are about seven years old. They could be "average" DU members when 2050 arrives. What changes might take place in the next 43 years to affect their future duck hunting? Will there still be enough habitat to fill the skies with ducks and provide places to hunt?

This example, although explicitly framed around possible futures, organizes these futures through the chronotope of the rural past, first asking readers to think back 43 years ago and

pointing out that in 1964 (43 years before the post was written) there were "12 million more acres of wetlands in the United States than there are now." The text then turns to the future—going on to show statistics about the effects of climate change on wetlands near the Gulf of Mexico, and finally concludes with a call to action, specifically a call for hunters to act on the things "most important to waterfowl" in order to preserve the future of duck hunting, while wondering if there will "still be enough habitat to fill the skies with ducks and provide places to hunt?"

Example 5.5 illustrates the nostalgic lens through which even warnings about the future are framed within the hunting community. Other texts similarly emphasize the threat to "our hunting heritage and traditions" to mobilize the past-wilderness chronotope. A video created by Conservation Hawks called "Cold Waters," for instance, describes climate change as "the single greatest threat to our hunting heritage," a phrase that the NGO's director, Todd Tanner, has also used in guest blog posts on *Field and Stream*'s blog *The Conservationist*, among other places. Likewise, the title of a report produced by the National Wildlife Federation (Example 5.6) also highlights the fear of losing wildlife populations, and the accompanying threat to hunting and the sportsman person-type, warning that "Warming Winters Put America's Hunting and Fishing Heritage at Risk."

Example 5.6 (Source: https://www.nrcm.org/documents/NWF_OnThinIce.pdf)

ON THINICE Warming Winters Put America's Hunting and Fishing Heritage at Risk NATIONAL WILDLIFE FEDERATION

Later in the same document, the excerpt in Example 5.7 states that the personal experiences of hunters and fishers "confirm" the negative changes that fish and wildlife are experiencing. It then argues that these negative changes will in turn threaten the "traditions," and by extension the identity, of hunters and fishers—those whose persona is "rooted in wild places and wildlife." This is a common concern within hunting and fishing media, as the sportsman is often constructed as anachronistic in a modern, urbanizing world, the last vestige of a more authentic past with a connection to the land. In line with this representation, the phrase in Example 5.7, "American traditions rooted in wild places and wildlife," is commonly-used with exactly this wording in hunting and fishing media, both conservation-oriented and not, paired with calls for sportsmen to do any number of things—from mentoring new hunters to joining an NGO—to preserve their "traditions," "heritage," or "way of life."

Example 5.7 (Source: https://www.nrcm.org/documents/NWF OnThinIce.pdf)

Sporting experiences in fields and streams confirm that change is underway. Hunters, anglers and other outdoor enthusiasts are keenly aware that the country's treasured fish and wildlife are under pressure and that climate change threatens American traditions rooted in wild places and wildlife.

Overall, the climate change media produced by hunting and fishing organizations is characterized by its prevalent use of the past-wilderness chronotope, primarily constructed through nostalgic reminiscences about past hunting experiences and wild places, invocations of heroic past hunter, and concern for the future of the hunting legacy. In the next section, I consider the indexical work of the mobilization of this chronotope and its function in reinforcing the social meanings of space, time, and personhood.

Reproduction of social meanings of space, time, and personhood

By drawing on the idyllic rural-past chronotope, the climate change rhetoric of the hunting and fishing community reproduces racialized and gendered social meanings of space, time, and personhood. This construction occurs primarily in relation to two related anxieties: the ongoing crises of masculinity and a concern about the fading "real" America. As the historian Karen Jones (2015) writes, the original hunter-naturalist identity arose, in many ways, to counter the crises of masculinity of the late nineteenth century, which were largely brought about by greater urbanization. As discussed in Chapter 2, hunting offered middle-class men of the early 20th century a form of masculinity that a rapidly urbanizing and industrializing society did not offer. In many ways, the contemporary mobilization of the wilderness-past echoes this crisis of masculinity, suggesting that one of the most serious consequences of climate change is in preventing the hunting and fishing opportunities that allow men to fully realize their masculinity. In Example 5.1 above, for instance, the Conservation Hawks public service announcement, the hunter in the non-wilderness present is unable to access the type of masculinity afforded by hunting. Instead, he is reduced to sitting around a campfire in his own backyard, completing the tasks requested by his wife and reminiscing about better times. While he continues to bond with his friends, he no longer has access to the wilderness and the type of experiences that Aldo Leopold referred to as the most "virile and primitive" (1949). Near the end of the video the hunter is summoned by his wife to attend to a list of domestic chores. The wife is never shown on screen, but is portrayed with a "shrill" voice quality. The husband sighs and complains, "Unbelievable," but goes inside to fix the air conditioner and the knocked-over Christmas tree. In locating authentic masculinity in the wilderness-past, the PSA constructs modernity

as a place-time in which such rural, white masculinity is inaccessible, and thus, the sportsman persona is no longer able to be embodied.

The mobilization of the wilderness-past also constructs a racialized chronotope of the sportsman as an inhabitant of the fading "real" American heartland—a rural past that is peopled largely by white frontiersmen. This chronotope draws on and reproduces an imagined history in which North America "had previously been *terra nullius*, a land without people" (Dunbar-Ortiz 2014, 2), erasing the Indigenous peoples as well as the methods through which land was acquired for "conservation." This is evident in Example 5.2, the video by the Theodore Roosevelt Conservation Partnership, when comparing the present state of Montana rivers to what they must have been like "when explorer John Colter first laid eyes on the region in 1807," implies a state of virgin wilderness unpopulated when Western explorers arrived.

In addition to erasing the past and present of Native peoples in North America, the chronotope of the wilderness-past populated by white frontiersmen reinforces the idea of an American Golden Age in which the majority of the population was white and had a "connection to the land." Similar chronotopes have been mobilized extensively in the service of right-wing political ideology, especially rising to prominence in Donald Trump's 2016 presidential campaign, in which he constructed an explicit orientation to the smalltown and industrial past as part of his negative evaluation of the political present through his slogan "Make America Great Again." The rural-past chronotope, when mobilized by rightwing political groups, often coincides with chronotopes employed by colorblind discourses (Bonilla-Silva 2017), which often use racist, classist, and spatially-coded words such as *inner city, urban* (Hurwitz and Peffley 2005), or terms with anti-Semitic connotations, like *cosmopolitan* or *globalist*. These chronotopes are recognized by supporters and critics alike as racialized. Donald Trump's campaign slogan was even adopted and adapted at a more explicit level by a white supremacist politician with the slogan "Make America White Again" (Beaver 2016), and the racialized nature of the chronotope is frequently mobilized

against the interests of people of color in political discussions of immigration, welfare, and linguistic policy.

The use of the wilderness-past in sportsman-oriented climate communications thus functions, in some ways, to obscure associations between climate change action and left-wing political groups and ideology, which are viewed negatively by the majority of the hunting and fishing community. Against a history of right-wing anti-environmental discourses painting future-focused environmental communication as "environmental hysteria," used by industry actors to derail environmental activist efforts (Killingsworth and Palmer 1995), situating climate rhetoric within a new chronotope—the idyllic rural past peopled by intrepid masculine white settlers—avoids troubling connections with environmentalism and its associated field of indexicality. In fact, some preliminary experimental research has shown past-focused climate communications to be more effective among politically-conservative people in the U.S. (Lammers and Baldwin 2018).

Constructions of climate change

While discussing the risks of climate change through the lens of the idyllic wilderness-past situates it in line with other conservation writing, such as Leopold's *The Sand County Almanac*, and aligns with the chronotopic organization of the sportsman persona, it also creates a very different construction of climate change—its risks, vulnerable subjects, and possible responses—than mainstream climate rhetoric. It centers the risks and consequences for those who populate the wilderness-past chronotope—hunters, wildlife, and occasionally the outdoor industry, while backgrounding those absent or erased from this imagined rural past. Thus, while climate change is already having grave effects in the rural West on agriculture, forests, municipal water supplies, communities vulnerable to wildfire, and so on (Bentz et al. 2010), these present-day and intensifying impacts are rarely portrayed in the climate change media created by and for hunters. Furthermore, this representation

backgrounds the disproportionate effects of climate change felt by poor and vulnerable communities within and outside of the United States, and its use does not coincide, in any text in this corpus, with a consideration of environmental justice for marginalized people and areas. As one hunter climate activist claimed, "As hunters, we have the most to lose, and we should be the ones opposing it loudest" (Herring 2012). This statement is notable for the actors it erases who have more to lose, including farmers who are already losing their livelihoods, especially in warmer, drier areas, or those in coastal communities, whose homes will be underwater or otherwise unlivable. It also furthers the narrative that climate change will affect primarily the non-human world, and only those who care about that world can or should care about climate change. For sportsmen, who perceive themselves as the only members of modernity with a true connection to the land, that perception is both drawn on and reproduced through this type of climate change rhetoric.

Another effect of focusing on a negative present in contrast to an idyllic past is that these texts background the potentially worse effects of climate change that will occur in the future unless carbon emissions are decreased. A changing climate is portrayed as a serious problem, especially for wildlife, but not a life-threatening one, at least for people. In opposition to the predominant apocalyptic framing in mainstream climate change discourse (Foust 2012), the idyllic wilderness-past framing erases these issues, presenting the main consequences of environmental degradation as danger to wildlife and changes to hunting and fishing lifestyles. One exception to this portrayal exists, to some extent, in the texts primarily directed at anglers, such as those produced by Trout Unlimited, which illustrate a more worrisome view of the future, given that trout are projected to lose a majority of their habitat and population with warmer, drier weather, and mitigation strategies such as creating habitat above a rising sea level are less feasible for this species.

Lastly, this type of chronotopic framing also backgrounds the causes of the current climate crisis. Although some of the texts mention the necessity of decreasing carbon emissions, none discuss particular actors that produce significant levels of emissions or suggest that extreme emitters take more responsibility in solving the climate crisis. While the discussion of climate change within mainstream media increased with the release of the International Panel on Climate Change report in the fall of 2018, it does not seem to have led to more media within the hunting and fishing community. Rather, the climate change texts in my corpus appear to be fairly evenly distributed, with the earliest appearing in the early 2000s and continuing to the present.

Conclusion

In this chapter, I have analyzed the climate change media produced by hunting and fishingfocused institutions. I have argued that within the 71 texts identified as primarily about
climate change and produced by hunting and fishing media and institutions, the primary
stances toward space-time were a positive stance to past "wild places" and a negative stance
towards the disappearing present wilderness. By juxtaposing these stances, these media
construct a chronotope of the idyllic wilderness-past, situating the sportsman persona as
prototypically at home in that space-time, and anachronistic in the contemporary modern
and urbanizing world. Within the corpus of climate change media, the chronotope of the
wild places of the past is constructed by reminiscing about nostalgic real and imagined
pasts, invocations of past heroic hunters, and the fear of a loss of heritage. This is an
emerging and understudied use of temporality and spatiality within climate change rhetoric,
which has largely been a genre typified by its focus on imagined apocalyptic futures
(Killingsworth and Palmer 2012). I have argued that these chronotopic representations
create a racialized and gendered representation of space-time—reinforcing, on the one hand,
perceptions of an ongoing crisis of masculinity, in which members of modernity no longer

have access to traditional masculinity through a relationship with nature, and on the other hand, the fear of a fading "real" American heartland populated by a largely homogenous white population with a connection to the land. I furthermore argue that a nostalgic wilderness frame within climate change communication shapes the perception of that crisis, constraining the perception of who is vulnerable to the risks of climate change largely to those that people the past wilderness chronotope, erasing the causes of the crisis and influencing the possible solutions.

This chapter thus shows the value of a chronotopic analysis for analyzing rhetoric situated within communities of practices, showing how the chronotopic positioning of identities shapes the environmental discourses within communities, and furthermore how environmental discourses can reproduce and reshape personae through chronotopes, especially during times of environmental change. This chapter also illustrates—within mediatized environmental discourses—the importance of a unified linguistic and environmental anthropological lens for analyzing the interaction of identity and environmental constructions, stances, and rhetoric.

Chapter 6: Conclusion

In this dissertation, I have paid close attention to the interaction of language use, identity, and environmental ideologies and practices, specifically within hunters and fishers in the western United States. In the three analytic chapters of the heart of the dissertation, I drew on anthropological and sociocultural linguistic methodologies to perform a mixed-methods analysis of the discourses of conservation within this community of practice whose members' identities are centrally connected to environmental issues yet who remain understudied in all social science research on environmental communication. My analysis focused on the mobilization of linguistic resources by community members when discussing environmental issues. It also explored how local identities are made relevant when discussing environmental changes and problems. The dissertation drew on ethnographic interviews and participant observation, an intraspeaker sociophonetic analysis, and a discourse analysis of media texts to illustrate the complex ties between language and environmental ideologies and practices within hunters and fishers in the western United States.

Chapter 1 described how sportsmen and women's deep ties to conservative political ideology and wildlife conservation have made this community of practice a rich site for the analysis of language, identity, and environmental stances. I illustrated how hunting culture, firearms, conservative political ideologies, and discourses of conservation are strongly associated for this community in a way that is often hard to describe in academic research on identity and environmental ideologies. This chapter then provided an overview of previous research analyzing language and the environment in three main areas: literature that focuses on the interaction of linguistic forms and environmental ideologies and practices; literature that uses language as a lens to analyze discourses surrounding the

environment; and literature which implicitly examines language without explicitly analyzing its role. I highlighted the way that a greater focus on local identities can deepen work in environmental communication and psychology and how greater theorization of environmental interactions can contribute to linguistic analyses.

Chapter 2 explored the historical contexts which have contributed to the creation of the contemporary sportsman person-type. It also described the present-day social structures which shape the practices and ideologies surrounding conservation within this community. In particular, it demonstrated how an affiliation with wildlife conservation and interactions with the more-than-human world have been integral elements of the hunter/fisher person-type since its beginning. They have also situated the sportsman identity with respect to other socially meaningful structures, such as gender, class, and race. This chapter argued that, for hunters and fishers in the present-day United States, analyses of more-than-human intersubjectivity are fundamental to an understanding of the sociolinguistic style and its social meaning.

Chapter 3 analyzed ethnographic interviews with hunters to illustrate how contemporary sportsmen discursively construct a changing climate and its effects, and in turn, how they position themselves through this discursive construction. I argued that community members' discursive constructions of climate change are interpreted through the lens of wildlife behavior and are therefore fundamentally shaped by their identities as hunters and fishers. Sportsmen similarly make sense of the risks of climate change through its effects on wildlife and wildlife habitat and construct the appropriate scope of responses to the climate crisis through their self-identification as "stewards of wildlife." Through these discursive constructions of the effects of, and appropriate responses to, climate change, sportsmen and women simultaneously produce their own identity as close to nature, as removed from modernity, and as the community with the most to lose from a changing

climate. For linguists, this chapter illustrated the ways in which identities that have emerged in interaction with non-human actors can operate in socially-meaningful ways, shaping language use and the performance and perception of identities. For interdisciplinary research on environmental communication, it furthermore illustrated how these identities function to shape perceptions of possible and justified responses to environmental crises. In addition, this chapter showed the complex connections between interactions with the more-than-human world and social and ideological structures for hunters and fishers in the western United States.

Chapter 4 examined the interaction of sociolinguistic styles and environmental stances at the sociophonetic level. It analyzed the speech one speaker, a public sportsman personality, Steven Rinella, and his use of a "Country" style across two contexts: a Public Service Announcement which promoted climate change action, and another which explained the virtues of the North American model of wildlife management. An acoustic analysis of the speaker's use of variables associated with a rural, working-class persona showed that, while arguing for climate change action, Rinella used a more extreme form of one of the variables, a fronted BOOT vowel. This chapter thus argued that environmental stances—and more broadly, ideological stances—should be considered integral parts of the semiotic bundles that form styles or identities. As central aspects of personae, ideological stances interact with phonetic variation and discursive stylistic resources. This analysis also illustrated the importance of interactions between a speaker's identity and their production of environmental messages. For scholars of environmental communication, this finding highlights the need to view identity as partial and emergent, rather than categorical and reducible to demographic categories or partisan affiliation.

Chapter 5 focused on media discourses, analyzing the climate change media produced by hunting and fishing-focused institutions. This chapter showed the prevalence of stances towards a positively evaluated past wilderness and a negatively evaluated

disappearing present wilderness within texts that are primarily about climate change. The juxtaposition of these stances situates the sportsman persona as prototypically at home in the chronotope of the idyllic wilderness past and as anachronistic in the contemporary modern and urbanizing world. This chapter showed the construction of the chronotope of the wilderness past through reminiscences about nostalgic real and imagined pasts, invocations of past heroic hunters, and the fear of a loss of heritage. One contribution of this chapter is the demonstration of an emerging and understudied use of temporality and spatiality within climate change rhetoric, which has, as a genre, largely focused on imagined apocalyptic futures. This chapter also demonstrated the social function of these chronotopic representations in creating a racialized and gendered representation of space-time. These representations reproduce perceptions of an ongoing crisis of white masculinity, in which members of modernity no longer have access to traditional masculinity through a relationship with nature. In addition, these portrayals reinforce the fear of a fading "real" American heartland populated by a largely homogenous white population with a connection to the land. In the chapter, I also argued that a nostalgic wilderness frame within climate change communication shapes the perception of that crisis, constraining who is perceived as vulnerable to the risks of climate change largely to those that inhabit the past wilderness chronotope, thereby erasing the causes of the crisis, and influencing the possible solutions.

Methodologically, this dissertation has explored the implications for environmental research of integrating ethnographic analyses of identity and conservation ideologies at the local level with linguistic analyses of the mobilization of sociolinguistic styles and chronotopic stances. In contrast to the top-down approach often taken in previous work on language and environmental practices and ideologies, I have instead worked to build theory from the bottom up, grounding my conceptual framework in the experiences of speakers negotiating their identities with respect to environmental interactions, broader social and political structures, and ongoing environmental changes.

Theoretical contributions

The main theoretical contribution of this dissertation is in highlighting the importance of environmental interactions for language, and conversely the significance of linguistic factors for environmental practices and ideologies. This study has shown that a focus on environmental practices and stances within linguistics can be theoretically productive for our understandings of linguistic concepts such as stance and style. It suggests that environmental ideologies become enregistered as a part of sociolinguistic styles and personae and can then interact with other aspects of social meaning, such as racialized, gendered, and classed identities. The dissertation has also highlighted the need for sociolinguists to consider more-than-human intersubjectivity, and interactions with the non-human world, as sites for identity construction and performance. It has suggested that certain sociolinguistic styles, such as a Country style, that have been analyzed primarily in relation to region and rurality, can be further complexified through an understanding of these identities in relation to environmental practices and interactions.

This dissertation also contributes to broader interdisciplinary work on language and the social aspects of environmental crises. The analysis in Chapter 4 showed the interaction between a speaker's stylized identity and his production of an environmental message, highlighting the need for scholars of environmental communication to view identity as partial and emergent, something that can be brought to the foreground or left in the background, depending on the context. Existing research on environmental communication generally conceptualizes identity as categorical and based on macro-level factors, such as age, race, gender, partisan affiliation, and so on. In this dissertation, I have argued that identity in the context of environmental communication is more productively analyzed as a local and emergent phenomenon both for the message creator and for the listeners/perceivers. A more nuanced conceptualization of identity paves the way for future research to investigate the effects of sociophonetic variation—which allows for a speaker's identity to be highlighted to greater or lesser degrees—on the perception of environmental

messages. This study therefore highlights the potential of linguistic frameworks and methodologies to contribute to examinations of environmental ideologies and communication. I have also endeavored to pave the way for an interdisciplinary focus on language and the environment, an approach which unites anthropological, linguistic, and communication methodologies though ethnographic analyses of environmental practices and ideologies and linguistic analyses of stancetaking and sociolinguistic styles, an approach I term *environmental linguistics*. While this study largely focused on the discursive aspects of conservation within the hunting and fishing community, in the future I hope to use this approach to further examine the material aspects of hunting, including embodied practices and the interactions between hunters and non-human animals.

On a broader level, I argue that a greater emphasis on environmental issues could be productive across many subfields of linguistics. For scholars of sociolinguistic justice, for instance, an interdisciplinary examination of environmental justice could illuminate the links between environmental and racial positioning, and the ways that environmental and linguistic racism interact to marginalize speakers. For documentary linguists, on the other hand, this focus could pave the way for linguists to consider climate modeling predictions, with which they could predict communities that will soon come under environmental pressure and may be displaced, such as communities who live on coasts, depend heavily on fishing, or live in drought-prone areas. Identifying such vulnerable languages and populations early on could be helpful for language documentation and the creation of language maintenance structures in emerging diasporic communities. Furthermore, linguists could anticipate species loss in especially vulnerable areas and take steps to document that knowledge. Relatedly, an integrated focus on language and the environment could be helpful in diasporic communities in which speakers are removed from their traditional environmental context. This distance often impacts the retention of lexical items related to environmental interactions, such as the loss of names for plants and animals and the loss of knowledge of traditional healing and agricultural practices (Cruz 2017). This context of

linguistic change can have negative effects for linguistic vitality and a sense of cultural community identity. Finally, linguists could contribute further to the emerging scholarship examining the way traditional ecological knowledge and practices can be restorative for ecosystems (Berkes et al. 2000; Ruiz-Mallén & Corbera 2013).

Conclusion

This dissertation has examined the connections between language use, identity, and conservation ideologies among hunters and anglers in the western United States. It also has endeavored to provide analyses that integrate environmental and linguistic-anthropological approaches, combining ethnographic descriptions of environmental ideologies and identities with linguistic analyses of sociolinguistic styles and stancetaking strategies, an approach I term environmental linguistics. Ultimately, in this dissertation I have called for a more central focus on language and the environment. This focus is increasingly important now, as widespread ecological destruction impacts marginalized and vulnerable communities and ecosystems in ever greater ways around the world.

References

- Abram, David. 1996. The spell of the sensuous: Perception and language in a more-than-human world. New York: Pantheon Books.
- Agha, Asif. 2005. "Voice, footing, enregisterment." *Journal of Linguistic Anthropology* 15(1):38–59.
- ——. 2007. "Recombinant selves in mass mediated spacetime." *Language & Communication 27*(3):320-335.
- Alim, Samy H. 2004. You know my steez: An ethnographic and sociolinguistic study of styleshifting in a Black American speech community. Durham, North Carolina: Duke Press.
- Altherr, Thomas L. 1978. "The American hunter—naturalist and the development of the code of sportsmanship." *Journal of Sport History* 5(1):7–22.
- Altherr, Thomas L., and John F. Reiger. 1995. "Academic historians and hunting: A call for more and better scholarship." *Environmental History Review* 19(3): 39–56.
- Arnold, Lynnette. 2016. Communicative care across borders: Language, materiality, and affect in transnational family life. PhD Dissertation, University of California, Santa Barbara, Santa Barbara, CA.
- Babel, Anna. 2016. "Introduction." In *Awareness and control in sociolinguistic research*, edited by Anna Babel. Cambridge: Cambridge University Press, pp. xxix-xxii.
- Bailey, Adriana, Lorine Giangola, and Maxwell T. Boykoff. 2014. "How grammatical choice shapes media representations of climate (un)certainty." *Environmental Communication* 8(2):197–215.
- Bakhtin, Mikhail M. 1981. "Forms of time and of the chronotope in the novel." In *The Dialogic Imagination*, edited by Michael Holquist. Austin: University of Texas Press, pp. 84–258.
- Baldwin, Matthew, and Joris Lammers. 2016. "Past-focused environmental comparisons promote proenvironmental outcomes for conservatives." *Proceedings of the National Academy of Sciences* 113(52):14953-57.
- Basso, Keith H. 1988. "Speaking with names': Language and landscape among the Western Apache." *Cultural Anthropology* 3(2):99–130.
- Bates, Douglas M., Martin Mäechler, Ben Bolker, and Steve Walker. 2015. "Fitting linear mixed-effects models using lme4." *Journal of Statistical Software*, 67(1):1–48.

- Berkes, Fikret, Johan Colding, and Carl Folke. 2000. "Rediscovery of traditional ecological knowledge as adaptive management." *Ecological Applications* 10(5):1251-62.
- Bever, Lindsey. 2016. "Make America White Again': A politician's billboard ignites uproar." *Washington Post* (June 23). Retrieved from https://www.washingtonpost.com/news/the-fix/wp/2016/06/23/make-america-white-again-a-politicians-billboard-ignites-uproar/?utm term=.93dcae110b1a
- Bell, Allan. 1984. "Language style as audience design." *Language in Society 13*(2):145–204.
- Bell, Allan. 2001. "Back in style: Reworking audience design." In *Style and sociolinguistic variation*, edited by Penelope Eckert & John R. Rickford. Cambridge: Cambridge Press, pp. 139–169.
- Benegal, Salil D. 2018. "The spillover of race and racial attitudes into public opinion about climate change." *Environmental Politics* 27(4):733–56.
- Bennett, Nathan J., Robin Roth, Sarah C. Klain, Kai Chan, Patrick Christie, Douglas A. Clark, Georgina Cullman, et al. 2017. "Conservation social science: Understanding and integrating human dimensions to improve conservation." *Biological Conservation* 205(January):93–108.
- Bennett, Nathan J., Robin Roth, Sarah C. Klain, Kai M. A. Chan, Douglas A. Clark, Georgina Cullman, Graham Epstein, et al. 2017. "Mainstreaming the social sciences in conservation." *Conservation Biology 31*(1):56–66.
- Blanton, Ryan. 2011. "Chronotopic landscapes of environmental racism." *Journal of Linguistic Anthropology 21*:76–93.
- Blom, Jan-Peter, and John J. Gumperz. 1972. "Social meaning in singuistic structures: Code-switching in Norway." In *Directions in sociolinguistics: The ethnography of communication*, edited by John J. Gumperz and Dell Hymes. New York: Holt, Rinehart, and Winston, pp. 407-434.
- Blommaert, Jan. 2005. *Discourse: A critical introduction*. Cambridge: Cambridge University Press.
- Blommaert, Jan. 2015. "Chronotopes, scales, and complexity in the study of language in Society." *Annual Review of Anthropology* 44(1):105–116.
- Blommaert, Jan, and Anna De Fina. 2016. "Chronotopic identities: On the timespace organization of who we are." *Tilburg Papers in Culture Studies*.
- Boas, Franz. 1911. Introduction [to the *Handbook of American Indian Languages*]. U.S. Government Printing Office.
- Boglioli, Marc. 2009. A matter of life and death: Hunting in contemporary Vermont. Boston: University of Massachusetts Press.

- Bonilla-Silva, Eduardo. 2017. *Racism without racists: Color-blind racism and the persistence of racial inequality in America*. Lanham, MD: Rowman & Littlefield. 2nd edition.
- Bourjaily, Phil. 2015. "On hipsters and hunting." The Gun Nuts blog, *Field and Stream* (March 4). Retrieved from https://www.fieldandstream.com/blogs/the-gun-nuts/on-hipsters-and-hunting/
- Brick, Cameron, David K. Sherman, and Heejung S. Kim. 2017. "Green to be seen' and 'brown to keep down': Visibility moderates the effect of identity on proenvironmental behavior." *Journal of Environmental Psychology* 51:226–38.
- Brugman, Hennie, Albert Russel, and Xd Nijmegen. 2004. "Annotating multi-media / multi- modal resources with ELAN." *Proceedings of the 4th International Conference on Language Resources and Language Evaluation*. Lisbon, Portugal, pp. 2065–68.
- Bucholtz, Mary. 1999. "You da man: Narrating the racial other in the production of white masculinity." *Journal of Sociolinguistics* 3(4):443-460.
- ——. 2001. "The whiteness of nerds: Superstandard English and racial markedness." *Journal of Linguistic Anthropology 11*(1):84-100.
- ——. 2003. "Sociolinguistic nostalgia and the authentication of identity." *Journal of Sociolinguistics* 7(3):398–416.
- ——. 2009. "From stance to style: Gender, interaction, and indexicality in Mexican immigrant youth slang." In *Stance: Sociolinguistic perspectives*, edited by Alexandra Jaffe. Oxford, UK: Oxford University Press, pp. 146-170.
- ——. 2011. *White kids: Language, race, and styles of youth identity.* Cambridge: Cambridge Press.
- ——. 2015. "The elements of style." In *Language and identity across modes of communication*, edited by Dwi Noverini Djenar, Ahmar Mahboob, and Ken Cruickshank. Berlin: De Gruyter Mouton, pp. 27-60.
- Bucholtz, Mary, Nancy Bermudez, Victor Fung, Lisa Edwards, and Rosalva Vargas. 2007. "Hella Nor Cal or totally So Cal?: The perceptual dialectology of California." *Journal of English Linguistics* 35(4):325-352.
- Bucholtz, Mary, and Kira Hall. 2005. "Identity and interaction: A sociocultural linguistic approach." *Discourse Studies* 7(4–5):585–614.
- Bucholtz, Mary, and Kira Hall. 2016. Embodied sociolinguistics. In *Sociolinguistics: Theoretical Debates*, edited by Nikolas Coupland. Cambridge, UK: Cambridge University Press, pp. 73-197.

- Budinsky, Jennifer, and Susan Bryant. 2013. "It's not easy being green': The greenwashing of environmental discourses in advertising." *Canadian Journal of Communication* 38(2):207-26.
- Campbell-Kibler, Kathryn. 2007. "Accent, (ING), and the social logic of listener perceptions." *American Speech* 82:32-64.
- ——. 2009. "The nature of sociolinguistic perception." *Language Variation and Change 21*:135-156.
- ——. 2011. "Intersecting variables and perceived sexual orientation in men." *American Speech* 86(1):52-68.
- Cantrill, James G. 1998. "The environmental self and a sense of place: Communication foundations for regional ecosystem management." *Journal of Applied Communication Research* 26(3):301–318.
- Carbaugh, Donal. 1999. "Just listen': 'Listening' and landscape among the Blackfeet." *Western Journal of Communication* 63(3):250–70.
- Carfora, Valentina, Daniela Caso, Paul Sparks, and M. Conner. 2017. "Moderating effects of pro-environmental self-identity on pro-environmental intentions and behaviour: A multi-behaviour study." *Journal of Environmental Psychology* 53:92–99.
- Carvalho, Anabela. 2007. "Ideological cultures and media discourses on scientific knowledge: Re-reading news on climate change." *Public Understanding of Science* 16(2):223–43.
- 2010. "Media(ted) discourses and climate change: A focus on political subjectivity and (dis)engagement." WIREs Climate Change 1(2):172–79.
- Carvalho, Anabela, Margit van Wessel, and Pieter Maeseele. 2017. "Communication practices and political engagement with climate change: A research agenda." *Environmental Communication 11*(1):122–35.
- Casagrande, David G. 2016. "Ethnoscientific implications of classification as a socio-cultural process." In *Routledge handbook of environmental anthropology*, edited by Helen Kopnina and Eleanor Shoreman-Ouimet. London: Routledge, pp. 56-68.
- Cavanaugh, Jillian R., and Shalini Shankar. "Producing authenticity in global capitalism: Language, materiality, and value." *American Anthropologist 116*(1):51-64.
- Cawley, R. McGreggor. 1993. Federal land, western anger: The sagebrush rebellion and environmental politics. Lawrence: University Press of Kansas.
- Chen, Sibo. 2016a. "Language and ecology: A content analysis of ecolinguistics as an emerging research field." *Ampersand* 3:108–16.

- ——. 2016b. "Selling the environment: Green marketing discourse in China's automobile advertising." *Discourse, Context & Media* 12:11–19.
- Chu, Haoran, and Janet Z. Yang. 2018. "Taking climate change here and now mitigating ideological polarization with psychological distance." *Global Environmental Change* 53:174–81.
- Cohen, Fay. 1986. *Treaties on trial: The continuing controversy over Northwest Indian fishing rights*. Seattle: University of Washington Press.
- Coleman, Gabriella. 2010. "Ethnographic approaches to digital media." *Annual Review of Anthropology 39*:487-505.
- Colloff, Matthew J., Sandra Lavorel, Lorrae E. van Kerkhoff, Carina A. Wyborn, Ioan Fazey, Russell Gorddard, Georgina M. Mace, et al. 2017. "Transforming conservation science and practice for a postnormal world." *Conservation Biology* 31(5): 1008–1017.
- Conley, Clare. (April 1984). "The threatening Indian problem," *Outdoor Life* 5. Retrieved from http://issues.outdoorlife.com/19840401/#!/5
- Connolly, Matt. (December 22, 2017). "These places really, really want to secede from their states." *Mother Jones*. Retrieved from http://www.motherjones.com/politics/2013/11/north-colorado-state-secession/
- Cordner, Alissa, and Eliana Schwartz. 2019. "Covering wildfires: Media emphasis and silence after the Carlton and Okanogan Complex wildfires." *Society & Natural Resources* 32(5):489-507.
- Coupland, Nikolas. 2001. "Language, situation, and the relational self: Theorizing dialect-style in sociolinguistics." In *Style and sociolinguistic variation*, edited by Penelope Eckert and John R. Rickford. Cambridge, UK: Cambridge University Press, pp. 185-210.
- . 2003. "Sociolinguistic authenticities." *Journal of Sociolinguistics* 7(3):417–31.
- 2009. "The mediated performance of vernaculars." *Journal of English Linguistics* 37(3):284-300.
- Cruz, Emiliana. 2017. "Documenting landscape knowledge in Eastern Chatino: Narratives of fieldwork in San Juan Quiahije." *Anthropological Linguistics* 59(2):205-31.
- Davidson, Debra J., and Michael Haan. 2012. "Gender, political ideology, and climate change beliefs in an extractive industry community." *Population and Environment* 34(2):217–34.
- Depoe, Stephen P. 1998. "Talking about the earth: On the growing significance of environmental communication studies." *Rhetoric & Public Affairs 1*(3):435–48.

- Derrick, Matthew A. 2014. "The state of Jefferson: Beyond myth and mindset, toward enhanced conceptualization of a region." *Humboldt Journal of Social Relations* 36:4–16.
- Devine-Wright, Patrick, and Susana Batel. 2017. "My neighbourhood, my country or my planet?: The influence of multiple place attachments and climate change concern on social acceptance of energy infrastructure." *Global Environmental Change* 47:110–20.
- Dick, Hillary. 2010. "Imagined lives and modernist chronotopes in Mexican nonmigrant discourse." *American Ethnologist* 37(2):275–90.
- DiFrancesco, Darryn Anne, and Nathan Young. 2011. "Seeing climate change: The visual construction of global warming in Canadian national print media." *Cultural Geographies* 18(4):517–36.
- Dinkin, Aaron J. 2011. "Nasal short-a systems vs. the Northern Cities Shift." *University of Pennsylvania Working Papers in Linguistics* 17(2):71-80.
- Doyle, Julie. 2007. "Picturing the clima(c)tic: Greenpeace and the representational politics of climate change communication." *Science as Culture 16*(2):129–50.
- Dray, Philip. 2018. *The fair chase: The epic story of hunting in America*. New York: Basic Books.
- Dryzek, John S. 2013. *The politics of the earth: Environmental discourses*. Oxford, UK: Oxford University Press.
- Du Bois, John W. 2007. "The stance triangle." In *Stancetaking in discourse: Subjectivity, evaluation, interaction*, edited by Robert Englebretson. Amsterdam: John Benjamins, pp. 139–182.
- Du Bois, John, W., Stephan Schuetze-Coburn, Susanna Cumming, and Danae Paolino. 1992. "Outline of discourse transcription." In *Talking data. Transcription and coding in discourse research*, edited by Jane A. Edwards and Martin D. Lampert. Hillsdale, NJ: Lawrence Erlbaum Associates, pp. 45-89.
- Dunlap, Riley E., Aaron M. McCright, and Jerrod H. Yarosh. 2016. "The political divide on climate change: Partisan polarization widens in the U.S." *Environment: Science and Policy for Sustainable Development* 58(5):4–23.
- Dunlap, Thomas R. 1988. "Sport hunting and conservation 1880-1920." *Environmental History Review 12*(1):51–60.
- Durkin, Patrick. 2019. "Is hunting too white?" *The MeatEater* (May 17). Retrieved from https://www.themeateater.com/hunt/big-game/is-hunting-too-white
- Eckert, Penelope. 1989. *Jocks and burnouts: Social categories and identity in the high school.* New York: Teachers College Press.

- ———. 2000. Linguistic variation as social practice: The linguistic construction of identity in Belten High. New York: Blackwell.
- ——. 2003. "The meaning of style." *Texas Linguistic Forum 47*:41–53.
- 2008. "Variation and the indexical field." *Journal of Sociolinguistics* 12(4):453–76.
- ——. 2010. "Affect, sound symbolism, and variation." *University of Pennsylvania Working Papers in Linguistics* 15(2):69-80.
- ——. 2012. "Three waves of variation study: The emergence of meaning in the study of sociolinguistic variation." *Annual Review of Anthropology* 41(1):87–100.
- Eckert, Penelope, and Sally McConnell-Ginet. 1992. "Think practically and look locally: Language and gender as community-based practice." *Annual Review of Anthropology* 21:461–90.
- Eckert, Penelope, and John R. Rickford. 2001. "Introduction." In *Style and sociolinguistic variation*, edited by Penelope Eckert and John R. Rickford. Cambridge, UK: Cambridge University Press, pp.1-20.
- Eddington, David and Caitlin Channer. 2010. "American English has go? a lo? of glottal stops: Social diffusion and linguistic motivation. *American Speech* 85(3):338-51.
- Ellen, Roy F. 1979. "Omniscience and ignorance: Variation in Nuaulu knowledge, identification and classification of animals." *Language in Society* 8(2–3):337-359.
- ——. 1986. "What Black Elk left unsaid: On the illusory images of green primitivism." *Anthropology Today 2*(6):8-12.
- ——. 1999. "Models of subsistence and ethnobiological knowledge: Between extraction and cultivation in Southeast Asia." In *Folk Biology*, edited by Scott Atran. Boston: MIT Press, pp. 91–117.
- Endter-Wada, Joanna, Dale Blahna, Richard Krannich, and Mark Brunson. 1998. "A framework for understanding social science contributions to ecosystem management." *Ecological Applications* 8(3):891–904.
- Englebretson, Robert. 2007. "Stancetaking in discourse: An introduction." In *Stancetaking in discourse: Subjectivity, evaluation, interaction*, edited by Robert Englebretson. Amsterdam: John Benjamins, pp. 1-25.
- Ervin-Tripp, Susan. [1972] 1986. On sociolinguistic rules: Alternation and cooccurrence. In *Directions in sociolinguistics: The ethnography of communication*, edited by John J. Gumperz & Dell Hymes. New York: Blackwell, pp. 213–250.

- Ervin-Tripp, Susan. 2001. Variety, Style-shifting, and Ideology. In *Style and sociolinguistic variation*, edited by Penelope Eckert and John Rickford. Cambridge, UK: Cambridge University Press, pp. 44-56.
- Fill, Alwin, and Peter Mühlhäusler, eds. 2001. *The ecolinguistics reader: Language, ecology, and environment.* New York: Continuum.
- Fiorina, Morris P., and Samuel J. Abrams. 2008. "Political polarization in the American public." *Annual Review of Political Science 11*(1):563–88.
- Fløttum, Kjersti. 2010. "A linguistic and discursive view on climate change discourse." *La Revue du GERAS, Asp 58*:19–37.
- ———. 2014. "Linguistic mediation of climate change discourse." *La Revue du GERAS, Asp 65:7–20*.
- Fløttum, Kjersti, Trine Dahl, and Vegard Rivenes. 2016. "Young Norwegians and their views on climate change and the future: Findings from a climate concerned and oilrich nation." *Journal of Youth Studies 19*(8):1128-43.
- Fridland, Valerie, Tyler Kendall, Besty E. Evans, and Alicia Beckford Wassink. 2016. "Speech in the western states." *American Speech 91*(5):1-166.
- Geist, Valerius, Shane P. Mahoney, and J. F. Organ. 2001. "Why hunting has defined the North American model of wildlife conservation." In *Transactions of the North American Wildlife and Natural Resources Conference*, 66:175–185.
- Goatly, Andrew. 1996. "Green grammar and grammatical metaphor, or Language and the myth of power, or Metaphors we die by." *Journal of Pragmatics* 25(4):537–60.
- Goebbert, Kevin, Hank C. Jenkins-Smith, Kim Klockow, Matthew C. Nowlin, and Carol L. Silva. 2012. "Weather, climate, and worldviews: The sources and consequences of public perceptions of changes in local weather patterns." *Weather, Climate, and Society* 4(2):132–44.
- Goffman, Erving. 1978. *The presentation of self in everyday life*. Harmondsworth: Penguin.
- Gordon, Matthew J. 2000. "Phonological correlates of ethnic identity: Evidence of divergence?" *American Speech* 75(2):115-36.
- Gottlieb, Robert, and Peter Dreier. 1998. "The Sierra Club wrestles with the nativism in environmentalism." UEP Faculty & UEPI Staff Scholarship. Retrieved from https://scholar.oxy.edu/uep_faculty/719
- Gromet, Dena M., Howard Kunreuther, and Richard P. Larrick. 2013. "Political ideology affects energy-efficiency attitudes and choices." *Proceedings of the National Academy of Sciences* 110(23):9314–19.

- Gumperz, John J. 1982. *Discourse strategies*. Cambridge, UK: Cambridge University Press.
- Haidt, Jonathan, and Jesse Graham. 2007. "When morality opposes justice: Conservatives have moral intuitions that liberals may not recognize." *Social Justice Research* 20(1):98–116.
- Halfacre, Angela. 2016. "Nostalgia as a catalyst for conservation in the Carolina lowcountry." *Journal of Environmental Studies and Sciences* 6(4):774–78.
- Hall-Lew, Lauren. 2005. "One shift, two groups: When fronting alone is not enough." *University of Pennsylvania Working Papers in Linguistics* 10(2):105-16.
- Hall-Lew, Lauren. 2011. "The completion of a sound change in California English." In Proceedings of ICPhS XVII. The International Congress of Phonetic Sciences, Hong Kong, pp. 807-810
- Hall-Lew, Lauren, and Nola Stephens. 2012. "Country talk." *Journal of English Linguistics* 40(3):256–80.
- Hall-Lew, Lauren, Mirjam Eisworth, Mary-Caitlyn Valentinsson, and William Cotter. 2015. "Northern Arizona: Sound change and dialect contact." Presentation at New Ways of Analyzing Variation 44. Toronto, CA. October 22-25.
- Halliday, Michael. 2001. "New ways of meaning: The challenge to applied linguistics." In *The ecolinguistics reader: Language, ecology, and environment*, edited by Alwin Fill and Peter Mühlhäusler. London: Continuum, pp. 175–202.
- Haraway, Donna J. 1997.

 Modest_Witness@Second_Millennium.FemalMan©_Meets_OncoMouse*. New York: Routledge.
- Hart, P. Sol, and Erik C. Nisbet. 2012. "Boomerang effects in science communication: How motivated reasoning and identity cues amplify opinion polarization about climate mitigation policies." *Communication Research* 39(6):701–23.
- Hartigan, John. 2014. *Aesop's anthropology: A multispecies approach*. Duluth: University of Minnesota Press.
- Hazen, Kirk. 2002. "Identity and language variation in a rural community." *Language* 78(2):240-57.
- Hebdige, Dick. 1979. Subculture: The meaning of style. New York: Routledge.
- Hibbing, Matthew, Matthew Hayes, and Raman Deol. 2017. "Nostalgia isn't what it used to be: Partisan polarization in views on the past." *Social Science Quarterly* 98(1):230-243.
- Hill, Jane H., 2002. "Expert rhetorics' in advocacy for endangered languages: Who is listening, and what do they hear?." *Journal of Linguistic Anthropology* 12(2):119-33.

- Hochman, Jhan. 1997. "Green cultural studies: An introductory critique of an emerging discipline." *Mosaic: An Interdisciplinary Critical Journal* 30(1):81–96.
- Hoelle, Jeff. 2017. "Jungle beef: Consumption, production and destruction, and the development process in the Brazilian Amazon." *Journal of Political Ecology* 24(1):743-62.
- Hoffman-Dilloway, Erika. 2011. "Lending a hand: Competence through cooperation in Nepal's deaf associations." *Language in Society* 40(3):285-306.
- Horn, Miriam. 2016. *Rancher, farmer, fisherman*. New York, NY: W.W. Norton & Company.
- Howard, Philip. 1978. Weasel words. London: Hamilton.
- Hunt, Chris. 2018. "The last generation of trout anglers." *Hatch Magazine*. (December 7). Retrieved from https://www.hatchmag.com/articles/last-generation-trout-anglers/7714733
- Hurwitz, J., & Peffley, M. 2005. "Playing the face card in the post–Willie Horton era: The impact of racialized code words on support for punitive crime policy." *Public Opinion Quarterly* 69(1):99-112.
- Jaffe, Alexandra. 2009. "Introduction." In *Stance: Sociolinguistic perspectives*, edited by Alexandra Jaffe. Oxford, UK: Oxford University Press, pp. 1-28.
- ——. 2016. "Indexicality, stance and fields in sociolinguistics." In *Sociolinguistics: Theoretical debates*, edited by Nikolas Coupland. Cambridge, UK: Cambridge University Press, pp. 86–112.
- Johnson, Laura. 2009. "(Environmental) rhetorics of tempered apocalypticism in *An Inconvenient Truth*." *Rhetoric Review 28*(1):29-46.
- Johnstone, Barbara. 2007 "Linking identity and dialect through stancetaking." In *Stancetaking in discourse: Subjectivity, evaluation, interaction*, edited by Robert Englebretson. Amsterdam: John Benjamins, pp. 49-68.
- Johnstone, Barbara, and Justin Mando. 2015. "Proximity and journalistic practice in environmental discourse: Experiencing 'job blackmail' in the news." *Discourse & Communication* 9(1):81–101.
- Jones, Charlotte, Donald W. Hine, and Anthony D. G. Marks. 2017. "The future is now: Reducing psychological distance to increase public engagement with climate change." *Risk Analysis* 37(2):331–41.
- Jones. Karen R. 2012. "Lady wildcats and wild women: Hunting, gender and the politics of show(wo)manship in the nineteenth century American west." *Nineteenth-Century Contexts* 34(1):37-49.

- ——. 2015. Epiphany in the wilderness: Hunting, nature, and performance in the nineteenth-century American West. Boulder: University Press of Colorado.
- Jorgensen, Beth. 2011 "Granola-eating, Birkenstock-wearing tree-huggers who want to take your guns: Reframing the rhetoric of sustainable agriculture." In 2011 Institute of Electrical and Electronics Engineers International Professional Communication Conference. Cincinnati, OH, pp. 1-15.
- Kahan, Dan M., Hank Jenkins-Smith, and Donald Braman. 2011. "Cultural cognition of scientific consensus." *Journal of Risk Research* 14(2):147-74.
- Karimzad, Farzad. 2016. "Life here beyond now: Chronotopes of the ideal life among Iranian transnationals." *Journal of Sociolinguistics* 20(5):607–30.
- Kiesling, Scott Fabius. 1998. "Men's identities and sociolinguistic variation: The case of fraternity men." *Journal of Sociolinguistics* 2(1):69-99.
- Kiesling, Scott F. 2004. "Dude." American Speech 79(3):281-305.
- Kiesling, Scott Fabius. 2005. "Homosocial desire in men's talk: Balancing and recreating cultural discourses of masculinity." *Language in Society 34*(5):695-726.
- Kiesling, Scott Fabius. 2009. "Style as stance." *Stance: sociolinguistic perspectives*. In *Stance: Sociolinguistic perspectives*, edited by Alexandra Jaffe. Oxford, UK: Oxford University Press, pp. 171-194.
- Kahan, Dan M., Hank Jenkins-Smith, and Donald Braman. 2011. "Cultural cognition of scientific consensus." *Journal of Risk Research* 14(2):147–74.
- Kidner, Keely. 2016. "Neutral ground and naming: The implications of tar sands and oil sands for environmental debates in Alberta." *Critical Approaches to Discourse Analysis Across Disciplines* 8(2):1–18.
- Killingsworth, M. Jimmie, and Jacqueline S. Palmer. 1992. *Ecospeak: Rhetoric and environmental politics in America*. Carbondale: Southern Illinois University Press.
- ——.1995. "The discourse of 'environmentalist hysteria." *Quarterly Journal of Speech 81*(1):1–19.
- ——. 1996. "Millennial ecology: The apocalyptic narrative from *Silent Spring* to global warming." In *Green culture: Environmental rhetoric in contemporary America*, edited by Carl G. Herndl and Stuart C. Brown. Madison: University of Wisconsin Press, pp. 21-45.
- Kinefuchi, Etsuko. 2018. "Critical discourse analysis and the ecological turn in intercultural communication." *Review of Communication 18*(3):212–30.
- Kohn, Eduardo. 2013. *How forests think: Toward an anthropology beyond the human*. Berkeley: University of California Press.

- Kuznetsova, Alexandra, Per B. Brockhoff, and Rune Haubo Bojesen Christensen. 2017. "ImerTest package: Tests in linear mixed effects models." *Journal of Statistical Software* 82(13):1-26.
- Labov, William. 1963. "The social motivation of a sound change." *Word 19*(3): 273-309.
- Lammers, Joris, and Matt Baldwin. 2018. "Past-focused temporal communication overcomes conservatives' resistance to liberal political ideas." *Journal of Personality and Social Psychology* 114(4):599–619.
- Leddy, Edward F. 1987. *Magnum force lobby*. Lanham, MD: University Press of America.
- Lee, Jennifer S. 2003. "A call for softer, greener language." *New York Times* (March 2). Retrieved from https://www.nytimes.com/2003/03/02/us/a-call-for-softer-greener-language.html
- Lee, Yu-Kang, Chun-Tuan Chang, and Pei-Chi Chen. 2017. "What sells better in green communications: Fear or hope?: It depends on whether the issue is global or local." *Journal of Advertising Research* 57(4):379–96.
- Leopold, Aldo. [1949] 1968. A Sand County almanac. Oxford, UK: Oxford University Press.
- Littlefield, Jon, and Julie L. Ozanne. 2011. "Socialization into consumer culture: Hunters learning to be men." *Consumption Markets & Culture 14*(4):333–60.
- Lockwood, Matthew. 2011. "Does the framing of climate policies make a difference to public support? Evidence from UK marginal constituencies." *Climate Policy* 11(4):1097–112.
- Loo, Tina. 2001. "Making a modern wilderness: Conserving wildlife in twentieth-century Canada." *Canadian Historical Review* 82(1):91–121.
- Mace, Georgina M. 2014. "Whose conservation?" Science 345(6204):558-60.
- Maffi, Luisa. 2005. "Linguistic, cultural, and biological diversity." *Annual Review of Anthropology* 34(1):599–617.
- Maibach, Edward W., Matthew Nisbet, Paula Baldwin, Karen Akerlof, and Guoqing Diao. 2010. "Reframing climate change as a public health issue: An exploratory study of public reactions." *BioMed Central Public Health* 10(1):299-310.
- Mander, Brigid. 2018. "No, Wyoming. Women don't need to wear pink to hunt." *Outside Online* (February 15). Retrieved from https://www.outsideonline.com/2281806/no-wy-women-dont-need-wear-pink-hunt.
- Mannetti, Lucia, Antonio Pierro, and Stefano Livi. 2004. "Recycling: Planned and self-expressive behaviour." *Journal of Environmental Psychology* 24(2):227-236.

- Marris, Emma. 2012. "Hipsters who hunt." *Slate* (December 5). Retrieved from https://slate.com/technology/2012/12/hunting-by-liberal-urban-locavores-is-a-trend-good-for-the-environment.html
- Mascia, Michael B., J. Peter Brosius, Tracy A. Dobson, Bruce C. Forbes, Leah Horowitz, Margaret A. McKean, and Nancy J. Turner. 2003. "Conservation and the social sciences." *Conservation Biology* 17(3):649–50.
- Masco, Joseph. 2010. "Bad weather: On planetary crisis." *Social Studies of Science* 40(1):7–40.
- Massey, Doreen. 1994. *Space, place, and gender*. Minneapolis: University of Minnesota Press.
- Matz, Jacob, and Daniel Renfrew. 2015. "Selling 'fracking': Energy in depth and the Marcellus Shale." *Environmental Communication* 9(3):288-306.
- Mavisakalyan, Astghik, Yashar Tarverdi, and Clas Weber. 2018. "Talking in the present, caring for the future: Language and environment." *Journal of Comparative Economics* 46(4):1370–87.
- Mayer, Caroline E, and Amy Joyce. 2005. "The escalating obesity wars." *Washington Post* (April 27). Retrieved from https://www.washingtonpost.com/archive/business/2005/04/27/the-escalating-obesity-wars/4c18d13f-fca6-429e-b061-247e457ebda2/
- Mayhew Bergman, Megan. 2019. "Not all environmentalists eat tofu: The hunters fighting climate change." *Guardian* (January 9). Retrieved from https://www.theguardian.com/environment/2019/jan/09/republicans-climate-change-conservatives-environmentalists-arkansas
- McCorquodale, Scott. 1997. "Cultural contexts of recreational hunting and Native subsistence and ceremonial hunting: Their significance for wildlife management." Wildlife Society Bulletin (1973-2006) 25(2):568–73.
- McCright, Aaron M. 2010. "The effects of gender on climate change knowledge and concern in the American public." *Population and Environment 32*(1):66–87.
- McCright, Aaron M., Meghan Charters, Katherine Dentzman, and Thomas Dietz. 2016. "Examining the effectiveness of climate change frames in the face of a climate change denial counter-frame." *Topics in Cognitive Science* 8(1):76–97.
- McCright, Aaron M., and Riley E. Dunlap. 2011a. "The politicization of climate change: Political polarization in the American public's views of global warming." *The Sociological Quarterly* 52(2):155–194
- ——. 2011b. "Cool dudes: The denial of climate change among conservative white males in the United States." *Global Environmental Change 21*(4):1163–72.

- McElhinny, Bonnie. 2006. "Written in sand: Language and landscape in an environmental dispute in southern Ontario." *Critical Discourse Studies* 3(2):123–152.
- McGuigan, Lee. 2017. "The hunting industry: Exploring the marriage of consumerism, sport hunting, and commercial entertainment." *Journal of Consumer Culture* 17(3):910–30.
- McGuigan, Lee, and Rosemary Clark-Parsons. 2019. "This kill shot is brought to you by...: An analysis of hunting television in the United States." *Critical Studies in Television: The International Journal of Television Studies 14*(1):55–73.
- McKenzie, Callum. 2005. "Sadly neglected'—hunting and gendered identities: A study in gender construction." *The International Journal of the History of Sport*, 22(4):545-62.
- Medimorec, Srdan, and Gordon Pennycook. 2015. "The language of denial: Text analysis reveals differences in language use between climate change proponents and skeptics." *Climatic Change 133*(4):597–605.
- Mendoza-Denton, Norma. 2011. "The semiotic hitchhiker's guide to creaky voice: circulation and gendered hardcore in a Chicana/o gang persona." *Journal of Linguistic Anthropology* 21(2):261-280.
- Miller, Toby. 2016. "Greenwashed sports and environmental activism: Formula 1 and FIFA." *Environmental Communication* 10(6):719–33.
- Milstein, Tema. 2009. "Somethin' tells me it's all happening at the zoo': Discourse, power, and conservationism." *Environmental Communication* 3(1):25–48.
- Milstein, Tema, and José Castro-Sotomayor. Forthcoming. "Introduction." In *The ecocultural identity reader*, edited by Tema Milstein and José Castro-Sotomayor. New York: Routledge.
- Moser, Susanne C. 2016. "Reflections on climate change communication research and practice in the second decade of the 21st century: What more is there to say?" *Wiley Interdisciplinary Reviews: Climate Change* 7(3):345-369.
- Mühlhäusler, Peter, and Adrian Peace. 2006. "Environmental discourses." *Annual Review of Anthropology* 35(1):457–79.
- Mullin, Molly H. 1999. "Mirrors and windows: Sociocultural studies of human-animal relationships." *Annual Review of Anthropology* 28(1):201–24.
- Myers, Teresa A., Matthew C. Nisbet, Edward W. Maibach, and Anthony A. Leiserowitz. 2012. "A public health frame arouses hopeful emotions about climate change: A letter." *Climatic Change 113*(3–4):1105–12.

- Nabi, Robin L. 2003. "Exploring the framing effects of emotion: Do discrete emotions differentially influence information accessibility, information seeking, and policy preference?" *Communication Research* 30(2):224–47.
- National Wildlife Foundation. 2012. National survey of hunters and anglers. Retrieved from https://www.nwf.org/News-and-Magazines/Media-Center/Reports/Archive/2012/09-25-12-National-Sportsmen-Poll.aspx
- Nerlich, Brigitte, Vyvyan Evans, and Nelya Koteyko. 2011. "Low carbon diet: Reducing the complexities of climate change to human scale," *Language and Cognition 3*(1):45-82.
- Nicolle, Steve. 2004. "The relevance of ethnobotanical studies to linguistic vitality: The case of plant use and classification among the Digo of Kenya." *University of Nairobi Occasional Papers in Language and Linguistics* 2:86–103.
- Niedzielski, Nancy A., and Dennis R. Preston. 2003. *Folk linguistics*. Berlin and New York: Mouton de Gruyter.
- Nigbur, Dennis, Evanthia Lyons, and David Uzzell. 2010. "Attitudes, norms, identity and environmental behaviour: Using an expanded theory of planned behaviour to predict participation in a kerbside recycling programme." *British Journal of Social Psychology* 49(2):259-284.
- Nisbet, Matthew C., and Chris Mooney. 2007. "Framing science." *Science* 316(5821):56–56.
- Nordhaus, Ted, and Michael Shellenberger. 2007. Break through: From the death of environmentalism to the politics of possibility. Boston: Houghton Mifflin.
- Noy, Chaim. 2008. "Sampling knowledge: The hermeneutics of snowball sampling in qualitative research." *International Journal of Social Research Methodology* 11(4):327-44.
- O'Brien, Karen, Siri Eriksen, Lynn P. Nygaard, and Ane Schjolden. 2007. "Why different interpretations of vulnerability matter in climate change discourses." *Climate Policy* 7(1):73-88.
- Öhman, Susanna, Katarina Giritli Nygren, and Anna Olofsson. 2016. "The (un)intended consequences of crisis communication in news media: A critical analysis." *Critical Discourse Studies* 13(5):515–30.
- Olausson, Ulrika. 2011. "We're the ones to blame': Citizens' representations of climate change and the role of the media." *Environmental Communication* 5(3):281–99.
- Orr, Yancey, J. Stephen Lansing, and Michael R. Dove. 2015. "Environmental anthropology: Systemic perspectives." *Annual Review of Anthropology* 44(1):153–68.

- Osborne, Natalie. 2015. "Intersectionality and kyriarchy: A framework for approaching power and social justice in planning and climate change adaptation." *Planning Theory 14*(2):130-51.
- Pearson, Mary. 1996. "Hunting rights: Retention of treaty rights after termination: Kimball v. Callahan." In *Recent legal issues for American Indians, 1968 to the present*, edited by John R. Wunder. New York: Garland Publishing, pp. 107–115.
- Peeples, Jennifer, Pete Bsumek, Steve Schwarze, and Jen Schneider. 2014. "Industrial apocalyptic: Neoliberalism, coal, and the burlesque frame." *Rhetoric & Public Affairs* 17(2):227-254.
- Pennesi, Karen. 2015. "Constructing 'farmer' and 'state' identities in moral discourses about semi-subsistence agriculture in north-east Brazil." *Journal of Latin American Studies* 47(4):781–809.
- Pennycook, Alastair. 2004. "Language policy and the ecological turn." *Language Policy* 3:213–39.
- Peppermans, Yves, and Pieter Maeseele. 2016. "The politicization of climate change: Problem or solution?" *Wiley Interdisciplinary Reviews: Climate Change* 7(4):478-85.
- Peters, Richard G., Vincent T. Covello, and David B. McCallum. 1997. "The determinants of trust and credibility in environmental risk communication: An empirical study." *Risk Analysis* 17(1):43–54.
- Phippen, J. Weston. 2016. "Kill every buffalo you can! Every buffalo dead is an Indian gone." *Atlantic* (May 13). Retrieved from https://www.theatlantic.com/national/archive/2016/05/the-buffalo-killers/482349/
- Pickett, Stewart T. A., and Mary L. Cadenasso. 2002. "The ecosystem as a multidimensional concept: Meaning, model, and metaphor." *Ecosystems* 5(1):1–10.
- Plec, Emily, and Mary Pettenger. 2012. "Greenwashing consumption: The didactic framing of ExxonMobil's energy solutions." *Environmental Communication* 6(4):459–76.
- Podesva, Robert J. 2007. Phonation type as a stylistic variable: The use of falsetto in constructing a persona. *Journal of Sociolinguistics* 11(4):478-504.
- 2011. The California Vowel Shift and gay identity. *American Speech* 86(1): 32-51.
- Podesva, Robert J., Annette D'Onofrio, Janneke Van Hofwegen, and Seung Kyung Kim. 2015a. "Country ideology and the California Vowel Shift." *Language Variation and Change 27*(1):157–86.

- Podesva, Robert J., Patrick Callier, Rob Voigt, and Dan Jurafsky. 2015b. "The connection between smiling and GOAT fronting: Embodied affect in sociophonetic variation." *Proceedings of the International Congress of Phonetic Sciences* 18.
- Posey, Darrell Addison. 2002. Kayapó ethnoecology and culture. London: Routledge.
- Pouchet, Jessica, and Joshua Shapero. 2017. "Beyond the human, beyond the subfield: Integrating linguistic and environmental anthropology." Panel presented at the 116th Annual Meeting of the American Anthropological Association, Washington, DC, November 29-December 3.
- Preston, Dennis R. 1989. *Sociolinguistics and second language acquisition*. Oxford, UK: Basil Blackwell.
- Procházka, Ondřej. 2018. "A chronotopic approach to identity performance in a Facebook meme page." *Discourse, Context & Media 25*(1):78–87.
- Public Service Advertising Research Center. 2011. "Top 100 U.S. magazines by circulation." Retrieved from http://www.psaresearch.com/images/TOPMAGAZINES.pdf
- Pullum, Geoffrey. 1999. "The great Eskimo vocabulary hoax." *Natural Language & Linguistic Theory* 7(2):275–81.
- R Core Team. 2015. R: A language and environment for statistical computing. R Foundation for Statistical Computing. Vienna, Austria.
- Rampton, Ben. 1995. Crossing: Language and ethnicity among adolescents. London: Longman.
- Rampton, Ben. 2006. *Language in late modernity*. Cambridge: Cambridge University Press.
- Randall, Cassidy. 2019. "Hunters and anglers flex their political muscles." *High Country News* (January 11). Retrieved from https://www.hcn.org/issues/51.1/public-lands-sportsmen-flex-their-muscles-in-state-politics
- Reiger, John F. 1975. American sportsmen and the origins of conservation. New York: Winchester Press.
- Rich, Jessica L. 2016. "Drilling is just the beginning: Romanticizing rust belt identities in the campaign for shale gas." *Environmental Communication* 10(3):292-304.
- Rickford, John R. and Faye McNair-Knox. 1994. "Addressee-and topic influenced style shift: A quantitative sociolinguistic study." In *Sociolinguistic perspectives on register*, edited by Douglas Biber and Edward Finegan. New York: Oxford University Press, pp. 235-276.
- Rinella, Steven. 2012. "North American Model of Wildlife Conservation Conservation field notes with Steven Rinella." YouTube.com (October 29). Retrieved from https://www.youtube.com/watch?v=ukqzPNckrbg

- Rinella, Steven. 2013. "Sportsmen & climate change—Conservation field notes with Steven Rinella." YouTube.com (April 15). Retrieved from https://www.youtube.com/watch?v=QOsu1-ltKAY
- Rogers, Richard A. 2008. "Beasts, burgers, and hummers: Meat and the crisis of masculinity in contemporary television advertisements." *Environmental Communication* 2(3):281–301.
- Rogers-Hayden, Tee, Foye Hatton, and Irene Lorenzoni. 2011. "Energy Security' and 'Climate Change': Constructing UK Energy Discursive Realities." *Global Environmental Change 21*(1):134–42.
- Rosa, Jonathan. 2016. "Racializing language, regimenting Latinas/os: Chronotope, social tense, and American raciolinguistic futures." *Language & Communication* 46(5):106-117.
- Rosenfelder, Ingrid, Joe Fruehwald, Keelan Evanini, and Jiahong Yuan. 2011. FAVE (Forced Alignment and Vowel Extraction) program suite. Retrieved from http://fave.ling.upenn.edu
- Roser-Renouf, Connie, Edward W. Maibach, Anthony Leiserowitz, and Xiaoquan Zhao. 2014. "The genesis of climate change activism: From key beliefs to political action." *Climatic Change* 125(2):163–78.
- Rosman, Katherine. 2017. "He sees country music in 'Make America Great Again." New York Times (February 10). Retrieved from https://www.nytimes.com/2017/02/10/fashion/kurt-bardella-country-music-newsletter-morning-hangover-tipsheet.html
- Rowe, Stan. 1989. "What on earth is environment?" *Trumpeter 6*(4):123–26.
- Roy, Ellen. 1986. "What Black Elk left unsaid: On the illusory images of green primitivism." *Anthropology Today 2*(6):8-12.
- Ruiz-Mallén, Isabel, and Esteve Corbera. 2013. "Community-based conservation and traditional ecological knowledge: Implications for social-ecological resilience." *Ecology and Society* 18(4):1-19.
- Said, Edward W. 1979. *Orientalism*. New York: Vintage Books.
- Sandbrook, Chris, William M. Adams, Bram Büscher, and Bhaskar Vira. 2013. "Social research and biodiversity conservation." *Conservation Biology* 27(6):1487–90.
- Sapir, Edward. 1912. "Language and environment." *American Anthropologist* 14(2):226–42.
- Scannell, Leila, and Robert Gifford. 2013. "Personally relevant climate change: The Role of place attachment and local versus global message framing in engagement." *Environment and Behavior* 45(1):60–85.

- Schleppergrell, Mary. 2001. "What makes a grammar green? A reply to Goatly." In *The ecolinguistics reader: Language, ecology, and the environment*, edited by Alwin Fill and Peter Mühlhäusler. London: Continuum, pp. 226–28.
- Schneider, Jen, and Jennifer Peeples. 2018. "The energy covenant: Energy dominance and the rhetoric of the aggrieved." *Frontiers in Communication* 3(5)"1-12.
- Shankar, Shalini, and Jillian R. Cavanaugh. 2012. "Language and materiality in global capitalism." *Annual Review of Anthropology* 41:355-69.
- Shaw, Anna Nelson. 2014. "Knowledge, biopower, and subjectivities at the media-policy interface: A study of climate change discourses in Montana." Master's thesis. Missoula: University of Montana.
- Shreve, Bradley G. 2009. "From time immemorial': The fish-in movement and the rise of intertribal activism." *Pacific Historical Review* 78(3):403–34.
- Sinclair, Peter. 2013. "Sportsmen's and anglers' views highlighted in new this is not cool video." *Yale Climate Connections* (March 27). Retrieved from https://www.yaleclimateconnections.org/2013/03/sportsmens-and-anglers-views-highlighted-in-new-this-is-not-cool-video/
- Skutnabb-Kangas, Tove. 2003. "Linguistic diversity and biodiversity: The threat from killer languages." In *The politics of English as a world language: New horizons in postcolonial cultural studies*, edited by Christian Mair. Amsterdam: Rudopi, pp. 33–52.
- Smalley, Andrea L. 2005a. "I just like to kill things': Women, men and the gender of sport hunting in the United States, 1940–1973." *Gender & History 17*(1):183–209.
- ———. 2005b. "'Our lady sportsmen': Gender class, and conservation in sport hunting magazines, 1873-1920." *Journal of the Gilded Age and Progressive Era 4*(4):355–80.
- de Snoo, Geert R., Irina Herzon, Henk Staats, Rob J. F. Burton, Stefan Schindler, Jerry van Dijk, Anne Marike Lokhorst, et al. 2013. "Toward effective nature conservation on farmland: Making farmers matter." *Conservation Letters* 6(1):66-72.
- Sparks, Paul, and Richard Shepherd. 1992. "Self-identity and the theory of planned behavior: Assessing the role of identification with 'green consumerism." *Social Psychology Quarterly* 55(4):388–99.
- Sparks, Paul, Richard Shepherd, and Lynn J. Frewer. 1995. "Assessing and structuring attitudes toward the use of gene technology in food production: The role of perceived ethical obligation." *Basic and Applied Social Psychology* 16(3):267–85.
- Spence, Alexa, and Nick Pidgeon. 2010. "Framing and communicating climate change: The effects of distance and outcome frame manipulations." *Global Environmental Change* 20(4):656–67.

- Spoel, Philippa, David Goforth, Hoi Cheu, & David Pearson. 2008. "Public communication of climate change science: Engaging citizens through apocalyptic narrative explanation." *Technical Communication Quarterly* 18(1): 49-81.
- Starnes, Richard. (1977). "Indians and the courts: Allies against wildlife." *Outdoor Life* (June): 8-16.
- ——. (1979). "New Indian rip-off." *Outdoor Life* 15 (October). Retrieved from http://issues.outdoorlife.com/19791001/#!/15.
- Steffensen, Sune Vork, and Alwin Fill. 2014. "Ecolinguistics: The state of the art and future horizons." *Language Sciences* 41(A):6–25.
- Stets, Jan E., and Chris F. Biga. 2003. "Bringing identity theory into environmental sociology." *Sociological Theory 21*(4):398-423.
- Stibbe, Arran. 2004. "Health and the social construction of masculinity in *Men's Health* magazine." *Men and Masculinities* 7(1):31-51.
- ——. 2010. "Ecolinguistics and globalization." In *The handbook of language and globalization*, edited by Nikolas Coupland. West Sussex: Wiley-Blackwell, pp. 406–425.
- ——. 2014. "An ecolinguistic approach to critical discourse studies." *Critical Discourse Studies 11*(1):117–28.
- ——. 2015. *Ecolinguistics: Language, ecology and the stories we live by.* London: Routledge.
- Strangleman, Tim. 2013. "Smokestack nostalgia," 'ruin porn' or working-class obituary: The role and meaning of deindustrial representation." *International Labor and Working-Class History* 84(1):23-37.
- Stuckey, Mary E., and John M. Murphy. 2001. "By any other name: Rhetorical colonialism in North America." *American Indian Culture and Research Journal* 25(4):73-98.
- Summers, Ian. 2017. "The revolution that never was: Rhetorical enactments of the oppressed rural frontiersman at the Malheur National Wildlife Refuge." Paper presented at the 14th biennial Conference on Communication and Environment, Leicester, UK. June 29-July 2.
- Swim, Janet K., Nathaniel Geiger, and Michael L. Lengieza. 2019. "Climate change marches as motivators for bystander collective action." *Frontiers in Communication* 4(4):1-18.
- Taylor, Allan. 1989. "Review essay: Two decades of ethnobotany in the northwest plains. To Grass Woman (Mary Ground), excellent informant, dearest friend." *International Journal of American Linguistics* 55(3):359–81.

- Theodore Roosevelt Conservation Partnership. 2017. "TRCP National Sportsmen's Survey." Retrieved from http://www.trcp.org/trcp-national-sportsmens-survey/
- Turner, James Morton. 2002. "From woodcraft to 'leave no trace': Wilderness, consumerism, and environmentalism in twentieth-century America." *Environmental History* 7(3):462-84.
- Unsworth, Kerrie L., and Kelly S. Fielding. 2014. "It's political: How the salience of one's political identity changes climate change beliefs and policy support." *Global Environmental Change* 27(1):131–37.
- United States Department of the Interior. 2018. Certificate of apportionment. March 20. Retrieved from: https://wsfrprograms.fws.gov/subpages/grantprograms/WR/WRFinalApportionment 2018.pdf
- United States Fish and Wildlife Service. 2011. 2011 National survey of fishing, hunting, and wildlife-associated recreation: National overview. Washington, DC: U.S. Department of the Interior, U.S. Fish & Wildlife Service.
- ——. 2016. 2016 National survey of fishing, hunting, and wildlife-associated recreation. Washington, DC: U.S. Department of the Interior, U.S. Fish & Wildlife Service.
- Utter, Glenn H., and James L. True. 2000. "The evolving gun culture in America." *Journal of American Culture 23*(2):67–79.
- Väliverronen, Esa, and Iina Hellsten. 2002. "From 'burning library' to 'green medicine': The role of metaphors in communicating biodiversity." *Science Communication* 24(2):229–45.
- Van der Linden, Sander, Edward Maibach, and Anthony Leiserowitz. 2015. "Improving public engagement with climate change: Five 'best practice' insights from psychological science." *Perspectives on Psychological Science* 10(6):758–63.
- Van der Werff, Eleen, Linda Steg, and Kees Keizer. 2011. "Values, environmental identity and pro-environmental behaviour." Paper presented at the International Association for Research in Environmental Psychology. Exeter, UK. July 12-16.
- ——. 2013. "The value of environmental self-identity: The relationship between biospheric values, environmental self-identity and environmental preferences, intentions and behaviour." *Journal of Environmental Psychology* 34(1): 55-63.
- Varis, Piia. 2015. "Digital ethnography." In *The Routledge handbook of language and digital communication*, edited by Alexandra Georgakopoulou and Tereza Spilioti. New York: Routledge, pp. 55–68.
- Vibert, Elizabeth. 1996. "Real men hunt buffalo: Masculinity, race and class in British fur traders' narratives." *Gender & History* 8(1):4–21.

- Wald, Dara M., Elizabeth A. Segal, Erik W. Johnston, and Ajay Vinze. 2017. "Understanding the influence of power and empathic perspective-taking on collaborative natural resource management." *Journal of Environmental Management* 199(1):201-210.
- Warner, Koko, Mohamed Hamza, Anthony Oliver-Smith, Fabrice Renaud, and Alex Julca. 2010. "Climate change, environmental degradation and migration." *Natural Hazards* 55(3):689-715.
- Whitmarsh, Lorraine, and Saffron O'Neill. 2010. "Green identity, green living?: The role of pro-environmental self-identity in determining consistency across diverse pro-environmental behaviours." *Journal of Environmental Psychology, Identity, Place, and Environmental Behaviour 30*(3):305–14.
- Whorf, Benjamin Lee. 1940. "Science and linguistics." *Technology Review 42*(6):229–31, 247–48.
- Williams, Randall. 2015. *Green voters, gun voters: Hunting and politics in modern America*. PhD dissertation. Missoula: University of Montana.
- Williams, Raymond. 1983. *Keywords: A vocabulary of culture and society*. New York: Oxford University Press.
- Williamson, Lonnie. 1984. "The Indian land-grab." Outdoor Life 78 (March).
- ——. 1984b. "No laws for the Indians." Outdoor Life 33 (May).
- Woolard, Kathryn A. 2013. "Is the personal political?: Chronotopes and changing stances toward Catalan language and identity." *International Journal of Bilingual Education and Bilingualism* 16(2):210-224.
- Yale Climate Connections. 2019. "Conservative nonprofit leader David Jenkins says climate change should be priority for the right." *Yale Climate Connections* (August 5). Retrieved from https://www.yaleclimateconnections.org/2019/08/conservative-nonprofit-leader-david-jenkins-says-climate-change-should-be-priority-for-the-right/
- Yale Program on Climate Change Communication. 2019. "Young conservatives press GOP for climate reset." *Yale Program on Climate Change Communication* (July 26). Retrieved from https://climatecommunication.yale.edu/news-events/young-conservatives-press-gop-for-climate-reset/
- Yoder, Kate. 2019. "Why your brain doesn't register the words 'climate change." *Grist* (April 29). Retrieved from https://grist.org/article/why-your-brain-doesnt-register-the-words-climate-change/
- Zhang, Baobao, Sander van der Linden, Matto Mildenberger, Jennifer R. Marlon, Peter D. Howe, and Anthony Leiserowitz. 2018. "Experimental effects of climate messages vary geographically." *Nature Climate Change* 8(5):370–74.

- Zimman, Lal. 2015. "Creak as disengagement: Gender, affect, and the iconization of voice quality." Presentation at New Ways of Analyzing Variation 44. Toronto, CA. October 22-25.
- Zimman, Lal. 2017. "Gender as stylistic bricolage: Transmasculine voices and the relationship between fundamental frequency and /s/." *Language in Society* 46(3):339-70.
- Zuur, Alain, Elena N. Ieno, Neil Walker, Anatoly A. Saveliev, and Graham M. Smith. 2009. *Mixed effects models and extensions in ecology with R*. New York: Springer.

Appendix A: Transcription conventions

Falling intonation Period (.)

Rising intonation Question mark

(?)

Continuing intonation Comma (,)

Self-interruption Dash (-)

Short pause Two periods (..)

Deleted text Ellipsis (...)

Laughed speech At symbol (@)

Unintelligible speech Pound symbol (#)

Appendix B: Interview questions

- 1. Where did you grow up?
- 2. How did you get into hunting or fishing?
- 3. Did you have a mentor or role model that helped you learn?
- 4. How have you helped others get into hunting and fishing?
- 5. What do you think the hardest part is for people when they're learning to hunt and fish?
- 6. What is your motivation to hunt or fish?
- 7. What does it mean to be a sportsman (or woman)?
- 8. Can you describe an experience that was important to how you developed as a hunter?
- 9. What does conservation mean to you?
- 10. Do you think that's similar to how most sportsmen and women think about conservation?
- 11. Does the idea of conservation for hunters and fishers differ from how conservation is seen in other communities?
- 12. How do you think a sportsman(woman) should act to be a good conservationist?
- 13. How do you pass these ideas and ideals on to the new hunters and fishers?
- 14. What do you see as some of the biggest environmental problems facing the hunting and fishing community?
- 15. What do you think should be done about them?
- 16. A lot of people are talking about climate change these days, do you think climate change is something sportsmen see as a problem?
- 17. If so, what should be done about it?
- 18. How do you see hunters and fishers fitting into the bigger political context when it comes to conservation?
- 19. Is there anything else that you think it's important for non-hunters and fishers to know about sportsmen and conservation?

Appendix C: List of media institutions and non-governmental organizations

Aldo Leopold Foundation

Artemis Sportswomen

Field and Stream

American Hunter

Quality Deer Management Association

Backcountry Hunters and Anglers

Theodore Roosevelt Conservation Partnership

Conservation Hawks

American Hunter

Ducks Unlimited

Rocky Mountain Elk Foundation

Pheasants Forever

National Wild Turkey Foundation

Wild Sheep Foundation

Mule Deer Foundation

Sportsmen for Fish and Wildlife

Trout Unlimited

Wildlife Management Institute

National Deer Alliance

Bowhunter

Bowhunting

Izaak Walton League

Sports Afield

Cabela's Journal

National Wildlife Federation

Wide Open Spaces

MeatEater

Appendix D: Table of climate change texts

Title	Organization	Chronotopic stance	Purpose	Audience
Climate Change and Hunting	American Hunter (NRA)	positive present	satire	readers
Hunting's Greatest Threats	American Hunter (NRA)	negative present	urge readers to take action (not on climate change)	readers
Grave New World: Climate Change and the Value of Inquiry	Aldo Leopold Foundation	positive past	urge readers to take action	readers
What Would Aldo Leopold Do?	Aldo Leopold Foundation	positive past negative present	urge readers to take action	readers
Artemis Winter Reading List	Artemis Sportswomen	negative present positive past	urge readers to take action	readers
Climate Change Position Statement	Boone & Crocket Club	positive past negative present	urge readers to take action	readers, legislators
Facilitation of Hunting Heritage and Wildlife Conservation	Boone & Crocket Club	positive past negative present	propose governmental actions	legislators
What's Behind Maine's Disappearing Moose?	Bowhunting	negative present	report study results	readers
Deep Connection Between Hunting and Environmentalism	The Conservation Fund	positive past negative present	describe actions conservation groups are taking	readers
The Five Toughest Deer Hunting Scenarios	Deer and Deer Hunting	negative present	satire	readers
Shoot a Deer, Save a Moose	Deer and Deer Hunting	negative present positive past	report study results	readers
Challenges of Climate Change for Waterfowl and Wetlands	Ducks Unlimited	negative future	describe climate change effects	readers

Climate Change and Rising Tides	Ducks Unlimited	negative present negative future	describe actions conservation groups are taking	readers
Climate Change and Waterfowl	Ducks Unlimited	negative present positive past	describe actions conservation groups are taking	readers
Ducks in a Changing Climate	Ducks Unlimited	positive past negative present negative future	describe climate change effects; describe actions conservation groups are taking	readers
Ducks 2050	Ducks Unlimited	negative present positive past	urge readers to take action	readers
A Promising Way to Save the Duck Factory	Ducks Unlimited	positive past negative present positive present negative future	describe actions conservation groups are taking	readers
Ducks and Energy	Ducks Unlimited	negative present negative future	describe actions conservation groups are taking	readers
How Climate Change Affects Waterfowl: Flyaway Impacts	Ducks Unlimited	negative future	describe climate change effects	readers
A New Vision for Waterfowl	Ducks Unlimited	positive past negative present positive present negative future	describe actions conservation groups are taking	readers
Waterfowl in the Last Frontier	Ducks Unlimited	positive past negative present positive present	describe actions conservation groups are taking	readers
Wetlands in a Warmer World	Ducks Unlimited	positive past negative present negative future	describe climate change effects; describe actions conservation groups are taking	readers

A Change in the Weather	Field and Stream	positive past negative present negative future	urge readers to take action	readers
Five Crucial Conservation Goals for Sportsmen	Field and Stream	positive past negative present	urge readers to take action	readers
How You Can Fight Global Warming	Field and Stream	N/A	urge readers to take action	readers
Conservatives for Conservation not being heard?	Field and Stream (The Conservationist)	N/A	express opinion	readers
Conservation Roundup: Too Hot For Western Trout? and Backcountry Sportsmen Speak Out	Field and Stream (The Conservationist)	negative present negative future	report study results	readers
Guest Blog: One Man's Mission to Unite Sportsmen on Climate Change	Field and Stream (The Conservationist)	positive past negative present	urge readers to take action	readers
If Climate Change is real, I'll give you my Beretta	Field and Stream (The Conservationist)	positive past negative present	urge readers to take action	readers
Research Shows Climate Change Is Already Affecting Gamefish	Field and Stream (The Conservationist)	negative present	report study results	readers
Yellowstone Fish Kill a Warning Sign for the Future	Field and Stream (The Conservationist)	negative present negative future	report study results; urge readers to take action	readers
California Could Lose Three- Fourths of Its Salmonids in the Next 100 Years	Field and Stream (Field Notes)	negative present negative future	report study results; urge readers to take action	readers

Discussion Topic: Is It Time To Accept Man-Made Global Warming?	Field and Stream (Field Notes)	N/A	begin a discussion	readers
Discussion Topic: On Polar Bears, Climate Change, And Oil	Field and Stream (Field Notes)	N/A	begin a discussion	readers
Discussion Topic: Sportsmen and Global Warming	Field and Stream (Field Notes)	N/A	link to a video	readers
Discussion Topic: Where Would TR Stand On Global Warming, ANWR?	Field and Stream (Field Notes)	positive past	begin a discussion	readers
Feeling Angry? Blame Global Warming	Field and Stream (Field Notes)	negative present	report study results; satire	readers
Survival Of The Fattest: Climate Change Makes Upland Birds Evolve?	Field and Stream (Field Notes)	neutral present neutral future	report study results; begin a discussion	readers
Thank Ancient Hunters for Global Warming	Field and Stream (Field Notes)	neutral distant past	report study results; begin a discussion; satire	readers
Was Ronald Reagan an Environmentalist	Field and Stream (Field Notes)	positive past	begin a discussion	readers
Why Ducks May No Longer Fly South	Field and Stream (Field Notes)	neutral present	report study results; begin a discussion	readers
Watch Out for Bob Marshall, "Conservationist"	Field and Stream (A Sportsman's Life)	N/A	urge readers to take action	readers
Izaak Walton League Statement on Climate and Energy Actions	Izaak Walton League	negative present	urge readers to take action	legislators
Policy Pulse: Federal Government Releases Climate Assessment	Izaak Walton League	negative present negative future	describe climate change effects	readers

A Whole New Game: The effects of climate change on hunting, fishing, and outdoor recreation in Minnesota	Izaak Walton League	negative present negative future positive past	describe climate change effects	readers
Game Changers: Air Pollution, a Warming Climate, and the Troubled Future for America's Hunting and Fishing Heritage	National Wildlife Federation	positive past negative present	describe climate change effects; describe actions conservation groups are taking	readers
Hunter and Angler Lobby Days	National Wildlife Federation	positive past negative present positive present	describe actions conservation groups are taking	legislators
Fighting Climate Change	National Wildlife Federation	negative present negative future	urge readers to take action	readers
Study: Tick Bites and Climate Change are Shrinking Your Moose Herd	Outdoor Life	negative present	report study results	readers
Study: Global Climate Change Could Benefit Parasites, Harm Fish	Outdoor Life	negative present	report study results	readers
Here's What 7 Major Fish and Game Conservation Groups Have to Say About Climate Change	Outdoor Life	negative present negative past	describe actions conservation groups are taking	readers
Feeling the Heat: How Global Warming is Affecting Wildlife Habitats	Petersen's Hunting	positive past negative present	describe climate change effects	readers

New Pheasants Forever Chapters in California to Focus on habitat, Youth Education	Pheasants Forever	negative present	describe actions conservation groups are taking	readers
Decline of a Wilderness Icon	Sports Afield	positive past negative present negative future	urge readers to take action	readers
An Economic Colossus	Sports Afield	positive past	urge readers to take action	readers
Beyond Season's End	Sportsman's Coaltition	positive past negative present negative future	urge readers to take action	legislators
Climate Change in the West: Beyond Season's End	The Theodore Roosevelt Conservation Partnership (TRCP)	positive past negative present	urge readers to take action	readers
In the Arena	TRCP	positive past negative present	describe actions conservation groups are taking; urge readers to take action	readers
Sportsmen and Climate Change: A Long, Hard Look at Reality	TRCP	negative present	describe climate change effects; urge readers to take action	readers
Anglers deeply disappointed in climate change decision	Trout Unlimited	negative present negative future	describe climate change effects	readers; legislators
"Beyond Season's End" Provides Blueprint for Protecting Fish and Wildlife in a Changing Climate	Trout Unlimited	positive past negative present positive present	describe climate change effects	readers
Climate Change and the Future of Yellowstone	Trout Unlimited	positive past negative present	describe climate change effects	readers
Climate change	Trout Unlimited	negative	describe climate	readers

from an angler's perspective		present	change effects	
Impacts of climate change on tailwaters	Trout Unlimited	negative present	describe climate change effects	readers
New report explores how trout and salmon streams can be restored in the face of climate change	Trout Unlimited	negative present positive present	describe actions conservation groups are taking	readers
New Report Looks at Impact of Climate Change on Trout and Salmon	Trout Unlimited	negative present negative future	describe climate change effects; describe actions conservation groups are taking	readers
The Time for Band-aids Is Past	Trout Unlimited	positive past negative future	urge readers to take action	readers
N/A (Letter to representatives)	Washington Wildlife Net	positive past positive future	urge readers to take action	legislators
Global Warming Could Impact Upland Birds	Whitetails.com	positive present negative future	describe climate change effects	readers
Sportsmen's Groups Urge Action on Climate Change	Wildlife Management Institute	negative present positive past	urge readers to take action	legislators
Secretaries Form Wildlife and Hunting Heritage Conservation Council	Wildlife Management Institute	N/A	describe actions conservation groups are taking	readers