PATTERNS OF PERCEPTION, NEGOTIATION, AND CIVIC EPISTEMOLOGY: CONSTRUCTING KNOWLEDGE CLAIMS OF RISK ON CAPITOL HILL

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Jason Ryan Holley

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PATTERNS OF PERCEPTION, NEGOTIATION, AND CIVIC EPISTEMOLOGY: CONSTRUCTING KNOWLEDGE CLAIMS OF RISK ON CAPITOL HILL

Jason Ryan Holley, Ph.D.

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Socio-psychological and sociological studies of risk and risk communication have long contributed to a discrepancy between studies of message effects on the one hand and processes by which risk definitions (or messages) are constructed on the other hand. This discrepancy is most notable for the concepts of trust and credibility, where socio-psychological studies have focused on the processes by which individuals come to trust risk managers, view them as credible, or imbue them with expertise. Contrarily, studies in the sociological tradition have examined risk managers' efforts to construct and disseminate risk definitions and express credibility in knowledge claims about risk. Although overlapping in their use of terms, these two lines of research remain disconnected, and little progress has been made to reconcile these conceptual distinctions or consider how processes of risk message perception and social negotiations to produce risk messages may inform understandings of credibility, expertise, or what these cognitive and social processes reveal about broader parameters of learning within which knowledge claims are developed (i.e., a civic epistemology).

To address the discrepancy between socio-psychological and sociological approaches to risk and forms of credibility in the perception and production of risk messages, this study uses the context of the United States Congress, and specifically, two bipartisan organizations in the House of Representatives designed explicitly to investigate (and make claims about) issues related to climate change risks—the Select Committee on the Climate Crisis and the Climate Solutions Caucus. Taking an ethnographic approach, this study uses in-depth interviews with key

staffers (i.e., legislative specialists) affiliated with each organization, in-person observations of hearings, and analyses of public-facing materials to examine how climate-related risk information sources are deemed credible and used to develop (or inform) members' knowledge claims about risk. Findings reveal that legislative specialists are situated in environments that provide little time to assess the credibility of information sources, which requires them to rely on sources they consider familiar or established, or those with whom they have built a relationship over time. In turn, legislative specialists remain the primary gatekeepers of source credibility assessments as knowledge claims are developed with other staffers within or outside of one's office—providing them the ability to effectively "nest" credibility judgments within strategic negotiations about the substance of knowledge claims. Public-facing materials and Select Committee hearings reveal thematic expressions of credibility in knowledge claims that are distinct along partisan lines, which is contrary to the concealed processes of perception and negotiation that are politically indistinguishable. This private-public divide that limits partisan discourse to public-facing materials and sense-making rituals suggests a distinct culture of sense-making (i.e., a civic epistemology) that is unique to Capitol Hill. Overall, processes of credibility nesting pose implications for understanding the points at which risk definitions are (re)framed and provide a formative connection between socio-psychological and sociological approaches to studying risk communication.

BIOGRAPHICAL SKETCH

Jason R. Holley grew up in the desert southwestern United States where he personally witnessed the environmental, social, and political issues associated with severe, prolonged drought. As an inherent storyteller, he took interest in issues of drought and associated risks that highlighted the tensions between science and politics that often permeate broader climate-related policy discussions. Jason holds B.A. and M.A. degrees from the University of Nevada, Las Vegas (UNLV) in Film and Journalism and Media Studies. During his graduate studies at UNLV, he explored theories of risk, science, and environmental communication that culminated in a thesis project on portrayals of climate change in the largest local news publication of his hometown, the *Las Vegas Review-Journal*. As a graduate student at Cornell University, Jason has continued to study forms of risk communication in contexts where policies are developed, often towards the end of exploring where (and how) theoretical gaps between social psychology and sociology may be bridged.

ACKNOWLEDGMENTS

Writing (and completing) a dissertation is no small feat, and I couldn't have done so without the support of key individuals.

The scholarly giants on my Special Committee—Dr. Katherine McComas, Dr. Bruce Lewenstein, Dr. Stephen Hilgartner, and Dr. Laura Rickard—have influenced and inspired me in more ways than I can describe in this space. I consider these individuals my intellectual mentors who have guided me through the process that has culminated in this work. Of particular note is the unwavering support I have received from Dr. Katherine McComas, who believed in my work and outlandish ideas even before I became a Cornellian and after I ventured to Washington DC to explore the policymaking processes on Capitol Hill. The work of my committee members often remained in the background of my mind when I had the privilege to participate in (or witness) confidential meetings that touched on issues of risk, science, and politics. Their influence will remain with me long after I leave Cornell.

My wife, Sara, who I met while completing my graduate work at the University of Nevada, Las Vegas, is my rock who has kept me sane and calm while completing this dissertation. She has exuded nothing short than the patience of a patron saint who has kept me focused on the big picture rather than the rabbit holes in which I tend to fall.

My parents, Jerry and Christine, provided considerable forms of support that were instrumental in the completion of this work. I am lucky to have them as parents and forever grateful for their help along the way.

The individuals who I met in Washington DC, both on and off Capitol Hill, opened doors through which I never thought I would walk. They helped provide critical access, ideas, and even criticisms that I considered along the way. To them and my anonymous participants, thank you.

PREFACE

This study takes place in a highly political environment, but it should not be construed as a politically motivated study. In the age of so-called "fake news," tribalism, and overall harsh political rhetoric, policy work on scientific and technical issues that attempts to address risk issues persists. And the process by which risk messages take shape within these environments is my primary interest. I have long been intrigued by the relationships between politics, science, and risk communication, and this work is but one manifestation of this interest—albeit in a relatively high-stakes environment where federal law is made.

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CHAPTER 1

INTRODUCTION

The concept of risk has long fascinated scholars in the social sciences from a wide range of perspectives, including psychology, sociology, economics, management, communication, and others. One need not look further than the diversity of studies published in the journal *Risk Analysis* or the various panels considered at the annual meetings of the Society for Risk Analysis to underscore this point. Indeed, such transdisciplinary foci are not merely a coincidence: risk issues serve to raise seemingly endless questions about how they come to be, what we think about them, their potential impacts on society at large (economic or otherwise), and how they should be managed. The emergence of complex technologies—such as nuclear power and their necessary machineries of production and control—provides one example of the myriad questions risk issues might raise. Not only could we examine how and whether the complexities of such systems create unforeseen risks, but the social processes by which particular risks are assessed and defined, how individuals perceive such risks, and how the institutions operating nuclear facilities may seek to build public trust through communication initiatives (c.f., Beck, 1986, 1987, 1992; Besley & McComas, 2013, 2015; Lash, Szerszynski, & Wynne, 1996; Otway & Wynne, 1989; Wynne, 1982, 1989, 1992). While each of these questions would likely draw from distinct disciplinary traditions, they each converge at the nexus of risk and society, and as such, they transcend specific levels of analysis as issues are interpreted, defined, and communicated.

Risk issues often raise questions that cut across disciplinary boundaries, but they may also result in focused research agendas that inhere conceptual parameters on the questions one may raise. In the case of social science research, a sizable portion of scholars have adopted psychometric or hypothetico-deductive approaches to shed light on the antecedents of key

variables, including (but not limited to) perceived risks and benefits of new initiatives, trust in others to manage risks, perceived credibility of information sources, the perceived procedural fairness of risk management initiatives, and motivations or intentions to alter behaviors or support for risk-related policies (e.g., Holley, McComas, & Hare, 2018; Löfstedt, 2005; McComas, Schuldt, Burge, & Roh, 2015; McComas, Trumbo, & Besley, 2007; Trumbo & McComas, 2003, 2008). On the other hand, social scientists have also used sociological or inductive approaches to examine the inherent risks within industrialized Western societies, how knowledge claims about risk are created and performed, and how forms of control designed to mitigate risks—such as changes to policies, legislation, or technologies—involve decisions and social processes that are inevitably tied to contextual politics and the social expectations therein (Berner, 2011; Enticott, 2008; Hilgartner, 1992, 2000; Jasanoff, 2002, 2004, 2005, 2011; Krieg, 1995; Smith & Howe, 2015; Tierney, 1999; Warner, 2007). Both approaches have addressed the generative and contested concepts of trust, credibility, and expertise in terms of individual perceptions and social interactions; however, key distinctions remain, as well as the disciplinary boundaries within which questions have been pursued.

Theoretical Context

Trust, credibility, and expertise are notable concepts in socio-psychological and sociological studies of risk, in part due to their explanatory power in predictive models of risk perception or their roles in the social processes around the construction of scientific or technical knowledge claims about risk (c.f., Earle, 2010; Hilgartner, 2000; Peters, Covello, & McCallum, 1997). For studies in the socio-psychological tradition, trust and credibility are often used in predictive models of risk perception, usually as they relate to the perceived ability of an institution or individual to manage risk based on processing cues such as perceived value

similarity (for trust) or perceived trustworthiness and competence (for credibility) (McComas, 2006). On the other hand, sociological studies of credibility and expertise tend to examine risk managing institutions and the social processes by which risk managers come to negotiate identities of expertise with non-experts or use explicit cues of expertise (such as affiliation with a prestigious university) as a persuasive strategy to advance knowledge claims about risk (Hilgartner, 2000; Parthasarathy, 2010). Scholars from this perspective may also consider the networks of social and technical entities to which causes of risk may be assigned, and as such, examine how new risk definitions may be constructed and affiliated with "risk objects" (Hilgartner, 1992).

Taken together, socio-psychological predictive studies of risk perception and sociological descriptive analyses of risk construction may overlap in their use of terms, but they remain conceptually distinct: Socio-psychological studies are predictive, primarily concerned with the cognitive antecedents of trust and credibility as they relate to perceptions of risk, and consider risk as defined *a priori*. Contrarily, sociological analyses of risk managers and institutions are generally descriptive, focused on the social negotiations by which risk definitions are constructed, or how efforts to express credibility and expertise involve dramaturgical elements of persuasion and performance. Little progress has been made to reconcile these distinctions or consider how the relationship between processes of individual perception of risk messages and social negotiations of producing risk messages may inform understandings of credibility, expertise, or what these cognitive and social processes reveal about broader cultural parameters of learning within which knowledge claims are developed. As such, this dissertation attempts to provide a conceptual bridge between socio-psychological and sociological approaches to risk to

examine patterns of learning across distinct social boundaries in a unique cultural/political context.

Applied Context

To examine processes of perception and social negotiation, this dissertation engages a context in which individuals are expected to both interpret and construct knowledge claims about climate change risks: Capitol Hill. Specifically, I examine the recently-formed Select Committee on the Climate Crisis in the U.S. House of Representatives (hereinafter referred to as the Select Committee) in addition to the bipartisan Climate Solutions Caucus (also in the House). At the time of this writing in the 116th Congress, the Select Committee and the Climate Solutions Caucus are the only organizations in Congress that involve the active participation of both Republican and Democratic members on climate-related discussions, hearings, or other legislative efforts. As I discuss further below, this provides a unique opportunity to examine and compare patterns of perception, negotiation, and cultural parameters of learning across ideological boundaries concerning a historically contentious issue.

The Select Committee was created on January 9th, 2019, amid passage of House Resolution 6 (along a partisan-line vote of 235 to 192) that established the rules for the 116th Congress. The Select Committee on the Climate Crisis is the first select committee to address human-caused climate change since 2011, and it is designed explicitly to interpret and construct knowledge claims about climate change risks:[1] House Resolution 6 (2019) states the Select Committee's "sole authority … shall be to investigate, study, make findings, and develop recommendations on policies, strategies, and innovations to achieve substantial and permanent

[1] The Select Committee on Energy Independence and Global Warming existed between 2007 and 2011 and sought to address emissions reductions and decreased reliance on foreign energy sources. See House Resolution 202 (2007) and House Resolution 279 (2009).

reductions in pollution and other activities that contribute to the climate crisis …" (p. 43). Additionally, the resolution restricts the Select Committee's jurisdiction from taking any "legislative action on any bill or resolution," which formally designates the body as a congressional mechanism to communicate climate change risks and indeed even identify "other activities"—besides those causing pollution—that contribute to human-caused climate change (p. 43).

The Climate Solutions Caucus (hereinafter referred to as the CSC) was created in February of 2016 as a way for participating Republican and Democratic House members to find points of agreement on legislation addressing the causes and consequences of climate change (Citizens' Climate Lobby, 2019). Organization of the caucus was a collaborative effort between its founding Chair and Co-Chair (former Rep. Carlos Curbelo, R-FL and Rep. Ted Deutch, D-FL) and the Citizens' Climate Lobby, an external advocacy group that seeks to (among other things) encourage members of Congress to advance bipartisan climate change legislation. The caucus is similar to other issue-based caucuses in Congress, such that their organization is not formally sanctioned by congressional rules, nor is participation a requirement for any particular member (Eckman, 2019).

Taken together, the Select Committee and the CSC provide sites within Congress to examine how scientific and technical knowledge claims about risk are both interpreted and created among individuals who are not required to adhere to standards of peer-review, nor are they subject to any standards of empirical inquiry other than potential underlying pressures that may be due to contextual professional norms (i.e., political party affiliation).

Theoretical Relevance of the Context

The context of Capitol Hill provides a unique cultural setting in which to examine how individuals interpret and construct knowledge claims about risk. Vincent (1990) describes Capitol Hill as similar to a small town, "with its own inhabitants, rules, norms, and social processes" where congressional offices advocate for their "communities of origin" (p. 61). And Whiteman (1995) equates congressional offices to small businesses in such a town, given that priorities, interests, hierarchical structures of staff, and even elements of office décor vary considerably across members irrespective of their political affiliations. Given the diversity of interests and priorities at hand, the culture of Congress is necessarily one that encourages information exchange and collaboration to identify common points of agreement on which members may advance policy proposals, whether or not they cross partisan lines (Vincent, 1990). This is not to diminish the role of politics in the current Congress or the emergence of what some call political "tribalism" (i.e., the rejection of bipartisan collaboration, Mann & Ornstein, 2016) but to acknowledge that Capitol Hill is fundamentally an institution of social processes involving interactions with colleagues, constituents, special interest groups, lobbyists, and others, which also exposes members and their staffs to innumerable sources of information from which decisions may be made or policy positions formed (Akerlof, 2018; Weiss, 1989; Whiteman, 1995).

While previous studies have mapped communication networks in Congress or the uses of scientific information in policy (e.g., Akerlof, 2018; Whiteman, 1995), little effort has been made to advance knowledge on *why* staffers believe certain risk information sources are more credible than others, *how* these information sources are discussed between staffers, and the extent to which patterns of interpretations and negotiations remain consistent across partisan

boundaries. My intent to fill this gap is motivated by potential contributions to theory as they relate to bridging the conceptual discrepancies between socio-psychological and sociological approaches to risk. In contrast, it is not my intent to examine processes of interpretation and negotiation for purposes of advancing any legislative initiatives or advocacy efforts affiliated with any political party. With this in mind, I situate this study in the literatures on risk perception, construction, and communication, and discuss the conceptual discrepancies between socio-psychological and sociological approaches to risk for which the context of Congress may serve as a bridge.

The Importance of Congressional Staffers as Primary Study Subjects

Congressional staffers are essential information brokers for the development of federal policy in the legislative branch (Akerlof, 2018; Bimber, 1996; Malbin, 1980; Smith 1988; Whiteman, 1995). Congressional offices generally employ legislative correspondents, assistants, and directors, who specialize in issues that range from health care to energy to infrastructure or transportation (Petersen, 2012). Yet, staffers often hold little formal or technical training on many of the issues about which they help draft legislation and they generally hold their positions (depending on the job function) between one and three years on average (Hall & Deardorff, 2006; Petersen & Eckman, 2016; Weiss, 1989). As such, staffers often rely on "substantive lobbyists" who can summarize and provide guidance on complex issues while simultaneously offering recommendations that benefit client interests (Bauer, Pool, & Dexter, 1972; Hojnacki & Kimball, 1998, 1999). Staffers have trended towards this form of informational reliance on lobbyists to the extent that some argue lobbyists act as a form of adjunct staff or a "legislative subsidy" (Hall & Deardorff, 2006). Additionally, some evidence suggests that congressional staffers avoid consulting only academic peer-reviewed studies because there is no clear

ideological bias for which staffers can account (Akerlof, 2018; Weiss, 1989). Rather, Weiss (1989) notes staffers generally prefer to examine peer-reviewed studies alongside reports that are explicitly affiliated with an ideological position or institution for which a "correction factor" may be applied. Staffers' general reliance on lobbyists' summations of complex issues or their preferences to consult ideological reports alongside peer-reviewed literature suggests that contextual cues are particularly important indicators on which assessments of credibility are made. And this particular population provides an environment to examine how staffers' uses of such cues relate to their individual processing and social negotiations towards developing knowledge claims about climate change risks.

Research Objectives

The overall objective of this dissertation is to examine the cognitive and social functions of credibility and expertise among individuals who both interpret and construct messages about climate change risks and, in turn, assess the extent to which these processes of meaning-making are consistent across distinct professional or ideological expectations (specifically those of one's political affiliation). This includes observing (a) how Republican (minority) and Democratic (majority) staffers of the Select Committee and CSC consult sources of risk information (such as lobbyists, think tank representatives, colleagues within and outside of the Select Committee or CSC, or pre-packaged forms of risk information), (b) how staffers assess the characteristics of such risk information sources, and (c) how staffers' source assessments relate to their uses of information in negotiations with colleagues towards the end of developing public-facing knowledge claims of risk. In turn, this study will examine how these processes indicate parameters of learning (i.e., a broader civic epistemology) in which knowledge claims are interpreted and developed (Jasanoff, 2005) and whether such processes transcend professional

norms between the minority and majority staffs associated with the Select Committee and the CSC. As such, this research may be summarized in the following three main objectives:

1. To examine how staffers associated with the Select Committee and CSC assess source credibility of climate change risk information by use of contextual cues (i.e., attributes of messages or the environments in which messages are transmitted) and source characteristics (i.e., whether a message is official/unofficial, formal/informal);
2. to examine how the perceived credibility of climate change risk information relates to social negotiations involved in the development of knowledge claims among staffers of the Select Committee and CSC, in addition to the public-facing claims and messages that result from such negotiations; and
3. to consider how patterns of cognition, social negotiation, and expressions of public-facing knowledge claims indicate parameters of learning in the form of civic epistemology, and whether such patterns of learning remain consistent across partisan boundaries.

This approach contributes to socio-psychological and sociological understandings of risk as it relates to theories of credibility, expertise, and the parameters of learning (i.e., civic epistemology) in which knowledge claims are developed in the following two ways: (1) It links the cognitive (perceptual) and social (constructivist) functions of credibility and expertise in a single site of inquiry where messages of risk are both interpreted and produced by the same individuals; and (2) it maps the processual distinctions between cognition and social negotiation as they relate to credibility and expertise in terms of whether these patterns of understanding diverge across discrete ideological boundaries (i.e., between Republican and Democrat staffers of the Select Committee and the CSC). Although findings may not be necessarily generalizable

to large populations, this study uses multiple methods to triangulate findings for high dependability and appropriate transferability to other contexts.

Research Overview

Methods. This study used mixed methods to collect varying forms of qualitative data on (a) staffers' perceptions of information sources, (b) their development of knowledge claims, and (c) members' expressions of credibility and knowledge claims in public-facing materials or hearings. These methods include semi-structured in-depth interviews (n = 23), *in situ* field observations of hearings (n = 7) and analyses of public-facing materials from the Select Committee and CSC (such as press releases, websites, letters, and hearing transcripts, among others) (n = 576). Interviews, observations, and document analyses were conducted concurrently between October 2019 and February 2020. This work adopted an ethnographic approach to examine the perceptions, negotiations, and performances of knowledge claims across staffers, materials, and settings of the Select Committee and CSC (Denzin, 1989; Geertz, 1973; Holloway, 1997; Liebow, 2003; Schwandt, 2001) and the use of grounded theory to identify themes from these data (Glaser & Strauss, 1967). In turn, multiple units of analysis across the Select Committee and CSC were considered that include both individuals (in terms of their perceptions of information sources) and groups (in terms of the development of knowledge claims about risk)—otherwise known as a multiple-case embedded design (Yin, 2009). Multiple sources of data served to provide a "chain of evidence" (Yin, 2009, p. 122) that enhanced the credibility, transferability, dependability, and confirmability of this work (Guba, 1981).

Outline of chapters. The coming chapters provide an overview of the patterns of perception, negotiation, and performance through which forms of risk information are both interpreted and expressed.

Chapter 2 examines the conceptual discrepancies between socio-psychological and sociological approaches to risk. First, I consider previous efforts to examine risk communication from a multidisciplinary perspective specifically through the social amplification of risk framework (SARF) (Kasperson, Renn, Slovic, Brown, Emel, Goble, Kasperson, & Ratick, 1988). While I acknowledge the fruitfulness of this approach in recent decades of risk research, I also note its failure to consider forms of constructivism concerning the conceptual stability of risk definitions across individuals and groups, which has come define much risk research in the sociological tradition (e.g., Hilgartner, 1992). In turn, I discuss key concepts of risk communication in the traditions of social psychology and sociology (specifically science and technology studies) that may serve to explain processes of message perception and knowledge claim developments on Capitol Hill. For perceptions of risk messages, concepts include (a) forms of cognitive processing (i.e., theories of motivated reasoning and forms of cognitive processing) (e.g., Eagly & Chaiken, 1993; Petty & Cacioppo, 1986; Tetlock, 1981), (b) the roles of trust and credibility in the formation of risk perceptions or perceived credibility of information sources (e.g., Earle & Cvetkovich, 1995; McComas & Trumbo, 2001; Meyer, 1988), and (c) how forms of risk information sources relate to risk perceptions (e.g., Bühler & Kohler, 2003; Ford & Kaphingst, 2009; Rickard, 2012). For the construction of risk messages, I review the literature on the cultural parameters in which large bureaucracies come to make sense of risk issues or disaster events (i.e., civic epistemology), and contemplate the application of this approach to the specific context of the Select Committee and CSC on Capitol Hill (Jasanoff, 2005; Miller, 2004, 2008; Tironi, Salazar, & Valenzuela, 2013). Considering the literature reviewed in this chapter and their potential application to the research site, I offer a conceptual model of sense-making on Capitol Hill that accounts for the basic procedures by which messages are perceived and

knowledge claims are constructed towards the end of informing public-facing "performances" (Hilgartner, 2000). This model does not necessarily serve to hypothesize relationships or phenomena, but provide a framework of fundamental processes that seem to occur based on the existing literature. I follow this framework with six research questions that address the core aims of this work.

Chapter 3 reviews the methods I used for this work. As an ethnographic multiple-case embedded design, I first provide a rationale for this approach and briefly review the qualifications that inhere theory building from case study data. I then describe the context and provide a detailed overview of the Select Committee and CSC that includes anonymized organizational maps of each group from which participants were selected and interviewed. I then review the procedures by which I gained familiarity with the norms of behavior on Capitol Hill and access to the research site, in addition to the network I developed that afforded access to a proprietary database of staffer emails. Next, I discuss "mixed methods" and the procedures I used for sampling (of participants, materials, or observational notes) and conducting interviews, observations, and analyses of public-facing materials. At the conclusion of this chapter, I offer analogs to what may be normatively categorized as reliability and validity to appropriately qualify the generalizability of this ethnographic study, in addition to an overview for referencing specific staffer interviews while maintaining anonymity.

Chapter 4 explores how staffers use contextual cues (i.e., attributes of messages or environments) to assess the credibility of information sources about climate change risks (RQ1). To further probe assessments of source credibility, I next examine the relationship between staffers' professional norms/expectations and their uses of contextual cues to assess information source credibility (RQ2). Finally, I consider how information source characteristics (e.g.,

whether a message is written versus an interpersonal interaction) relate to staffers' uses of contextual cues and their perceptions of source credibility (RQ3).

Chapter 5 examines the relationship between information source perceptions and the processes by which staffers develop knowledge claims of risk that inform public-facing materials or members' statements (among others). Specifically, I consider how contextual cues, information source characteristics, or perceived source credibility are discussed in social negotiations to develop knowledge claims about climate change risk (RQ4).

Chapter 6 takes an outsider's perspective by considering how Select Committee and CSC members express credibility and expertise in public-facing messages that contain knowledge claims about climate change risks, in addition to whether these expressions diverge across channels and partisan boundaries (RQ5). To preface this analysis, I review my approach towards document analysis (and specifically ethnographic content analysis) from which I discovered themes and selected materials. In the latter half of the chapter, I provide additional context to public-facing expressions of credibility and knowledge claims by comparing two thematically distinct hearings I attended during the data collection process (in addition to my experiences of the sites for each event).

Chapter 7 considers the data reviewed in previous chapters to examine whether patterns of perception, negotiation, and public-facing expressions are distinct across partisan boundaries or indicative of a particular sense-making culture (i.e., a civic epistemology) that may be unique to Capitol Hill (RQ6). I examine points of similarity and difference across partisan lines according to Jasanoff's (2005) dimensions of learning that seem to encompass sense-making cultures. I do not invoke Jasanoff's (2005) parameters of learning to question their existing

parameters, but to consider whether differences in sense-making are most appropriately demarcated as distinct between Democrats and Republicans.

Chapter 8 discusses the implications of this work for existing literature on information source perceptions, civic epistemology, and the broader conceptual (dis)connection between socio-psychological and sociological approaches to risk communication this dissertation sought to explore in the first place. In turn, I offer a contextualized processual approach for the study of risk sense-making that features the key finding of this work (credibility nesting) on which future transdisciplinary studies of risk communication may build. Given the site of this research and the concealed processes of perception and negotiation I describe, I also offer a general outline of practical implications for those seeking to affect the legislative process. Towards the end of this chapter, I offer my thoughts on the strengths and limitations of this work, in addition to recommendations for future research and my concluding thoughts.

CHAPTER 2

SOCIO-PSYCHOLOGICAL AND SOCIOLOGICAL APPROACHES TO RISK AND THEIR APPLICATION TO CAPITOL HILL

Perceptions of risk involve intuitive judgments, biases, and cognitive shortcuts that occur in relation to individual, social, cultural, and contextual forces (e.g., Fischhoff, Slovic, Lichtenstein, Read, & Combs, 1978; Frewer, Howard, Hedderley, & Shepherd, 1996; Grasmück & Scholz, 2005; Ho, Scheufele, & Corley, 2010; Slovic & Peters, 2006; Slovic, 1993; Trumbo, 1999). To this degree, evaluations of risk are inevitably affected by the imperfections of human judgment that almost always diverge from models of the "rational" decision-maker (Fischhoff et al., 1978; Slovic, 1993). And recent work has found that the nature and context of information sources may influence individuals' judgments about the credibility or trustworthiness of risk information and in turn the evaluation of risk itself (McComas & Trumbo, 2001; Peters et al., 1997; Trumbo & McComas, 2003, 2008). In this light, socio-psychological and sociological studies have challenged the notion of risk as purely a calculation of probability to an idea whose interpretations are circulated through social environments that inhere individual cognitive biases and organizational norms (Burgess, 2015; Freudenburg, 1993; Kasperson et al., 1988). Yet, as noted below, socio-psychological studies of risk examine perception, cognition, and how these processes relate to the social environments in which risk is experienced; whereas sociological analyses examine the social processes around the construction of knowledge claims about risk and risk definitions—differences that extend to fundamental junctures of assumption and philosophies of knowledge about risk that are most clearly demarcated along disciplinary boundaries.

The social turn towards risk is especially important for examining the context of Capitol Hill. Staffers associated with the Select Committee must develop recommendations to reduce

pollution and identify "other activities" that contribute to human-caused climate change. Similarly, staffers associated with the CSC are expected to develop forms of legislation that address the causes and consequences of climate change impacts. For both organizations, majority and minority members (and their staff) must work to construct notions of climate change risk(s) that require evaluations of information and information carriers that may range from internal staff meetings to external media reports, scientific manuscripts, or even "expert" acquaintances (e.g., lobbyists) beyond the halls of Congress. Additionally, this practice must also consider the performative aspect of risk construction, not only in terms of communicating (or framing) official messages from the Select Committee or members of the Climate Solutions Caucus in press releases or during hearings, but as a process of evaluating information on the extent to which it adheres to the ideological parameters of the majority and minority parties (Entman, 1993, 2007).

Throughout the following chapter, I first examine the conceptual discrepancies between socio-psychological and sociological approaches to risk that have largely kept these literatures bounded within their distinct disciplinary traditions. Next, I draw on key theories of perception and social negotiation that may illuminate how Select Committee and CSC staffers both interpret and construct knowledge claims about climate change risks. I then consider how patterns of perception and social negotiation may indicate a broader cultural parameter of learning in which Select Committee and CSC staffers (on both sides of the aisle) interpret and construct knowledge claims about risk. Finally, I expound on the context of Capitol Hill and how theories of cognition and social negotiation are relevant to this setting. To note, my aim to explore the conceptual discrepancies between socio-psychological and sociological approaches to risk is not to propose an overarching unifying framework, but to clarify the fundamental assumptions about risk within

each tradition that have contributed to the difficulty of their simultaneous application to various contexts. In turn, I seek to explore a conceptual path on which studies may consider processes of perception and constructivism without attempting to muddle in the precarious waters of grand or unifying theories (Mills, 1959).

Discrepancies between Socio-Psychological and Sociological Approaches to Risk

Efforts to connect the cognitive and social processes of risk are not new to the field of social science risk research. Amid the emergence of multi-disciplinary studies on risk in the late 1980s, Kasperson assembled a group of colleagues from the fields of cultural geography, sociology, and psychology in order to create an overarching framework of risk that could integrate multiple disciplinary perspectives and provide a sense of cohesion in the field of risk (Duckett & Busby, 2013). The result was Kasperson's et al. (1988) social amplification of risk framework (SARF), which uses the metaphor of electronic signal transmission to consider the role of cognitive processing in relation to the social environments in which perceptions may be amplified or attenuated. Kasperson et al. (1988) argue that various social environments—be they interpersonal interactions or exposure to media—act as amplification stations that may include, "… [t]he technical assessment of risk … [t]he risk management institution … news media … [a]ctivist social organizations … [o]pinion leaders within social groups … personal networks of peer and reference groups … [and] [p]ublic agencies" (Kasperson et al., 1988, p. 181). Inherent in such amplification stations are value dispositions or interpretive (framing) mechanisms that distill, rather than enhance, risk information and ultimately judgments about it (such as whether or not the risk is tolerable). Additionally, the SARF model considers "secondary impacts" of socially amplified or attenuated risk perceptions, which could affect economic activity, political

agendas, risk management systems, and/or changes to formal procedures for attending to potential injuries should an incident occur.

Scholars have used the SARF model to examine the relationship between social interactions and risk perception in terms of attending public meetings or exposure to crises (such as possible health epidemics) with findings supporting the general notion that amplification stations may alter (and typically amplify) understandings of risk (Lewis & Tyshenko, 2009; McComas, Lundell, Trumbo, & Besley, 2010). For example, McComas et al. (2010) examined risk perceptions of individuals who attended community meetings on cancer clusters that included information from local health officials on cancer rates in the area. In their self-descriptions of how the meetings affected their concern for potential cancer clusters, participants indicated their concern had grown in part due to health officials' information alone, but primarily due to what McComas et al. (2010) termed as symbolic aspects of official risk messages—i.e., beliefs about flaws in the official data; previous knowledge about cancer clusters; and previous experiences with and attitudes about cancer.

While generative, the SARF model has received considerable amounts of criticism for suggesting a form of proportionality of effects in relation to the magnitude of calculated risk (Rayner, 1988); privileging scientific or expert assessments of risk over those of non-experts (Rip, 1988); and most notably, objectifying risk definitions and risk objects as stable and unchanging over time and across social groups (Hilgartner, 1992). Scholars in the field of sociology and specifically the tradition of science and technology studies (STS) argue that processes of claiming knowledge (particularly about risk) occur within networks of entities that are both human and non-human (i.e., sociotechnical) from which objects of risk are "emplaced" as needing formal management controls (Hilgartner, 1992; see also Callon, 1984; Latour, 1983;

Riles, 2000; Star, 1991). Termed as the system/network approach to the social construction of risk (Hilgartner, 1992), this perspective considers the underlying social and technical connections between risks, risk objects, and the actors or entities involved in the processes of defining or controlling risk objects. Rather than view risk as an objective truth that may be interpreted differently across individuals and groups, Hilgartner (1992) uses the system/network approach to understand how risks become affiliated with distinct objects of causation (i.e., risk objects) and the extent to which such connections may shift or face disruption in light of new data or insight about the issue at hand. Any entity or actor may be conceptually connected to risk within a conceptual network: one may attribute car accidents to anything from alcohol consumption to "inadequate driver education programs" that are the result of funding cuts for such programs (Hilgartner, 1992, p. 42). Aside from what Hilgartner (1992) notes as "chain terminating objects"—such as "acts of God" or "bad luck"—the chain of causal attribution may be endless within conceptual networks of risk that come to define the objects of potential harm (p. 42).

The emplacement and displacement of risk objects in the system/network model is not an abstracted process; rather, it involves intense struggles among dispersed and heterogeneous actors, such as engineers, policymakers, scientists, and other specialists, from which the riskiness of objects fluctuates along a continuum with emplacement on one end and displacement on the other. Elaborating on the example of driving and the sociotechnical network of cars and drivers, Hilgartner (1992) refers to Ralph Nader's (1965) book, *Unsafe at Any Speed*, which details General Motors' widely-sold Corvair and its unfortunate tendency to rollover and lose control due to faulty suspension in the rear axle. Throughout the book, Nader (1965) uncovers a risk network ranging from inappropriate engineering choices to a corporate obsession with cost

reduction to a difficult bureaucracy that discouraged leadership (among others). These factors culminated in a dangerous design that made safe driving impossible, and notably, displaced "driver failure" as the primary cause of accidents in the Corvair. Such displacement led Congress to support legislation to formally regulate vehicle design and the automotive industry at large, which created a new network of control for the risk objects emplaced in Nader's (1965) account, specifically around the Corvair's oversteer and General Motors' problematic business practices.

The conceptual distinctions between socio-psychological and sociological approaches to risk lie at the assumed stability of risk definitions rather than the existence of risks independent of those who perceive or measure them. Whereas both approaches employ a form of social constructivism, socio-psychological approaches—including the SARF model—consider risk assessments as objectively stable and remain concerned with how individuals (i.e., the public) construct meanings of risk across groups and over time. Contrarily, sociological approaches question the social and political processes involved in the development of risk assessments as they relate to scientific and technical knowledge claims about risk, and thereby consider risk definitions as unstable and subject to change over time. While some have suggested these discrepancies may be attributed to differences in assumptions related to realism versus relativism (Duckett & Busby, 2013), this is not necessarily the case: neither socio-psychological nor sociological (STS) analyses of risk reject the existence of objective truth *per se* about the nature of risks or that the existence of risk is open to debate. Rather, these two approaches are merely concerned with the construction of meanings among (a) those who are subject to risk assessments from producers of knowledge (i.e., the socio-psychological approach) (e.g., Earle, 2010; McComas, 2006), and (b) producers of knowledge who construct and disseminate scientific and technical meanings of risk through official channels, such as peer-reviewed journal

articles, press releases, or government reports and hearings (Hilgartner, 2000; Jasanoff, 2002, 2005; Latour & Woolgar, 1979).

Circumstances in which individuals are both subject to assessments of risk and produce assessments of risk are somewhat rare, but they have been examined previously among science advisory boards in the National Academy of Sciences (NAS). Here, Hilgartner (2000) details the development of knowledge claims among members of science advisory boards who authored three reports on diet and health—two that were published (*Toward Healthful Diets*, 1980; *Diet Nutrition, and Cancer*, 1982) and one that remained unpublished amid internal controversy over the report's recommendations (termed as the *Draft of the Tenth Edition of the Recommended Dietary Allowances*, 1985). Using the conceptual lens of performance, Hilgartner (2000) examines the NAS, its advisory boards, and advisors as actors within the dramas that take place as reports are developed on the controversial topics of diet and health. This includes the role of critics who themselves shift from audience members to participants in the struggle over the control of how information is organized and interpreted within private, internal deliberations and subsequently disclosed to the public as specialized claims with conceptual stability. Just like actors in a play, science advisors employ techniques of rhetorical persuasion, stage management, and projections of character identity in their efforts to systematically construct scientific expertise. Yet, Hilgartner (2000) notes that audiences do not always completely suspend disbelief or become fully immersed in one's performance, which only increases the difficulty of fully constituting scientific authority when making claims of specialized knowledge about risk. As such, Hilgartner (2000) finds that science advice and the reports thereof are not merely presentations of information that are credible *a priori*, but deliberate efforts of careful

information selection that shed light on the processes of constructing credibility and knowledge claims about risk.

While Hilgartner's (2000) analysis considers the processes by which science advisory board members both interpret and develop new interpretations of scientific knowledge about health risks, the work does not consider the role of cognition in this process, specifically in terms of advisors' perceived information source credibility as it relates their negotiations of knowledge claims in backstage deliberations. This limitation is primarily due to the restricted amount of evidence considered (NAS advisory reports) given that analyses of information source perceptions would have required in-person observations at the time the reports were authored. It may also be due to a disciplinary tradition to eschew analyses of cognition that may be un-sociological and thus potentially not useful in the broader epistemology of STS—similar to practices of boundary work that have occurred in other fields of science (Gieryn, 1983). This leaves potentially generative questions unanswered on how the construction of knowledge claims may relate to perceptions of information sources that science advisors (or other specialists) must consult during the process of constructing knowledge claims about risks. Such questions are especially important among individuals charged to make claims about risk (such as members of Congress) who may hold no professional or scientific fidelity to epistemological checkpoints such as peer-review. Although no research has yet crossed these disciplinary distinctions and traditions in this manner, key variables, trends, and cognitive processes remain relevant to formations of risk perceptions, such as the role of dual processing, information source credibility, how source characteristics (such as the dissemination of messages from official or unofficial sources) relate to interpretations of risk information, and how such interpretations relate to socio-cultural parameters of learning in which knowledge claims are negotiated.

The Role of Heuristics and Biases in the Formation of Risk Perceptions

Heuristics and biases are the cognitive shortcuts and stereotyped thinking that can emerge when forming assessments of uncertainties, especially when someone has little data (and/or time) available to work with when forming such initial impressions (Kahneman, 2011; Tversky & Kahneman, 1973). For example, in a given situation where there is little time, limited information, or the stakes are low, individuals may make judgments based on information that is readily available (the availability heuristic), interpret data in ways that confirm existing assumptions (confirmation bias), underestimate the magnitude of risk such as that associated with starting a company (optimistic bias), or rely on emotional attitudes and feelings to make a judgment (the affect heuristic) (Kahneman, 2011; Pachur, Hertwig, & Steinmann, 2012; Slovic, Finucane, Peters, & MacGregor, 2004).

Scholars have tended to approach the study of heuristics and biases from the perspective of dual processing models of information processing—such that individuals process information systematically when they are motivated to do so, and heuristically when no such motivation is present. Some notable approaches to dual-processing include Petty and Cacioppo's (1986) elaboration likelihood model (ELM), Eagly and Chaiken's (1993) heuristic-systematic information processing model (HSM), and Philip Tetlock's social contingency model (SCM) (Tetlock, 1981, 1983, 2002), which all consider motivation a driver of systematic processing. In this sense, motivation may take the form of individuals' desire for accuracy in their attitudes and beliefs (ELM, HSM), the defense of one's preexisting beliefs (HSM), or individuals' intentions to express attitudes or beliefs that are socially favorable (HSM, SCM), not to mention various combinations of these motivations that may occur in a given situation (HSM).

At the level of key decision-makers—such as medical practitioners or National Park Service (NPS) rangers and employees—seasoned professionals have been found to engage heuristics for making critical decisions, such as medical diagnoses (Brannon & Carson, 2003; Hall, 2002) or assessments one's ability to successfully complete a physically difficult hiking trail or climb (Rickard, McComas, & Newman, 2011). For example, Brannon and Carson (2003) presented nurses and student nurses with two scenarios of hypothetical patients who exhibited symptoms of a heart attack (in scenario one) and a stroke (in scenario two) and found that contextual cues (e.g., the patient lost his job in scenario one; the patient smelled of alcohol in scenario two) led approximately 25 percent of the participants who received contextual cues to attribute the symptoms to stress, independent of professional training. Brannon and Carson (2003) argued this effect was a function of the representative heuristic—i.e., that the context combined with the symptoms represented an easily-accessible stereotype of a distressed patient rather than someone suffering from life-threatening complications.

Additionally, Rickard et al. (2011) found that NPS rangers and employees at Mount Rainier National Park tended to rely on heuristic cues to assess the extent to which visitors were adequately prepared to successfully complete their intended hiking trails. NPS staff often engaged visitors in conversation to assess their knowledge and skill level, which was also influenced by visual cues such as how visitors were dressed and their apparent athletic ability. In turn, these acts of instinctual profiling led NPS staff to either encourage visitors that seemed prepared (by "previewing" highlights of their hike) or discourage those who seemed unprepared by mentioning the prevalence of fatalities or discussing their insufficient level of preparedness (Rickard et al., 2011). Although NPS staff occasionally doubted their own assessments of visitors based on visual and conversational cues alone, they remained committed to protecting

visitor safety and acted as "gate-keepers of risk information" (Rickard et al., 2011, p. 76). Considering the notion that NPS staff profiled visitors as a function of professional motivation—i.e., to enhance park safety—raises the question of whether Select Committee members and staff might engage heuristic processing as a function of varying political or ideological motivations, or other aspects of staffers' professional identities.

The Role of Trust and Credibility in Forming Assessments of Risk

Members and staffers of the Select Committee and CSC will inevitably be exposed to various information sources in their efforts to clarify and communicate climate change risks. One key for appropriately discriminating more or less useful information will be assessments of source credibility, and in turn, the committee's and CSC's development of trustworthy messages that may resonate with individuals on and off of Capitol Hill. Scholars have long observed the inverse relationship between trust and perceived risk (Siegrist, Connor, & Keller, 2012; Siegrist, Cousin, Kastenholz, & Wiek, 2007; Siegrist & Cvetkovich, 2000; Trumbo & McComas, 2008), and at times, obfuscated the differences between trust and credibility (West, 1994). The distinction between these two lies at the difference between the social and the interpersonal: Trust refers to individuals' acceptance of others to manage risks within complex organizations; credibility refers to the interpersonal trustworthiness individuals associate with someone based on certain characteristics or cues (e.g., Trumbo & McComas, 2003).

One of the most notable approaches to social trust is that of Earle and Cvetkovich (1995), who argue that individuals' assessments of various trust characteristics—such as competence, confidence, consistency, and others—requires cognitively burdensome systematic processing that individuals will naturally avoid in favor of heuristic processing. Instead, they argue, individuals will trust risk managers to the extent they perceive themselves as holding similar

values to those managing risk, and that this perception of shared values may predict a single-item measurement of trust.

Termed as salient value similarity (SVS), studies have supported the hypothesis that perceptions of shared values are associated with social trust (Lu, Xie, & Xiong, 2015; Siegrist, Cvetkovich, & Gutscher, 2001; Siegrist, Cvetkovich, & Roth, 2000). Siegrist et al. (2000) found that perceived SVS and social trust in risk managers were positively related under the scenarios of managing pesticides, nuclear power, and artificial sweetener. And in their study of risk communication on cancer clusters, Siegrist et al. (2001) found that perceived SVS in risk managers was associated with the belief that clusters could occur at random. Additionally, the relationship between SVS and trust may not be limited to the sociopolitical context of the United States: Lu et al. (2015) found that among participants in Hong Kong, perceived SVS in a spokesperson of a company managing genetically modified (GM) foods was related to participants' trust in the company to manage GM risks.

On the side of interpersonal trust, hereinafter referred to as credibility, scholars have drawn from Meyer's five-item credibility index that assesses the extent to which a source is perceived as fair, unbiased, "tells the whole story," accurate, and trustworthy (Meyer, 1988, p. 574). Although parsimonious, the index was developed amid scholars' long-standing questions around credibility in the mass communication literature and declining newspaper subscriptions in the 1970s and 1980s (Meyer, 1988).

Scholars have applied Meyer's credibility index to distinct contexts with consistent reliability (McComas & Trumbo, 2001), and have used it to predict perceptions of risk across different information sources. In particular is the work of Trumbo and McComas (2003) who examined whether the perceived risks of cancer clusters were a function of information

processing and source credibility among industry groups, citizen groups, and a state health department. Using a path model, Trumbo and McComas (2003) found that heuristic processing (which predicted lower risk perception) was associated with high levels of perceived credibility for the industry and state health department sources, but low levels of perceived credibility for citizen groups. Conversely, systematic processing (which predicted greater perceived risk) was associated with low levels of perceived credibility for industry groups and the state health department. In the context of the Select Committee and the CSC, Meyer's credibility index or the general concept of credibility more broadly may serve to clarify how members and staffers view various message sources in relation to systematic or heuristic processing and to what extent this may relate to staffers' claims about climate change risks.

The Role of Information Sources in Forming Assessments of Risk

Paramount to the idea of examining the processes by which Select Committee and CSC staffers construct claims of climate change risks and assess information sources is the distinction between messages and messengers that are both affiliated and unaffiliated with each group—whose messages may be considered more or less formal, informal, official, or unofficial (Rickard, 2012). A particularly relevant body of literature that examines messages and their sources towards the development of risk perceptions stems from the domain of health communication, and the extent to which individuals discuss health-related information with sources considered official (e.g., a physician) or unofficial (e.g., family, friends, acquaintances) intermediaries of critical health information (Bühler & Kohler, 2003; Doria, Abubakar, Syed, Hughes, & Hunter, 2006; Ford & Kaphingst, 2009; Hine, 2014; Linnan & Ferguson, 2007; McComas et al., 2010). Such work has been especially insightful for understanding how perceptions of risk are actively (re)constructed amid serious health conditions (such as cancer or

HIV) in developing countries (Agadjanian & Menjívar, 2008), the United States (Howze, Broyden, & Impara, 1992), and among sources with little to no formal healthcare training.

Previous studies have noted the importance of individuals who serve as intermediaries of critical health information for the formation of risk perceptions, such as friends, family members, or colleagues. Such sources have been found to translate formal esoteric messages into relatable terms (Agadjanian & Menjívar, 2008), motivate pro-health behaviors through interpersonal interactions (Ford & Kaphingst, 2009; Howze et al., 1992), or raise awareness of particular health risks through informal or casual interactions (Rickard, 2011). For example, in their study of the communication patterns around HIV transmission in Sub-Saharan Africa (Mozambique), Agadjanian and Menjívar (2008) found that friends and family served to clarify messages about condom use that were vaguely discussed during religious church sermons. In the United States, Howze et al. (1992) found that interpersonal messages about breast cancer risks from hairstylists were significantly more effective at motivating participants to schedule mammogram screenings compared to pamphlets containing the same information. Ford and Kaphingst (2009) found that belief in the modifiability of colon cancer risk was positively associated with discussions participants had with friends and family. And more recently, Rickard (2011) found that pesticide applicators in New York State acted as "multifaceted professionals" and informal risk communicators whose consistent exposure to risk served to build a form of lay expertise and identity from which discussions of pesticide risks with customers took place. Such works and others not discussed here (e.g., Kasperson et al. 1988; McComas et al., 2010) demonstrate the importance of various information sources in the domains of health and risk communication and suggest that forms of informal intermediaries (such as friends, family or colleagues) serve a powerful role for helping shift behavioral motivations or interpretations of critical risk issues.

Yet, studies examining the relationship between types of information sources (e.g., official/unofficial, formal/informal) and perceptions of risk remain emergent. One exception includes Rickard (2012), who examined individuals' causal attributions of unintentional injuries within three national parks across the United States in relation to (among other variables) injury-prevention messages demarcated along the lines of official/unofficial and formal/informal sources. Rickard (2012) defined official/unofficial sources as either "affiliated with a publicly-recognized organization or institution, such as a government agency" (official), or "not affiliated with a recognized organization" (unofficial) (p. 44). Similarly, formal/informal sources were defined as either "scripted, such as a text of a written press release" (formal), or "unscripted, such as an impromptu conversation" (informal) (Rickard, 2012, p. 44).

Following the direction of Rickard (2012), the table below details a typology of potential information sources that may be involved in the process of defining climate change risk or circulating (or even reframing) risk discourses for members and staffers of the Select Committee and CSC. In this regard, the typology does not claim a sense of chronology or effects, but a hypothesized landscape of entities that could be involved in staffers' overarching risk-defining processes—from backstage negotiations to frontstage performances (Hilgartner, 2000). Such messages and messengers involved in these performative negotiations could include, for example, sources that range from previous or current legislation on climate change that has been (or will be) introduced in the House or Senate from non-committee/CSC members (i.e., formal/unofficial); phone calls or in-person meetings with constituents, lobbyists, activists, special interest groups, or scientists (i.e., informal/unofficial); in-person meetings or phone calls with other committee/CSC members or staffers (i.e., informal/official); and/or existing material

the Select Committee or CSC has published, such as statements for the press, letters, reports, or even other content published on the majority and minority websites (all formal/official).

Table 2.1. Typology of Potential Message Sources Involved in the Construction of Risk for the Select Committee and CSC

	Official (from the Select Committee or CSC)	Unofficial (not from the Select Committee or CSC)
Formal (scripted)	• Legislation* • Official statements • Press releases • Letters • Reports, recommendations, findings • Internal emails • Websites • Opening remarks from the Select Committee Chair and Ranking Member during hearings • Select Committee members' lines of witness questioning during hearings (may also be unscripted, see below)	• Legislation • Official statements about the Select Committee or CSC • Official statements about the Select Committee or CSC from the executive branch or other government agencies including the Congressional Research Service, the Congressional Budget Office, and the Government Accountability Office • Press releases about the Select Committee or CSC • Media coverage of Select Committee proceedings via the press, television, and/or social media • Reports from think tanks, special interest groups, or activist groups • Scientific reports
Informal (unscripted)	• Interpersonal interactions or phone calls between Select Committee/CSC members/staffers from the same political party • Interpersonal interactions or phone calls between Select Committee/CSC members/staffers from a different political party • Committee members' lines of witness questioning during hearings (may also be scripted, see above)	• Interpersonal interactions or phone calls between Select Committee/CSC members/staffers and executive branch officials or political party leaders • Interpersonal interactions or phone calls between Select Committee/CSC members/staffers and constituents, activists, special interest groups, scientists, or lobbyists • Interpersonal interactions between Select Committee members/staffers and hearing witnesses before/after hearing proceedings • Interpersonal interactions between CSC members/staffers and stakeholders or constituents before/after meetings • Interpersonal interactions or phone calls between Select Committee members/staffers and non-committee member congressional offices in the same/different political party • Interpersonal interactions or phone calls between CSC members/staffers and non-caucus member congressional offices in the same/different political party

*Applies only to the CSC given that the Select Committee does not have the jurisdiction to advance bills or resolutions (see House Resolution 6, 2019).

The Role of Civic Epistemology in Forming and Expressing Assessments of Risk

In the context of Capitol Hill, the cognitive processes and source characteristics that shape perceptions of risk information must be considered in relation to the broader socio-cultural parameters of learning in which negotiations of knowledge claims are developed. As committee members and staffers interpret risk information and negotiate knowledge claims about risk, they are situated as both consumers and producers of specialized risk information in which analyses of cognitive antecedents alone will only address half the process. Previous analyses of Capitol Hill have discussed the site as having a distinct culture (e.g., Bimber, 1996; Smith, 1988; Vincent, 1990), but none have examined this culture with theoretical depth, particularly in terms of what cognitive and social processes might reveal about socio-cultural parameters of understanding in this context and whether such parameters transcend tacit professional norms, such as political affiliation.

Scholars in the tradition of science and technology studies describe civic epistemology as the culmination of national political styles, cultures, and traditions that influence the "habits of thought and language that shape the possibility of learning" and the evaluation of communal experiences that embody public knowledge of risks or catastrophes (Jasanoff, 2005, p. 211). Analyses of civic epistemology have examined how processes of understanding critical events or technologies—such as chemical gas leaks, election outcomes, or emergent opposition to genetically modified foods—reveal socio-cultural parameters of learning that come to shape not only how investigations occur but also the claims they produce (Jasanoff, 2005; Miller, 2004, 2008; Tironi et al., 2013). Thus, distinctions in civic epistemologies are tantamount to distinctions in the questions, procedures, and narratives organizations (such as government bureaucracies) construct in their efforts to identify causes of risk or harm.

Jasanoff's (2005) analysis of catastrophes in India (the Bhopal gas disaster of 1984), the U.K. (the spread of "mad cow" disease in the 1990s), and the U.S. (the terrorist attacks of September 11, 2001) is a particularly clear example of how national political styles, cultures, and traditions reveal distinct civic epistemologies and processes by which they are legitimized. Jasanoff (2005) examines patterns of sense-making in terms of how each nation (and their publics) construct accountability, objectivity, expertise, and forms of public demonstration towards the end of legitimizing knowledge claims that are markedly different across the three countries. For example, public demonstration of objectivity in the case of Bhopal in India involved claims of primacy that diverged across experts affiliated with the Indian government, Union Carbide, and the public, whose accounts failed to overlap and resulted in merely a series of counter-claims between the parties involved. Comparatively, public demonstration of objectivity in the U.K. incident involved a formal legal investigation into the spread of the disease from cows to humans after the emergence of epidemiological support. In turn, the investigation identified a specific source to which accountability was assigned: a deficient Ministry of Agriculture, Fisheries, and Food that was later disbanded. Finally, in the U.S., the 9/11 Commission demonstrated objectivity by use of its bipartisan membership and in turn its "politically negotiated unanimity" from which it recounted the events on 9/11 in close detail and through extensive interviews so as to reveal the "objective" fact that the Federal Bureau of Investigation and the Central Intelligence Agency were not sufficiently coordinated or aggressive to detect and prevent the attacks, nor were the technologies of aviation necessarily suited to compensate for the potential of such crimes to occur (Jasanoff, 2005, p. 227).

For Jasanoff (2005), the cultures and traditions that come to indicate the parameters of civic epistemology remain contained to nation-states whose bureaucracies may engage

apparatuses of official learning such as the use of experts, legal investigations, or bipartisan committees that in turn create social and political order. Nonetheless, civic epistemology need not be constrained to the nation-state as a mechanism of political styles, cultures, and traditions that influence parameters of understanding: As Miller (2005, 2008) argues, processes of civic epistemology may be observed within sub-national contexts such as democratic societies where public deliberation between competing political groups involves the use of science or quantification in order to identify "truth" or the most appropriate policy initiatives. In the effort to further expound on styles of learning at the sub-national level, Tironi et al. (2013) examined how Chilean farmers and stakeholders made sense of debates on the use of genetically modified organisms (GMOs) in crops. They found that farmers engaged multiple but conflicting styles of understanding that pertained specifically to GMOs as economic, political, and scientific objects—a mixed knowledge that Tironi et al. (2013) discussed as a hybrid epistemology. Similarly, Kreiss (2017) argues that debates about the nature of facts or truthful journalism that occurred during the 2016 presidential election (primarily between Republicans and Democrats) demonstrate a splintering of civic epistemology between partisan groups that is further supported by differences in motivated reasoning that may be explained by one's political affiliation (e.g., Kahan, 2010). Considering the works of Tironi et al. (2013) and Kreiss (2017) compared to Jasanoff (2005) raises the question of whether processes of knowledge-making occur within the broad parameters of nation-states or other contexts (be they larger or smaller) in which boundaries are less clear.

Civic epistemology provides a framework to connect processes of individual perception to social negotiation across categories in which groups may construct accountability, objectivity, expertise, and forms of public demonstration. While Jasanoff (2005) and others have found

explicit processual distinctions across these categories of knowledge-making in national and sub-national contexts (e.g., Kreiss, 2017; Tironi et al., 2013), no research has yet considered the extent to which processes of knowledge production shift across distinct partisan boundaries in a single site of inquiry such as Capitol Hill, where ideological adherence is intrinsic to professional life and partisan beliefs about the science of human-caused climate change are disparate (Dunlap, McCright, & Yarosh, 2016). As such, this work invokes civic epistemology as a conceptual lens to interpret and assess the consistency of cognitive and social patterns across two groups (Republicans and Democrats) that hold substantively distinct positions on the claims of climate change risks.

Theories of Risk in Relation to Capitol Hill

As previously noted in H. Res. 6, Select Committee members and staff are faced with the challenge of developing formal declarations of knowledge—from investigating causes to disseminating "findings" and "recommendations"—that are inevitably subjected to internal deliberations, individual biases, and the use of information sources deemed more or less official or formal for use in the committee's assessments. CSC members and staff likely engage in a similar process from which proposed legislation is the end result, preferably in forms that attract bipartisan co-sponsorship. Such approaches turn the broad notion of "policy change" on its head that is often referenced as the end goal within many risk communication analyses. Indeed, rather than reference policy change in the abstract, my perspective here examines the policy process as one that is more social than substantive, within which individuals are subjected to expectations and norms that may be even more pronounced compared to other professional contexts. In this light, my emphasis on committee and CSC staffers in addition to external information sources is not coincidental: Staff and others are often the informational backbone of almost any

congressional office and have been documented as becoming increasingly influential amid their growth over the last four decades (Bimber, 1996; Malbin, 1980; Smith, 1988; Whiteman, 1995).

The importance of credibility and expertise on Capitol Hill. In his book, *Power Game*, journalist Hedrick Smith (1988) argues that the emergence of large staffs in the legislative branch followed congressional reforms that were prompted by the Vietnam War and Watergate—events that led members of Congress to lose trust in the executive branch and the information they provided to Congress. As such, Smith (1988) reports Congress increased budgets to bolster the size of staffs in the effort to combat their distrust of information from the executive branch, which also included funding to establish formal knowledge-producing bodies in the legislative branch—including the Congressional Research Service (CRS), the Congressional Budget Office (CBO), the General Accounting Office (GAO), and the Office of Technology Assessment (OTA, which was closed in 1995)—in order to commission non-partisan reports about policy issues when needed. Since that time, staffers have become familiar with the information resources available to them, particularly the CRS, yet information sources beyond Congress remain pervasive and often competing (Whiteman, 1995).

Amid the emergence of think tanks, special interest groups, and lobbyists, some have argued perceived expertise is one key toward advancing one's policy interests. In his book, *The Politics of Expertise in Congress*, Bimber (1996) discusses the potent effect expertise may have in the communication of information on Capitol Hill:

> Experts have the potential to influence legislators' policy preferences by illuminating connections between choices and political outcomes, and they can shape public dialogue by contributing to discourse about politics. They can shape the success of policy implementation, not only by their contribution to the content of legislation, but also by their role in oversight and appropriation activities (p. 2).

Such expertise (or perception of expertise) may be compelling for staffers who find themselves awash in data without direction on connecting the conceptual and political dots, especially if they perceive the source as accurate, trustworthy, fair, unbiased, or someone who "tells the whole story" (i.e., credible) (Meyer, 1988).

In the communication literature, the process of "illuminating connections" also draws from the concept of framing, and specifically a communicator's active intent to "organize central ideas" and "pare down complex issues by giving some aspects greater emphasis" (Nisbet & Mooney, 2007, p. 56). Additionally, frames "allow citizens to rapidly identify why an issue matters, who might be responsible, and what should be done" (Nisbet & Mooney, 2007, p. 56). This organizing tendency may be especially persuasive when the message recipient perceives the communicator (or message source) as a credible source of information whose goals are aligned with theirs.

With this in mind, studies in the policy domain have found that lobbyists tend to meet most with staffs and congressional members who already hold views conducive to their goals (Austen-Smith & Wright, 1994; Dexter 1969; Milbrath, 1963; Zeigler & Peak, 1972), and serve primarily as a legislative subsidy or extension of the staff more than a voice of persuasion (Hall & Miler, 2008; Hall & Deardorff, 2006; Hojnacki & Kimball, 1999). For example, Hall and Miler (2008) surveyed consultants who lobbied Congress amid the Environmental Protection Agency's (EPA) issuance of their final rule on clean air regulations in 1997, and found lobbying efforts were more of a subsidy of legislative processes rather than one of persuasion or information exchange. Reviewing their interview data, Hall and Miler (2008) note lobbyists tended to act as legislative assistants who offered data analysis, refined questions for hearings,

and even answered "panic calls" from staffers described as "young, fresh out of college, … [and] don't know the issue" (p. 1001).

It thus follows that lobbyists' tendencies to meet with staffs and members that hold views similar to their own could be an effort in itself to make those similarities salient, which in turn could contribute to building the impression as an external source of expertise. In her study of how committee members and staffs use analyses for policy decisions, Weiss (1989) notes the importance associated with the information lobbyists provide: "When staff hear about information through lobbyists, they know it is real stuff, not something that they 'should' know about in order to be intellectually respectable" (p. 420). In part, this is due to the nature of complex legislation that lobbyists can clarify and summarize for staffers with conceptual ease, all while making nuanced recommendations that benefit client interests (Weiss, 1989).

Based on the account of Weiss (1989) and others (e.g., Hall & Miler, 2008; Hall & Deardorff, 2006; Hojnacki & Kimball, 1999; Malbin, 1980; Whiteman, 1995), congressional staffers and members pay particular attention to their information sources and the ideological or political interests with which they may be affiliated. For example, Weiss (1989) notes that staffers generally prefer to read reports and data from special interest groups whose causes and political biases are tacit, for which a "correction factor" may be applied when reading (p. 420). Contrarily, academic analyses are generally devoid of any explicit contextual cues that indicate political or ideological bias, which in turn motivates staffers to consider such analyses in relation to politically-affiliated sources (Weiss, 1989). This preference is perhaps Weiss's (1989) most notable finding, such that explicit bias is preferred alongside scientific reports so as to easily account for its influence in order to uncover usable information. This also raises the question of whether Capitol Hill might be an environment where perceived source credibility might entail

elements that diverge from conventional applications of the construct, such as Meyer's (1988) credibility index that has focused on perceptions of fairness, accuracy, objectivity, trustworthiness and full disclosure.

The permeability of message sources between insiders and outsiders. At surface level, the difference between an "insider" and "outsider"—i.e., committee member/staffer versus an external entity or message—may seem static; however, the two may be frequently interchangeable in terms of the roles individuals occupy. Amid popular interest in the notion of the "revolving door" phenomenon, scholars have begun to describe a network of individuals who "revolve" or rotate between public servitude and lobbying as a way of "cashing in" on their existing contacts and access to privileged information (Cain & Drutman, 2014; Lazarus, McKay, & Herbel, 2016; Vidal, Draca, & Fons-Rosen, 2012). Indeed, even after leaving office, members of Congress retain their right to access the House or Senate floors, the athletic facilities, congressional dining rooms (that are not open to the public), and all materials published by the CRS and Library of Congress (of which the former is only partially available to the public) (Petersen, 2014). No doubt, such access to congressional facilities provides former members of Congress the opportunity to build credibility with colleagues toward the end of becoming the next "expert" influencer on Capitol Hill.

With the revolving door in mind, some staffers and members of the Select Committee or CSC may rotate into positions outside the halls of Congress or into positions in other areas of government that are related to environmental protection or climate change risks (such as "energy")—thus moving from an "official" to "unofficial" messenger involved in the Select Committee's and CSC's risk-defining process. More importantly, however, are the networks and relationships that former insiders develop in terms of their perceived credibility on climate

change risks, and the degree to which former insiders may be able to frame issues or "illuminate connections" in ways that benefit professional or personal interests (Bimber, 1996, p. 2). If former insiders are deemed credible sources, their colleagues may not be motivated to carefully scrutinize or question the information they receive, but rather engage heuristic processing that may allow frames of influential individuals to permeate the committee's and CSC's risk discourses. From this perspective, the extent to which boundaries between actors and entities are permeable is likely a function of their perceived credibility and its relation to heuristic or systematic processing. In this sense, categories of information carriers may not be paramount for assessing the processes of defining risk, but rather the networks of such carriers and the degree to which they are perceived as credible sources of information. Nonetheless, the extent to which categories of messages and messengers relate to perceived credibility is a critical question that is entirely relevant to this context.

The social pressures of Capitol Hill. The legislative context of Capitol Hill is an environment with tacit norms, usually along the lines of members' political affiliations and the parameters of expectations within which members should remain in discussions on various issues. Climate change remains an issue on which many Republicans and Democrats disagree, even when it comes to the acknowledgment of the Intergovernmental Panel on Climate Change as a legitimate scientific institution or the existence of climate change *writ large* (Collomb, 2014). In their book, *It's Even Worse Than It Looks*, Mann and Ornstein (2016) argue that a form of tribalism has emerged among the political right, in which bipartisan compromise signals rejection of one's adherence to the party that may be punishable by expulsion. Mann and Ornstein (2016) recount the case of former Representative Bob Inglis (R-SC), whose bipartisan

approach to climate change risks led his colleagues to withdraw their support for his reelection, all because he "dared to acknowledge the problem and work with the other side" (pp. 208-209).

Although tribalism in practice may be a product of current politics, the discourses reifying political ideology are indeed not new. In her study of congressional committees' uses of formal reports and analyses, Weiss (1989) notes that staffers were often tasked with finding reports or data to substantiate existing or new politically-motivated arguments. Weiss (1989) notes, "Most respondents cite cases in which a committee or a chairman requested information specifically to bolster a position that she wished to promote" (Weiss, 1989, p. 425). Less often were studies used to gauge the salience of an issue to adjust the policy agenda, produce guidance for addressing inefficiencies in current or future initiatives, or to consider perspectives beyond prevailing ideological parameters.

The works of Weiss (1989) and Mann and Ornstein (2016) suggest that conceptual divergence from prevailing ideology may pose significant consequences for one's political career. In the case of former Rep. Inglis, his motivation to engage with Democrats on climate change issues was likely an artifact of his divergence from the prevailing ideological parameters of the Republican party—i.e., a possible result of his efforts to rectify a difference in understandings of climate change risks between himself and those of the Republican party itself. In the case of the Select Committee and the CSC, majority (Democrat) and minority (Republican) members may diverge along party lines on the nature of risks and even the perceived legitimacy of climate change science, but the potential for understandings to diverge within each party poses questions about the emergence of alternative legislative movements that make such differences salient. For example, one recently-introduced resolution in the 116th Congress termed the "Green New Deal" (H. Res. 109, 2019) was introduced by a House member

(Rep. Ocasio-Cortez, D-NY) who is not a member of the Select Committee or the CSC. And at the time of this writing, co-sponsorship of the resolution includes only four of the nine Democratic Select Committee members and 23 of 41 Democratic CSC members. (The resolution has no Republican co-sponsors.) It is also worth noting that among the resolution's 68 co-sponsors, the Select Committee Chair, Kathy Castor (D-FL), is not included, nor is the CSC Chair, Ted Deutch (D-FL). As such, this emergence of support for the "Green New Deal" may be the result of preexisting conceptual gaps between the Democratic party's longstanding official/formal messaging on climate change risks compared to unofficial/informal discourses that have circulated between members of Congress and only recently come to fruition in the form of the resolution. Nonetheless, the resolution could also indicate the parameters in which some highly visible Democrat members seek to discuss climate change issues in the 116th Congress and beyond. Thus, while efforts to shift the parameters of discussions are a common feature of Congress, they are also distinct from efforts to take positions on issues that extend beyond the ideological purview of one's party. Doing so could result in dire consequents as in the case of Rep. Inglis.

Toward an Integrated Model of Risk Information Perception and Definition Construction

The literature reviewed here reveals that socio-psychological and sociological approaches to risk are conceptually distinct but nonetheless compatible: both perspectives are generally concerned with processes of meaning-making either from individual perceptual standpoints (among the public) or processes of constructing and disseminating knowledge claims about risk through official channels such as peer-reviewed journal articles, press releases, or government reports and hearings (among scientists, policymakers, or other specialists) (c.f., Duckett & Busby, 2013; Hilgartner, 1992; Kasperson et al., 1988). Considering the role of cognition,

studies of dual processing find that individuals are prone to stereotyped thinking, especially when contextual cues are present or unless when one is motivated to think carefully about the issue at hand (e.g., Eagly & Chaiken, 1993; Tetlock, 2002). This can impact the forms of risk information one communicates to another or the extent to which one views a risk information source as credible (McComas & Trumbo, 2001; Rickard et al., 2011). The sources from which risk messages emanate also poses implications for how risk is perceived and communicated: casual, interpersonal interactions can facilitate candid discussions outside of formal settings (Agadjanian & Menjívar, 2008), create lasting impressions (Howze et al., 1992), or expose individuals to new points of view about risk (Rickard, 2011). Additionally, information sources can be demarcated in terms of the settings in which they occur (i.e., formal or informal) and how such information is structured (i.e., formal and scripted or informal and unscripted) (Rickard 2012). While some work has examined how specialists both interpret and construct knowledge claims about risk (e.g., Hilgartner, 2000), such work has not considered what collective processes of individual cognition and social negotiation reveal about the broader civic epistemology of knowledge-making on Capitol Hill and whether this civic epistemology is a broad national political and cultural style of learning that transcends partisan ideological substance (Jasanoff, 2005).

In the context of Capitol Hill, scholars have noted several competing circumstances that may encourage staffers to engage heuristic processing for the sake of efficiency. Staffers are both exposed to myriad information sources and expected to make informed decisions on complex legislation—activities for which previous professional experience could help but is often lacking given the relatively high degree of transiency in this setting (Gerrity, Hardt, & Lavelle, 2008; Hall & Deardorff, 2006). As such, staffers have become increasingly reliant on external experts

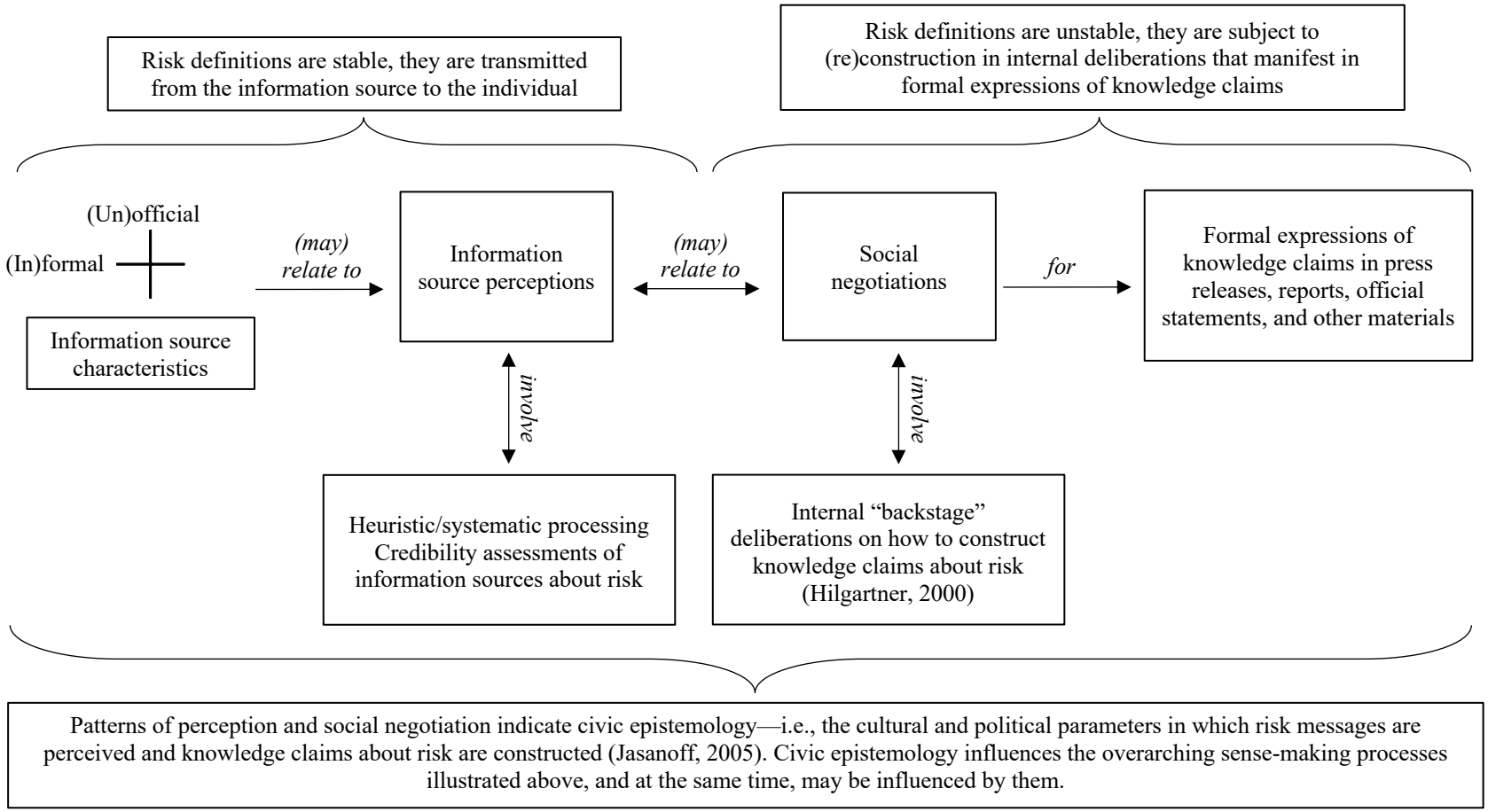
(i.e., lobbyists) who are capable of providing conceptual clarity and advice on political strategy while benefitting client interests (Hall & Deardorff, 2006; Hall & Miler, 2008). If staffers consult other forms of information sources (such as think tank reports), those with explicit political affiliations may be favored so readers have clear expectations on what to interpret as political versus substantive (Akerlof, 2018; Weiss, 1989). While no studies have formally investigated the relationship between source characteristics and information processing among staffers on Capitol Hill, the literature reviewed here suggests that certain cues (such as whether one is a lobbyist) may influence staffers' perceived credibility of information sources and the processing of their information. Nonetheless, such individual perceptions are also used in negotiations with colleagues or as expressions in formal materials (such as press releases or reports) which have also been overlooked in previous works.

Overall, the literature discussed here describes processes of sense-making at the individual and social levels, in addition to circumstances of the context itself that may influence how staffers perceive risk information (e.g., due to limited time) or construct knowledge claims about risk (e.g., due to political norms). Considering how risk messages are perceived, constructed, and disseminated could reveal the (in)stability of risk definitions throughout this process and indicate whether cultural or political parameters of understanding are consistent across staffs. Further implications also include a formative model of sense-making among individuals in positions that involve interpreting and constructing knowledge claims about risk, which has been overlooked in previous risk-related studies. Figure 2.1 visualizes a possible model of sense-making towards this end.

Contrary to previous multi-disciplinary models of risk (e.g., SARF in particular), this approach acknowledges the inherent changes in the stability of risk definitions in contexts that

involve interpretations of messages towards the end of constructing and/or disseminating knowledge claims about risk. While the arrows in Figure 2.1 suggest a form of linearity in the processes by which messages are interpreted and constructed, this is also not necessarily deterministic. Rather, the model illustrates a general framework of processes likely to occur among staffers on Capitol Hill and among others in positions of interpretation and construction. Of note in this model is the consideration for the characteristics of information sources as they relate to their affiliation with the Select Committee or the CSC (i.e., [un]official, [in]formal) and the potential relationship between these characteristics and information source perceptions. In turn, perceptions may relate to the social negotiations involved in the development of knowledge claims, and conversely, negotiations or interactions may influence information source perceptions (hence the bidirectional arrow). Involved in the formation of perceptions and social negotiations are underlying processes such as the use of heuristics to assess source credibility or the internal "backstage" negotiations in which risk assessments may be slightly altered or entirely reconstructed before they are disseminated through the formal channels affiliated with the Select Committee or the CSC. Nonetheless, variations of these underlying processes may be interchanged according to the circumstances of the context at hand. Finally, patterns of interpretation and construction within the Select Committee or CSC may be assessed as indicators of a broader cultural parameter of understanding (i.e., civic epistemology) that affects the model's processes but is also affected by them. In turn, the model in Figure 2.1 expresses an approach to consider the perceptual (socio-psychological) and social (sociological) processes of risk that encapsulates the research questions this dissertation seeks to explore.

Figure 2.1. Integrated Model of Risk Sense-Making on Capitol Hill



Research Questions

Considering the role of cognition and information source characteristics in forming perceptions of risk, this study first seeks to examine how disparate forms of information and source characteristics relate to perceptions of climate change risk in an environment with tacit professional norms. As such:

RQ1: How do Select Committee and CSC staffers use contextual cues to assess the credibility of climate change risk information sources?

RQ2: What is the relationship between staffers' professional norms (e.g., political party affiliation) and their use of contextual cues to assess the credibility of climate change risk information sources?

RQ3: How do information source characteristics (i.e., official/unofficial, formal/informal) relate to staffers' use of contextual cues and perceptions of source credibility?

This study also seeks to examine how perceptions of climate change risk information relate to social negotiations of knowledge claims among staffers of the Select Committee and the CSC, in addition to the claims and messages that result from such negotiations. As such:

RQ4: How are contextual cues, information source characteristics, or perceived source credibility discussed in social negotiations to develop knowledge claims about climate change risk?

RQ5: How do Select Committee and CSC members express credibility and expertise in messages that contain knowledge claims about climate change risks, and do such expressions diverge across channels and partisan boundaries?

Finally, this study seeks to consider how patterns of cognition, social negotiation, and expressions of knowledge claims indicate parameters of learning in the form of civic

epistemology, and whether such patterns of learning remain consistent across partisan boundaries. Given previous works on the distinctions of civic epistemology at national and sub-national levels (Jasanoff, 2005; Kreiss, 2017; Tironi et al., 2013), this study raises the following question:

RQ6: To what extent are the processes by which Select Committee or CSC staffers/members assess information sources, negotiate knowledge claims, and express such claims of climate change risks in messages consistent across Democrats and Republicans?

CHAPTER 3

METHODS

Rationale for a Case Study Approach

The study of perceptions and social processes among staffers on Capitol Hill presents a variety of methodological challenges that can make even the most emboldened social scientists think twice about pursuing this setting. Chief among these issues is the question of gaining access, and relatedly, the ability to collect multiple forms of data from which claims and theoretical contributions may be made. As Yin (2009) notes in his notable text on case study research, data collection "in the field" involves observations of social processes that cannot be manipulated, controlled, or separated from the environments in which they take place. That is, "the boundaries between phenomenon and context are not clearly evident" (Yin, 2009, p. 18). As such, multiple forms of data should be collected that allow findings to converge (or be triangulated) towards the end of extrapolating theoretically informative findings, which also requires the researcher to gain (and maintain) access to the data sources at hand. In such circumstances, data collection may be viewed more as a social process of negotiating and maintaining access than a straightforward procedure by which individuals are recruited and enrolled as participants for an experiment or survey (Lofland et al., 2006; Yin, 2009). Additionally, exposure to and involvement in social settings may raise new questions that lead the researcher to reevaluate previous assumptions or research questions that were unforeseen from the outset, which in turn requires a form of conceptual flexibility that is unusual for studies that use instruments of control for data collection (such as experiments or surveys). One may (accurately) presume that field research is more "messy" (or less controlled) than studies conducted in controlled or semi-controllable environments, which could lead some critical

observers to question the role of field research in the process of theory building, or at least situate field research as a form of inquiry that is inferior to approaches that exhibit more control over research subjects or their environments (Gerring, 2004; Platt, 1992; Thacher, 2006; Yin, 2009). And when conducting field research in a setting such as Capitol Hill, critical readers could also question the veracity of observations in terms of their applicability to theory or even other contexts in which individuals are expected to assess and construct knowledge claims about risk. To address these underlying concerns and methodological challenges, I engage Yin's (2009) approach to fieldwork and case study research in particular.

Yin's (2009) approach to field research rests on the fundamental act of observing a distinct and contemporary case (or cases) as it unfolds in the social world. While such environments may be "messy" (i.e., uncontrolled) and thus tightly coupled with the phenomena that occur within them, they may also offer a variety of social vantage points from which data may be collected and coalesced around the questions of interest. For example, interviews may be combined with (non)participant observations and/or analyses of documents and other materials from the research site, which in turn, serves to reveal the underlying patterns of interest from multiple sources. This not only enhances the internal consistency of the case study in question (discussed further below) but provides forms of data that may contribute to theory. Such forms of triangulation are particularly important for studies of multiple cases, as is the circumstance for my study of the Select Committee and the CSC. Specifically, this work may be classified as a multiple-case embedded design that considers multiple units of analysis within the Select Committee and CSC sites. Units of analysis include individuals on the one hand (in terms of their perceptions of message sources) and groups on the other hand (in terms of their efforts to construct and express claims about risk). I relied primarily on interviews with staffers to assess

both units of analysis, in addition to in-person observations and analyses of public-facing materials produced by the Select Committee and the CSC. This use of multiple data sources not only served to confirm my interpretations of the setting, but provided a clear "chain of evidence" in my effort to construct the validity of this work (Yin, 2009, p. 122).

In addition to the inherent messiness associated with field research, case study designs could pose additional cause for concern with regard to the generalizability or transferability of findings to other settings, especially since both organizations in this study are situated in the House of Representatives in the U.S. Congress (Yin, 2009). While the representativeness and generalizability (also discussed further below) of findings from these two cases may be problematic, it is also problematic to eschew the study of communities and groups on the margins of society given the limited generalizability of phenomena in those contexts. For Yin (2009), niche groups such as the Select Committee and the CSC are justifiable considering the unique context of the sites and the circumstances in which staffers are engaged that could provide revelatory theoretical insight on how individuals interpret and negotiate knowledge claims of risk. In this light, the question of theoretical relevance *to whom* is of primary import: few individuals and groups (relative to the general public) are placed in circumstances that require the interpretation and production of knowledge claims about risk. And thus, the implications of findings from the Select Committee and CSC should be most appropriately considered—and perhaps transferred—to settings with individuals in similar professional circumstances. Yet, the size of populations to which findings may be applied is not necessarily the threshold that determines the theoretical contribution of a case study; rather, the contribution lies at the extent to which the settings provide the potential for new insight that has otherwise been underexplored in previous works, such as the case with the Select Committee, the CSC, and

the individual and social processes therein. With this in mind, I consider the Select Committee and CSC appropriate cases to examine the research questions above, and sufficiently unique to provide theoretical insight that has been previously overlooked and distinct between socio-psychological and sociological analyses of risk.

Description of the Context

The Select Committee and the CSC are two distinct organizations in Congress designed explicitly for the purpose of considering issues and legislation related to climate change. They are also currently the only two groups in Congress whose explicit organization around climate change includes both Democrat and Republican members.[2] Considering the politicized history of climate change in Congress—particularly among Republicans (see Chapter 2)—the Select Committee and CSC provide unique sites to examine the relationship between partisan belief systems and processes of understanding climate risks. Nonetheless, there are key differences between the structure and governance of each group that affect the parameters in which climate issues are addressed or claims are advanced. These differences pertain specifically to (a) the formal boundaries of participation for each group, (b) legislative jurisdiction, (c) the concentration of focus and efforts on climate-related discussions, and (d) the distinctions in channels through which such efforts are disseminated. While such differences are not the focus of this dissertation, they do illuminate how the inherent structure of each group may affect the visibility of certain social processes over others, and in turn, my access to observe them for this analysis.

First, the boundaries of participation are substantively different for the Select Committee and the CSC. Select Committee membership is static and was determined by party leaders (i.e.,

[2] At the time of data collection in October of 2019, one House staffer noted ongoing efforts of the Citizens' Climate Lobby to organize a Climate Solutions Caucus in the Republican-majority Senate.

House Majority Leader Nancy Pelosi for Democratic members; House Minority Leader Kevin McCarthy for Republican members) when the committee was established at the start of the 116th Congress. Contrarily, CSC membership is entirely voluntary and subject to the will of any given member who wishes to participate. In particular, the CSC is considered a Congressional Member Organization (CMO) and registered as such with the Committee on House Administration, which oversees the operations of "informal member organizations" whose activities may involve the use of existing office staff and resources (Eckman, 2019). This designation allows the CSC to remain a group whose boundaries for participation remain permeable for members of the House, while using existing staff and other resources to participate in CSC events, such as roundtable policy discussions.

Second, while the Select Committee imposes formal boundaries of membership, it lacks the jurisdiction to advance any legislation as a committee. As noted in House Resolution 6 (2019), the committee only holds authority to examine the causes and consequences of climate change for the purposes of developing policy recommendations. Similarly, the CSC also lacks the jurisdiction to advance any legislation as a caucus, but the caucus's focus encourages the development of bipartisan relationships that result in its members introducing bipartisan legislation. In this sense, the overarching aim of the CSC is to organize interested members towards the end of facilitating legislative collaboration, while the Select Committee is designed to explicitly (and formally) investigate climate change issues and subsequently advance legislative recommendations.

Third, the structural and legislative differences between the Select Committee and the CSC also involve distinctions in how collective efforts are organized and performed. For the Select Committee, the investigation of climate change issues among Democratic and Republican

members (and their staff) involves a set of centralized groups—the majority and minority committee staffs—who serve as reference points for the topics of committee hearings, the witnesses who attend such hearings, stakeholder roundtable meetings, or other events officially sanctioned by the Select Committee. The committee staffs also determine the visibility of certain meetings over others. For example, hearings are open to the public; however, so-called "roundtable" discussions are not. According to one staffer I spoke to on this matter, closed-door roundtable meetings provide a space in which committee members may speak freely with experts from the field at hand—i.e., they allow committee members to "ask dumb questions away from cameras."[3] The role of centralized committee staffs is also embedded in the material spaces they occupy: Similar to other committees in Congress, Select Committee staffs are assigned dedicated offices to maintain operational consistency—i.e., to ensure press releases are regularly scheduled, hearings are planned and announced, witnesses are arranged, and most importantly, issues are investigated. In contrast, the CSC involves far less formal or material forms of centralized organization. While the CSC has two organizational leaders, a Chair and Co-Chair, it does not formalize its operations with a dedicated staff, separate offices, or public hearings. Rather, staffers of the Chair and Co-Chair serve as ad hoc organizers for private caucus member meetings and any materials that come from such events (if any at all).[4] In this light, the material forms and staffs of the CSC are ephemeral and structurally informal (in terms of its designation as a CMO).

[3] Outside of my analysis in the following chapters, I sometimes refer to previous conversations with participants or acquaintances as a way to contextualize congressional processes using the terms of those who have experienced them. I keep attributions here rather vague, as my use of quotes here is not essential to my analysis below.
[4] As noted earlier, the CSC's designation as a CMO permits this use of congressional resources for the informal organization of members (Eckman, 2019).

Fourth, the formal and informal organizational structures of the Select Committee and CSC pose distinct implications for the channels through which collective efforts are documented and disseminated. Similar to other committees in Congress, the Select Committee hosts two official websites, one each for the majority and minority staffs.[5] Such websites are generally the central hubs where committee business is documented in terms of hearing or roundtable meeting announcements, supporting materials for such events, and official committee announcements in the forms of press releases or even links to official social media profiles (such as Twitter or Instagram). In addition, Select Committee hearings are notably visible public rituals: not only are they streamed live on the committee's YouTube account, but they are transcribed verbatim for an "official record" that is archived with the Government Publishing Office.[6] Select Committee roundtable meetings, while private, are also announced on the committee's website. Contrarily, CSC activities are not publicly announced before they occur; rather, they are circulated internally among members and their staffs. In addition, the CSC does not host an official website, but the Chair (Rep. Ted Deutch, D-FL) does devote a page on his congressional website to the CSC that offers press releases from the Chair about CSC activities, legislation that has resulted from CSC relationships, letters developed collectively among CSC members, and official statements about new members of the caucus.[7] As an informal CMO, such disclosures are not required; they are left to the discretion of the Chair, Co-Chair, or other interested members.

Taken together, the Select Committee and the CSC involve distinct structural, legislative, and communicative parameters that make some processes more visible or pertinent than others,

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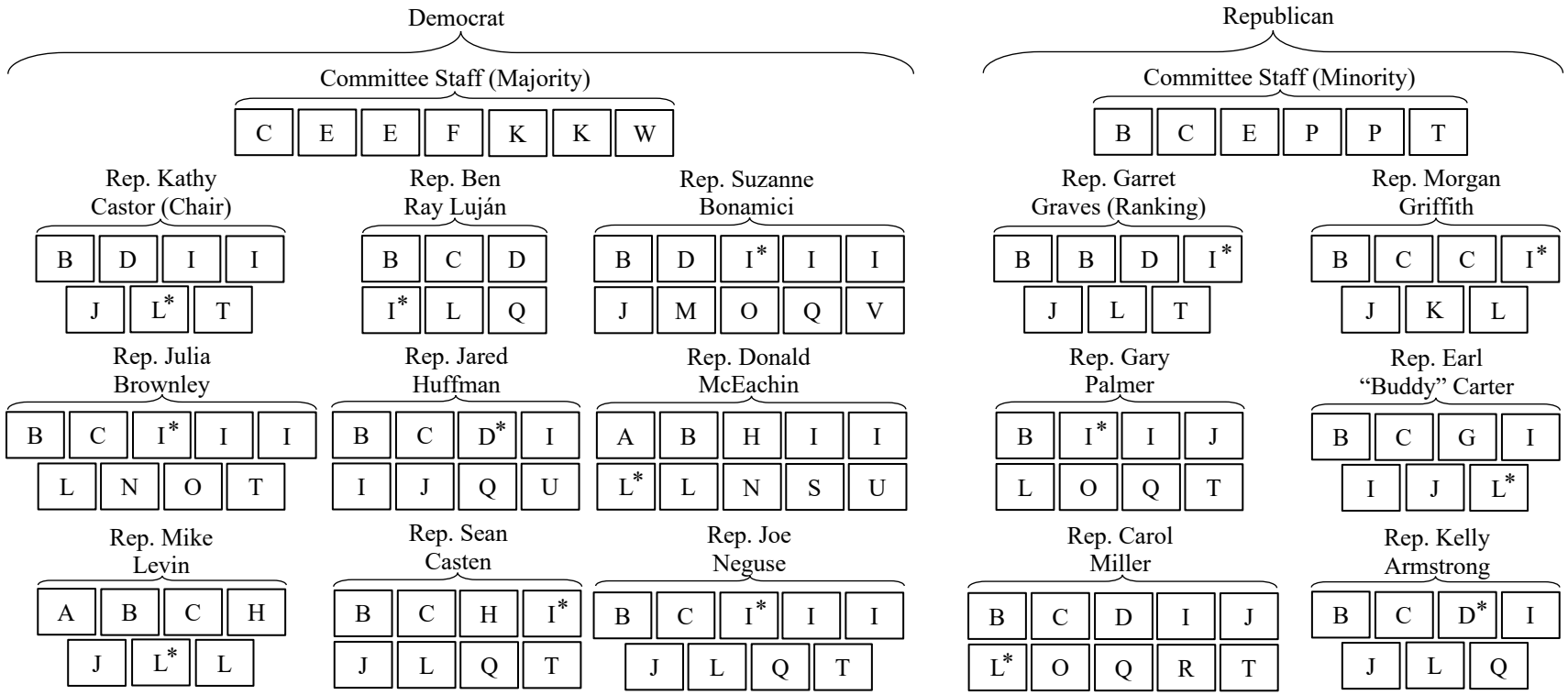
[5] The majority website may be accessed at www.climatecrisis.house.gov; the minority website may be accessed at www.republicans.climatecrisis.house.gov.
[6] House hearing transcriptions of the Select Committee and other committees may be found at www.govinfo.gov/app/collection/CHRG/
[7] See www.teddeutch.house.gov/climate/

such as the active investigation of climate change issues for the Select Committee, or the collective effort to develop climate-related legislation for the CSC. While these social processes may be more or less visible from the outset depending on group structures, both are centered around staffers' active engagement in and discussions about climate change risks, which requires basic forms of information gathering and strategic decision-making that is of interest in this study.

Mapping the Select Committee and the CSC. To further illustrate the structures of the Select Committee and the CSC, I developed organizational maps for each group that detail the number and types of positions working in each member or committee office (see Figure 3.1 for the Select Committee and Figure 3.2 for the CSC). As detailed in Figures 3.1 and 3.2, committee and caucus staffs are comprised of various types of positions that range from chief of staff, legislative assistant, or legislative correspondent (for some of the most common) to office manager, systems administrator, or clerk (for some of the least common). Yet, each member office for the committee and caucus employs one individual who focuses on (or sometimes exclusively specializes in) environmental issues, which includes those related to climate change. It is also worth noting the number of participants from each political party: Republicans comprise of six members of the Select Committee (compared to 9 Democrats) and 22 members of the CSC (compared to 41 Democrats). For the Select Committee, this difference is part of its formal organizational structure given that Democrats hold the majority of House seats. For the CSC, however, this difference may be attributed (in part) to lacking participation and the avoidance of exposure to political risk. As one Republican staffer put it, some Republicans seemingly do not want to appear "weak and compromising."

Figure 3.1. Organizational Map of the House Select Committee on the Climate Crisis in the 116th Congress



A	Administrative Operations Director	**I**	Legislative Assistant (or Aide)	**Q**	Scheduler (or Director of)
B	Chief of Staff	**J**	Legislative Correspondent	**R**	Shared Employee
C	Communications Director	**K**	(Legislative or Senior) Counsel	**S**	Special Assistant
D	Deputy Chief of Staff	**L**	(Senior) Legislative Director (or Aide)	**T**	Staff Assistant
E	(Deputy) Staff Director	**M**	Office Manager	**U**	Systems Administrator
F	Digital Production Specialist	**N**	(Director or Coordinator of) Outreach	**V**	Technical Support Representative
G	Executive Assistant	**O**	Press Secretary (or Assistant)	**W**	Clerk
H	Financial Administrator	**P**	Professional Staff Member	*	Environmental focus

Note. The positions and roles for this chart are derived from the House Telephone Directory, which can be found at directory.house.gov/#/. Some staffers in the directory are noted as serving multiple roles, such as Deputy Chief of Staff and Scheduler. For the sake of clarity, this chart only notes the primary role with which a staffer is affiliated in the directory. In addition, focus on environmental issues was derived from calling each office.

Figure 3.2. Organizational Map of the House Climate Solutions Caucus in the 116th Congress

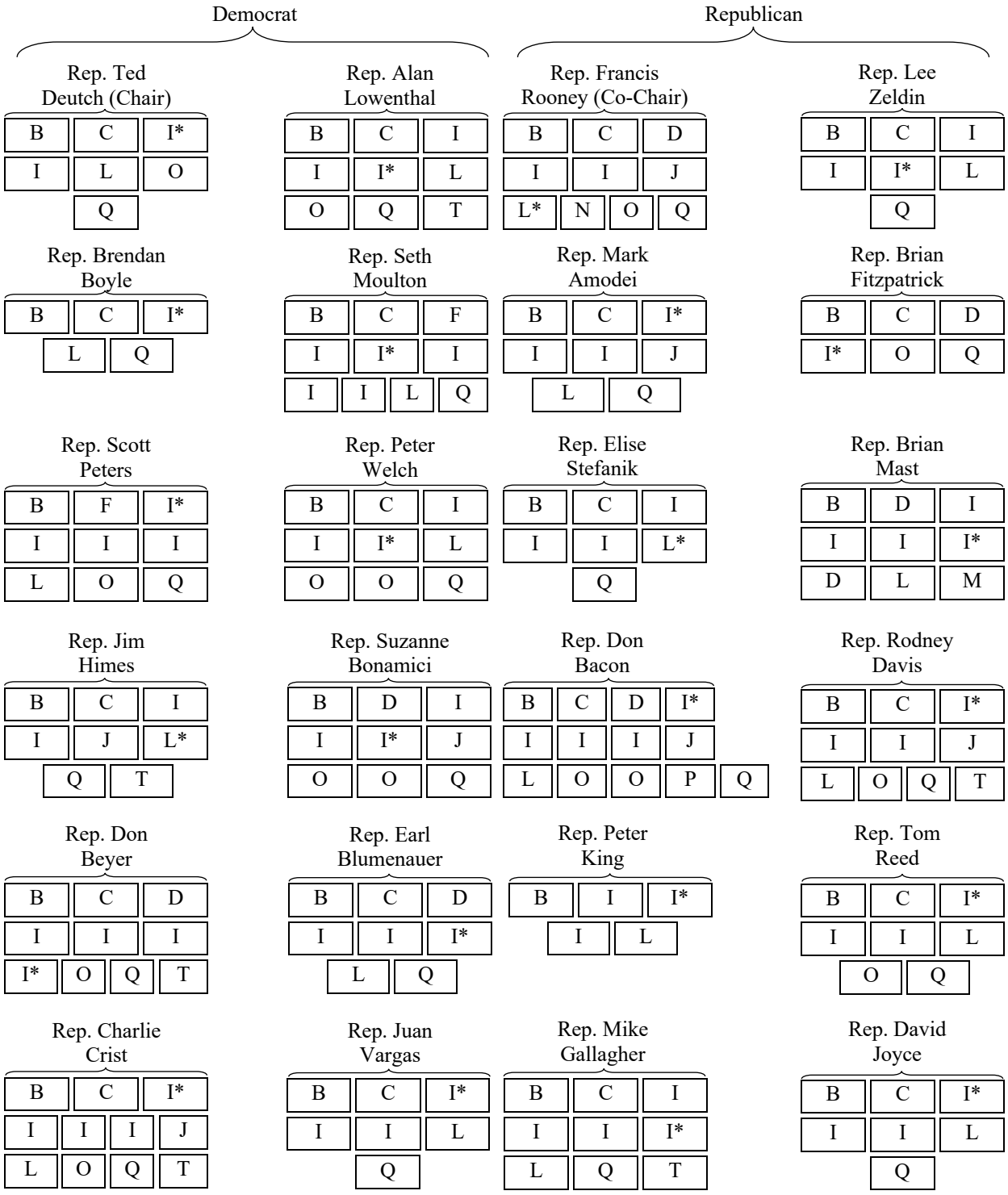


Figure 3.2. (Continued)

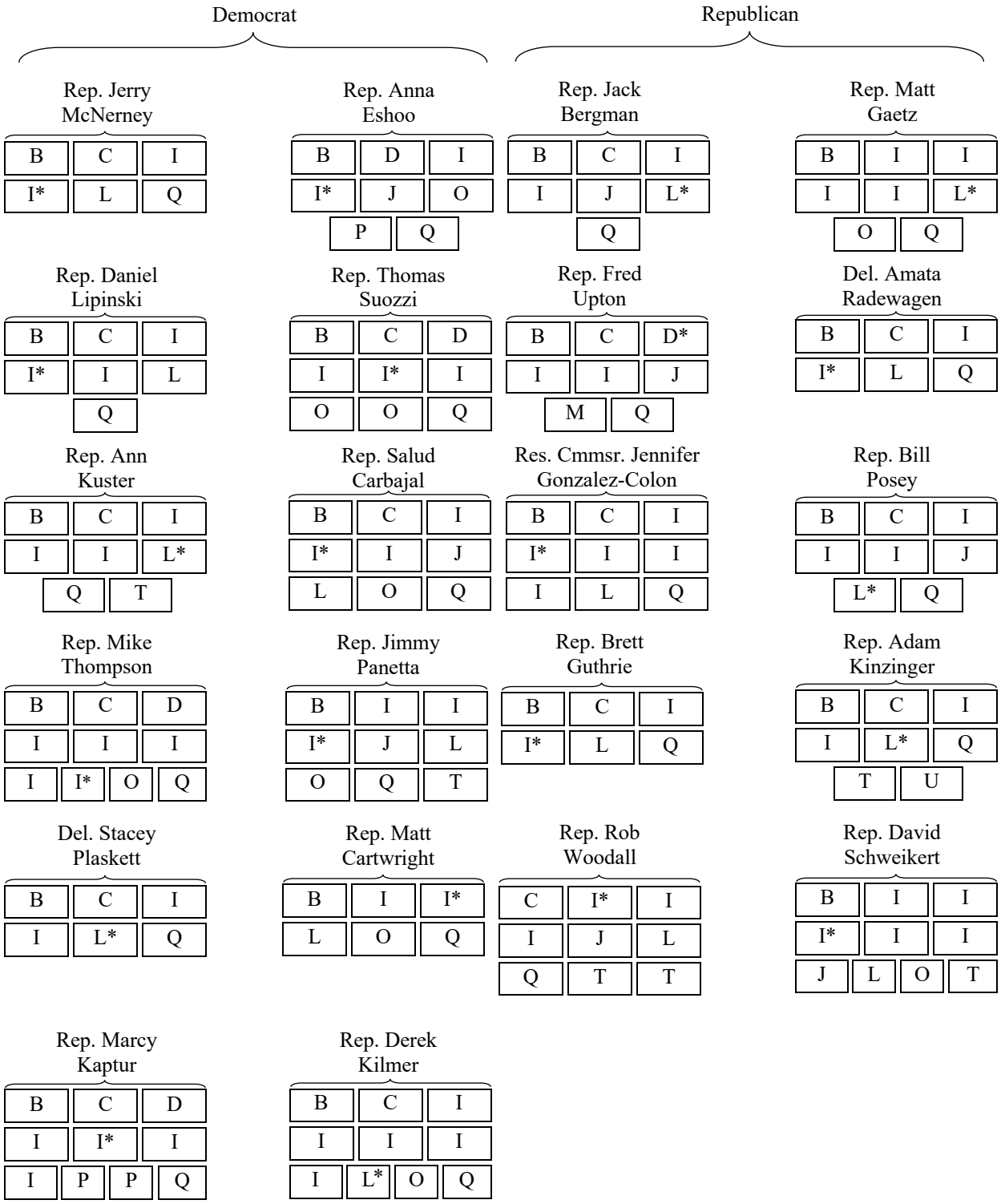


Figure 3.2. (Continued)

Democrat

Rep. John Larson	Rep. Nydia Velazquez	Rep. Stephanie Murphy	Rep. Pete Aguilar
B C I	B C I	B C D	B C I
I* J L	I I K L	I I* I I	I* I L
Q	M N O* Q	I I I Q	Q

Rep. Josh Gottheimer	Rep. David Cicilline	Rep. Judy Chu	Rep. Ed Perlmutter
B C I*	B C I	B C I	A C I
I I I	I I I*	I* L Q	I* I I
L Q	L O Q		I L T

Rep. Eliot Engel	Rep. Ron Kind	Rep. Jan Schakowsky	Rep. Eleanor Holmes Norton
C I I	B C I	B C D	B C I
I I I	I I* L	I I* I	I I I*
L* Q	Q	J L	L Q T

Rep. Robert Scott	Rep. Stephen Lynch	Rep. John Yarmuth	Rep. Ami Bera
B I* I	B C I	B C I	B C I
I I I I	I I* L	I L* Q	I I I
I I O Q	M Q T		L* N O Q

Rep. Mike Doyle
B C I*
I L O
Q

A	Administrative Operations Director	**I**	Legislative Assistant (or Aide)	**Q**	Scheduler (or Director of)
B	Chief of Staff	**J**	Legislative Correspondent	**R**	Shared Employee
C	Communications Director	**K**	(Legislative or Senior) Counsel	**S**	Special Assistant
D	Deputy Chief of Staff	**L**	(Senior) Legislative Director (or Aide)	**T**	Staff Assistant
E	(Deputy) Staff Director	**M**	Office Manager	**U**	Systems Administrator
F	Digital Production Specialist	**N**	(Director or Coordinator of) Outreach	**V**	Technical Support Representative
G	Executive Assistant	**O**	Press Secretary (or Assistant)	**W**	Clerk
H	Financial Administrator	**P**	Professional Staff Member	*	Environmental focus

Note. The positions and roles for this chart are derived from the proprietary database CQ (www.cq.com). Some staffers in the directory are noted as serving multiple roles, such as Deputy Chief of Staff and Scheduler. For the sake of clarity, this chart only notes the primary role with which a staffer is affiliated in the database. In addition, focus on environmental issues was derived from information on staffers' issue portfolios in the CQ database.

Logistics

Gaining Familiarity with the Social Networks of Policymaking on Capitol Hill

The process of gaining access to any social network or group can be an arduous, delicate, or sometimes frustrating task. To alleviate some of this difficulty, Lofland et al. (2006) recommend "[s]tarting where you are" (p. 9); however, from the inception of this dissertation, I had to start from where I was not. Long before I officially began this project, I was innately curious about the communicative processes of policymaking institutions. Yet, as a second-year graduate student, I held no personal contacts who were government employees or consultants in any capacity, nor did I possess previous experience with any policymaking institutions. As one might suspect, this lack of experience with and connection to policy insiders caused concern among my supervising faculty about gaining sufficient access to congressional staffers, and concern for myself about navigating a social landscape with its own culture and politics.

In the spring of 2017, I began to email congressional offices about summer internships; I also asked family, friends, and my partner for contact references. I deliberately targeted offices that had previous involvement with climate change issues, which included mostly Democrats and a small number of Republican offices. I determined this cursory level of involvement by conducting brief searches of members' congressional websites, which all contained information on the most salient issues in each member's district or state. Given my aim to gain experience with and connection to individuals working on climate-related legislation—and to experience the culture of Capitol Hill—I remained open to working with any office that seemed at least somewhat relevant to my interests and goals.

My outreach efforts yielded a small number of viable opportunities, most notably in the offices of Senate Minority Leader Charles Schumer (D-NY) and House Rep. Ron Kind (D-WI).

In perhaps quintessential Washington DC fashion, I accepted an internship offer (in an office that will remain unnamed) that was rescinded only days before starting. According to the staffer who hired (and fired) me, this was due to an "internal staff shakeup." I later learned this "shakeup" could have included obliging the demands of a donor to house their son/daughter as a summer intern even at the expense of someone else's position (among other possibilities). Nonetheless, I also found this initial encounter somewhat compelling: had I experienced, even indirectly, some form of the political drama that had become endemic to Washington DC? And what might this say about the value of exchange-based relationships on Capitol Hill?

Having encountered a rescinded offer, I was left to restart the search process after most summer internships had already begun. To save time and effort, I emailed a brief note on my situation to staffers in the various offices with which I interviewed or corresponded in some capacity. Most staffers responded to state their positions were filled, but some offered to contact colleagues in other offices. While this left me with little to no control over the options that might emerge, it did maintain the possibility to gain familiarity with this context. In turn, I was contacted by a staffer for Rep. Cathy McMorris Rodgers (R-WA), who at the time served as Chair for the House GOP Conference—the formal organization of party leadership in the House that coordinates with the party leader, whip, and Policy Committee (or Caucus Chair for Democrats) in order to "host periodic meetings" and serve as the "primary vehicle for communicating the party's message" (Schneider, 2003, p. 2). Considering the tumultuous presidential election of 2016, I was uncertain about whether experience with Republican leadership would affect my ability to connect with Democratic staffers. That said, I also harbored similar concerns about connecting with relevant Republican staffers following my potential internship with Democratic leadership in the Senate. To understand the veracity of my concerns,

however, I had to first gain entrée to Capitol Hill, which was most promising through the available option in the office of Rep. McMorris Rodgers and the GOP Conference.

Throughout the summer and early fall of 2017, I served as a "policy fellow" in the House GOP Conference office and worked with staffers specializing in health care, environmental conservation, and new technology legislation. Contrary to most internship experiences on Capitol Hill—which generally require individuals to answer phones and give Capitol tours to constituents—my work mostly focused on the substance of policies and the policymaking process. I conducted background research on emerging issues and potential legislation; drafted summaries of bills the member considered co-sponsoring; evaluated bills on the House floor for vote recommendations; wrote response letters to constituents; and contributed to briefing materials (such as "dear colleague" letters) that served as forms of information exchange between offices during the policymaking process. During this time, I was also provided an official email address and access to a database that contained the contact information for all staffers on the Hill, which I frequently used to solicit staffers for coffee, particularly those who worked in notable climate-related offices.

During the roughly five months I spent on Capitol Hill, I scheduled between 10 and 15 coffee meetings with individuals working on environmental legislation. These meetings were generally casual discussions in which I asked questions about the staffer's experience with their issue portfolio and the Hill in general. To continually increase my familiarity with the essence of Capitol Hill "culture," I also engaged in recreational activities such as basketball and golf that involved my colleagues and staffers from other offices. Considered against my experiences in the office, I established a basic sense of the decorum involved in serving as a congressional staffer. Most notably, however, was the confirmation of my suspicion: that staffers were critical

intermediaries of information on Capitol Hill, and indeed often the gatekeepers through which legislation, messaging, and political strategies moved.

Digging deeper into the culture of Washington DC. While my experience on Capitol Hill provided a sense of the culture by which legislation is conceived, constructed, and communicated, it also illuminated the transiency of the setting and the frequency with which staffers move from the legislative branch to private sector firms, usually in the capacity as an expert lobbyist. This was one aspect of the policy process I sought to explore further, which I did between late 2017 and the fall of 2018. During this time, I secured employment at a consulting firm that focused specifically on issues related to transportation and infrastructure, whose partners worked for multiple decades either in the legislative or executive branches on related issues. Many of my duties were similar to those on Capitol Hill; however, my outreach to Hill staffers was on behalf of clients rather than myself, and my outreach process involved different systems for accessing contact information than those I previously used. In turn, this experience benefitted my familiarity with and connection to Capitol Hill in three ways: First, this work required me to interact with familiar Hill staffers in the capacity as someone associated with known (and liked) transportation and infrastructure experts, which seemed to (favorably) influence staffers' reactions to me in meetings or at various social gatherings. Second, I gained key insight into the critical function consultants serve when acting as experts for staffers on complex and often opaque legislation. Third, this work exposed me to the circumstances external consultants face when attempting to contact congressional staffers, whose email addresses are not necessarily public and often stored within proprietary databases that have come to represent a cottage industry in Washington DC. These experiences collectively provided a more complete

understanding of Capitol Hill, its reliance on external information sources, and how external entities remain connected to otherwise transient congressional staffers over time.

Study Approval and the Process of (Re)Gaining Access as an Outsider

I resumed my graduate work in the spring of 2019 (while remaining physically in Washington DC) and attained human subjects approval from the Cornell Institutional Review Board during the summer of that same year (IRB protocol ID: 1908008980). Contacting congressional staffers via email, mail, or phone for the purposes of conducting research does not require special approval from Cornell University's IRB or any government entity; however, this is certainly not the case for external advocacy groups, experts, or others, who must adhere to lobbying disclosure guidelines (see Straus, 2015). As a researcher soliciting participation in this project, approval was limited to staffers' individual consent and/or the guidelines of their office policy.

The role of casual discussions with existing contacts. As I formally began this research, I contacted former colleagues, acquaintances, and friends working in policy to discuss my project and recruitment strategies that would likely yield the highest number of participants. Given the relatively small population of staffers working with the Select Committee and CSC, I solicited ideas from those with previous and extensive experience on Capitol Hill so as to minimize the chances of rejection among the few individuals I sought to recruit for this work. These meetings often resulted in discussions around the potential potency of a referral-based recruitment strategy, which in turn, also involved discussions about the social networks of those with whom I met for possible introductions. In this sense, the general thread among all these casual discussions centered on the idea that referral-based recruitment would yield a consistent and high participation rate. Following the guidance I received from those with legislative

experience far beyond my own, I employed a focused snowball sampling technique to reach individuals whose social networks extended to staffers of the Select Committee and CSC.

Snowball Sampling Procedures and Direct Outreach

The role of snowball sampling through chain referrals may leverage one's social network to extend considerably to various social groups (Biernacki & Waldorf, 1981; Lofland et al., 2006; Noy, 2008; Tansey, 2007). Scholars often discuss snowball sampling in the context of reaching marginalized populations whose activities of interest require unofficial forms of organization in order to avoid social stigma or legal prosecution (Charmaz, 1991; Chavez, 2012; Coltrane, 1996; Decker & Van Winkle, 1994; Densley, 2012; Maher, 1997).[8] In turn, such groups are generally not organized in a formal (and thus "visible") structure, or they may inhere explicit barriers to entry that make convenient access difficult. For example, Biernacki and Waldorf (1981) discuss the process of finding referral chains for the study of ex-heroin addicts who did not seek addiction treatment; Heckathorn and Jeffri (2001) use chain referrals to access jazz musicians; and Hansen and Kahnweiler (1995) use chain referrals to access human resources executives at Fortune 500 companies. While these works and others examine populations whose boundaries and structures may be more or less formalized or accessible, they each require assistance from an existing insider to gain entrée to the group at hand.

Given my conversations with acquaintances and former colleagues, I presumed only a few existing insiders would be needed to effectively penetrate my target populations of the Select Committee and the CSC. In so doing, I contacted three former colleagues who had remained

[8] To note, this approach of using chain referrals differs from probability snowball sampling that is used to predict the social structure of a given population of individuals who are generally not hard to reach. In such probability models, individuals are randomly selected from a given population and asked to indicate their relationships to friends and family members from which statistical predictions about the social structure of the population are made, such as the number of two- or three-person relationships (see Goodman, 1961, 2011).

employed on Capitol Hill in the year following my departure. These individuals also moved into senior positions within the offices they worked, which to my impression, would only increase the potency of their efforts to find willing participants. Over a period of approximately three weeks, my former colleagues *qua* research assistants contacted staffers in their professional social networks who were affiliated with the Select Committee (i.e., as employed for the committee itself or one of its members) and the CSC. This often involved interactions such as calls or in-person discussions (for which I was not present), in addition to virtual introductions via email. Contrary to my expectations, these insider efforts yielded no participants, which required me to reconsider my access points and the individuals who might provide exposure to a sufficient number of potential participants.

The role of outsiders as access points to potential participants. Capitol Hill presents a population context with its own inherent features that make direct outreach—and in turn, access to staffer email addresses—dependent on the financial or social resources that one has at their disposal. Staffer email addresses are not necessarily public nor private, and accessing them requires insider knowledge that may not be available to those without direct experience of this context and its processes of distributing (or controlling) information. For example, anyone may access the names and telephone numbers of House staffers using the recently-developed House telephone directory; however, access to email addresses requires prior knowledge that staffer names are generally structured in predictable formats that may be applied across all offices in Congress.[9] Similar controls are generally placed on interpersonal interactions if individuals call a congressional office: One may easily call any office in the House or Senate to ask for the names of staffers who focus on particular issues; however, an explicit request for email addresses could

[9] In the House, this format consists of "first-name.last-name@mail.house.gov" while in the Senate this format is "first-name_last-name@last-name-of-Senator@senate.gov."

raise a number of questions that lead the curious caller to end a discussion without attaining any specific information, or, a general email address designated for public inquiries. Amid such barriers to entry, firms have begun to offer subscription services that aggregate staffers' email addresses (and other forms of information) for fees that range from $200 (for a print copy of the Congressional Yellowbook) to between $5,000 and $12,000 (for annual access to a digital database).[10] While these databases are most commonly used among various consulting firms in Washington DC, subscribers occasionally allow trusted others to access these systems for purposes of aggregating contact information for projects such as mine. Nonetheless, knowledge of these systems and the norms surrounding their use (and access) requires familiarity with the culture of Congress and connection to the individuals embedded in it.

At the beginning of this project, an acquaintance observed that a project such as mine requires the researcher to "know how Congress works." This statement was particularly apparent as I began to coordinate a strategy to contact staffers directly, which not only required understanding of the basic formats of congressional emails, but familiarity with the individuals who could help the recruitment process by providing access to a proprietary database. Awareness of information, and access to it, was paramount for maintaining this baseline knowledge of Congress that my acquaintance argued would be necessary. In a similar vein, Vincent (1990) notes: "it is helpful to understand that the primary currency and root of all power on Capitol Hill is *information* [emphasis added]" (p. 63). In turn, I was fortunate to encounter an acquaintance during my initial discussions of the project who offered access to her subscription of CQ Roll Call—a proprietary database with staffers' direct contact information. Entrusted with this access,

[10] Pricing for proprietary database platforms varies across companies and the services their platforms offer, such as detailed analyses of current legislation or other processes. In addition, pricing cannot be attained from casual online inquires. Interested individuals must contact a given firm to schedule a meeting with a sales representative who assesses the potential client's needs (typically in the context of the needs of a lobbying firm).

I developed a list of staffers for the Select Committee and the CSC from which outreach emails were sent (see Appendix A).[11] While such outreach emails followed a general format, I tailored each message according to each staffer's job function (usually as a legislative assistant focusing on environmental issues, for reasons described below) and the name of their boss (i.e., the member of Congress). For most Republican offices, I also mentioned my work with the House GOP Conference so as to ease any potential suspicions of a Cornell researcher conducting a climate-related study. If I had previously met the staffer (either at a social event or while working in the private sector), I also mentioned this connection in order to serve as my own "locator" or insider (Biernacki & Waldorf, 1981). Indeed, mentioning prior meetings did serve to bolster my trustworthiness among some participants, who confirmed they recognized my name and had even heard of my current project prior to agreeing to my solicitation. What is key to note, however, is that my overarching access to staffers of the Select Committee and CSC was facilitated by an outsider or external entity (relative to those on Capitol Hill) who granted my use of a proprietary database platform from which I generated a comprehensive contact list.

Mixed Methods

While the current work draws entirely from qualitative data, I used multiple or "mixed" methods to describe the processes of message perception and social construction among staffers of the Select Committee and the CSC. Below, I briefly discuss the construct of mixed methods in social science research and how it applies to my work here. I then describe the methods I used and how I deployed them to find relevant data to answer the questions at hand.

[11] As noted in Figure 3.1, I derived staffer names for the Select Committee from the publicly available House telephone directory, which can be found at directory.house.gov/#/. For unknown reasons, staffer information for the Select Committee was not provided in the CQ database.

Overview and Application to the Current Study

Scholars have at times come to use "mixed-methods" as a heuristic for studies that use (in the broadest sense) quantitative and qualitative data; however, Small (2011) offers a more precise definition that clarifies the concept of "mixed" and distinguishes mixed data *collection* from mixed data *analysis*. For Small (2011), mixed data collection studies include "at least two kinds of data" that can range from field notes to administrative records, or two methods of collecting data that may include interviewing to observations or controlled experiments (p. 60). On the other hand, mixed data analysis may involve "more than one analytical technique" or the use of "cross techniques" such as coding and quantifying qualitative data (e.g., interviews) for use in, for example, a regression (Small, 2011, p. 60). Mixed-method studies may seek confirmation of phenomena using multiple forms of data (e.g., triangulation) or the use of multiple methods to provide perspectives not serviced from one data collection method (i.e., complementarity). Additionally, mixed-method studies may be sequential in their designs (e.g., starting inductively to generate codes for quantitative analysis) or concurrent, such as when multiple viewpoints are needed simultaneously and the ordering of data collection is not relevant (Small, 2011). Finally, mixed-method designs may be nested (e.g., some participants are selected from a large sample for additional interviewing) or non-nested (e.g., using data from different sources, such as the Census along with interviews) (Small, 2011).

It is also worth noting the tensions mixed-methods have generated among scholars, especially the notion that quantitative and qualitative data inhere competing and contradictory epistemological orientations along the lines of positivism versus relativism (Creswell, 2009;

Guba & Lincoln, 1981, 1994; Kirk & Miller, 1986; Small, 2011).[12] The core of such debates may indeed extend to the distinctions between predictive studies of psychological perception and interpretive studies of social constructivism given the former relies on quantitative models while the latter involves qualitative description. In turn, mixed-methodologists have adopted what Creswell (2009), Small (2011), and others have termed the pragmatist perspective, which is philosophically agnostic and encouraging of scholars to generate rich understandings of the research problems and environments at hand. In this light, pragmatism acknowledges both "an external world independent of the mind as well as that lodged in the mind," rather than an approach concerned entirely with paradigmatic conventions (Creswell, 2009, p. 11).

Mixed methods in the current study. This current study used varying methods to collect multiple forms of qualitative data in order to examine both psychological perceptions and sociological processes. This included semi-structured in-depth interviews, *in situ* field observations of public rituals, and analyses of public-facing materials from the Select Committee and CSC (such as press releases, websites, letters, and hearing transcripts, among other documents) (Lofland et al., 2006; Small, 2011). Specifically, semi-structured in-depth interviews shed light on staffers' self-reported assessments of source credibility throughout processes of developing public-facing materials such as legislation (for staffers associated with the CSC) or congressional members' opening statements at hearings (for staffers associated with the Select Committee). These interviews also revealed how staffers perceived and interacted with colleagues, staffers from other offices, or external information sources as materials were

[12] While I use the term positivism here in a somewhat simplified manner to represent the notion of quantification towards uncovering or measuring objective reality, it is key to remember that positivist perspectives are generally rooted in practices of the Vienna Circle and the Berlin Group, which encompass the idea that language propositions correspond to empirical phenomena from which predictions may be made (see Shapiro, 2017). In this sense, positivism is not necessarily monolithic but embedded in historical practices of measurement based on linguistic representations of phenomena.

developed. *In situ* field observations were directed primarily towards public-facing rituals (i.e., hearings) of the Select Committee, and at times, the office environments of staffers associated with the CSC and the Select Committee. Although public hearings in general are well documented and even streamed live online, attendance at these events allowed for observations of staffer behaviors that were otherwise omitted from the public record and live broadcasts as knowledge claims were enacted. Such peripheral data at these events included staffers' mannerisms in discussions with colleagues, reactions to knowledge claims from committee members, and interactions with members of the Select Committee. In addition to my analysis of public performance, observations of private or semi-private spaces (such as congressional offices) also illuminated the cultural environments in which participants are situated and provided conceptual details and insight that may be lost if resorting to interviews or documents alone. In effect, this enriched the data collection process and my understanding of the cultural nuance on Capitol Hill (relative to the populations I studied) (Geertz, 1973; Lofland et al., 2006; Maxwell, 1996; Vincent, 1990). In addition, I inductively analyzed public-facing materials produced by the Select Committee and CSC so as to examine how tenets of source credibility and expertise were transferred to and performed within knowledge claims about climate risks. Contrasting such materials against patterns of perception and social negotiation served to illustrate the parameters of learning (i.e., civic epistemology) among Democratic and Republican staffs, and whether such parameters were consistent across partisan boundaries.

Interviews, observations, and document analysis were carried out concurrently in order to provide confirmation and verification of findings from different viewpoints. I defined data as the words, actions, environments, and cultures of Democratic and Republican staffs, which served to collectively illustrate how individuals come to assess the credibility of myriad information

sources towards developing official knowledge claims of risk. This approach followed the direction of Lofland et al. (2006, p. 16) and their notion of collecting "rich" or comprehensive documentation of the empirical evidence needed to address the aim of this work, including the achievement of "intimate familiarity with the setting" through face-to-face interactions.

Interviews

The process of interviewing congressional staffers involves potential barriers to data collection that are generally inherent in contexts where participants are specialists or hold some degree of power relative to the general population. Congressional staffers are indeed within "close proximity to power" (Lilleker, 2003, p. 207) and within the purview of what some would classify as "elites" (Burnham, Gilland, Grant, & Layton-Henry, 2004; Ostrander, 1993). This distinction in power became most apparent when I embarked on formative discussions with acquaintances and former colleagues to discuss this project, in which one senior staffer (who I met through a mutual but distant connection) bluntly stated, "You're lucky I'm someone who meets with people like you." Since anthropologist Laura Nader (1972) argued for the study of individuals in society that reify existing power structures—i.e., "studying up"—scholars have embarked on this uncertain path with caution about the information that may be teased out from "elites" or those close to them. Particularly in the policy arena, individuals possess the distinct skills to shape their discussions according to how they wish to portray themselves or those with whom they work (Batteson & Ball, 1995). This could involve avoidance of questions altogether, the use of narratives to create tangential stories, or simply inaccurate accounts that may embellish or distort past experiences (Batteson & Ball, 1995; Morris, 2009). Additional concerns specific to the policy context include the researcher's understanding of the association between certain words and explicit political positions, such as the distinction between "pro-life" and "pro-

choice" in the context of abortion (Woliver, 2002) or the use of "employee" versus "worker" in the context of interviewing union managers in the United States (Herod, 1999). In this light, the use of certain terms during interviews could influence perceived biases of the researcher, which in the policy context, translates to political liability and the diminished chance of obtaining the "truth."

To address these concerns, scholars have offered various strategies that include emphasizing participants' contributions to the study (Richards, 1996), alternating between questions that may appear threatening and non-threatening (Leech, 2002), asserting control over the direction of the conversation if tangents arise (Lilleker, 2003), or allowing discussions to flow freely (Oakley, 1981). A more focused approach to elicit "truth" from "elite" participants comes from Borer (2006), whose dissertation research on the culture and place-meanings of Fenway Park involved interviews with Red Sox players, managers, and known sports journalists. Similar to researchers in the policy context, Borer (2006) sought to discuss participants' impressions of Fenway in a way that would extend beyond "a quick and pithy quote to put on the evening news or atop an article in tomorrow's paper" (p. 42). In so doing, Borer (2006) showed participants an interest in their views beyond common sound bites (similar to Richards, 1996) and asked the same questions using slightly different terms while remaining focused on the general essence of the research topic. While each of these strategies may benefit researchers of elite individuals in some capacity, they also demonstrate the difficulty of studying these individuals and the flexibility with which elite settings must be approached.

For the present study, interviews served to elicit the characteristics that make information sources credible to participants and how such perceptions of information source credibility relate to social interactions with colleagues, staffers from other offices, stakeholders, or external

information sources (see Appendix C for the semi-structured interview guide). In other words, interviews were the primary method from which data on individual and internal staff processes were derived. As such, it was critical to consider my style of interaction in the context of those I interviewed in order to gain trust and insight into the events that happen behind closed doors. This involved careful consideration for my self-presentation, my disclosure of previous experiences on Capitol Hill or in the private sector, and the terms I used to describe the topic of climate change and claims about risk. For Democrats, I described my work in the context of "climate change risks," while for Republicans I often interchanged "climate change risks" with "climate issues" or "environmental issues" (Herod, 1999; Woliver, 2002). In terms of discussing previous experience, staffers seemed most at ease when I started the discussion with a brief overview of my work rather than any of my professional experience on Capitol Hill. As most interviews took place in person (and some over the phone), self-presentation was also critical to ensure participants were comfortable with my work and open to disclosing their experiences on the Hill. Specifically, I remained mindful of the days on which votes were held in the House, which affected whether the House was "in session" or "out of session," and in turn, whether staffers dressed casually or more formally. As someone who identifies and self-presents as male, this involved a suit and tie on the in-session days and slacks with a dress shirt (no tie) on the out-of-session days. In turn, my appearance matched the essence of those I interviewed in person, which may have blurred the distinction between insider and outsider but certainly contributed to a familiar setting in which participants could express their views.

Purposive Sampling

Given the aim of this study to examine the relationship between information source perceptions and social interactions, I purposively (rather than randomly) sampled individuals I

believed to be most closely involved with this process (Lofland et al., 2006). This primarily included legislative assistants and legislative directors who focus on climate change issues (indicated by asterisks in Figures 3.1 and 3.2), and secondarily, communications directors or press assistants involved with developing public-facing messages such as press releases, statements for the press, social media posts, or other materials. My rationale to focus on these particular job functions was both theoretical and practical: In terms of theory, I sought to initially gather data from the individuals I thought were directly involved in the processes of interest, so as to analyze data from first-hand (rather than second-hand) experiences, and in turn, extend outwards to individuals peripherally involved if emergent themes called for such an approach (Glaser & Strauss, 1967). In terms of practicality, participants not involved or familiar with climate change issues generally eliminated themselves from the outreach pool or forwarded my outreach emails to someone they considered a relevant potential participant.

Recruitment occurred sequentially, beginning with staffers associated with the Select Committee and later the CSC. Data from initial interviews suggested that legislative assistants and directors were central to processes of identifying sources and determining their credibility, making these individuals primary informants for the questions of this work. Participants in these early discussions also suggested internal office negotiations about environmental knowledge claims sometimes involved communications directors/press assistants or chiefs of staff, but not as individuals who negotiated or challenged the credibility of sources or claims selected by the legislative staffer. Rather, communications directors/press assistants and chiefs of staff served more as general sounding boards with which legislative staffers discussed policy ideas or ways to describe climate change issues in public-facing materials (such as dear colleague letters). Later on, I discovered the importance of networks *between* legislative staffers in different offices and

even across partisan boundaries. Towards the end of determining the credibility of particular information sources—such as unfamiliar stakeholder groups, NGO reports, or consultants—legislative staffers often developed connections to legislative staffers in other offices who they described as sufficiently trustworthy to rely on for recommendations or confirmations that certain unknown sources were "worth listening to" and using in their own materials. In this sense, interactions between legislative staffers were often a function of one's job title and expertise or previous experience with climate-related issues. Indeed, even many of the physical attributes of congressional offices seemed to encourage staffers' reliance on issue-relevant networks to perceive and negotiate information sources: tall barriers attached to desks often separated staffers from each other in many of the offices I visited in previous years and occasionally during the course of this work. Considering that such desks were equipped with phones seemed to discourage convenient interaction among the staffers working in these offices, and even encourage interaction with staffers in other offices who shared similar expertise and who could also be easily accessed via phone. Interviews confirmed this suspicion, as many participants noted their frequent interactions with staffers in other offices towards the end of proposing a bill (for the CSC) or developing questions for a hearing (for the Select Committee).

Emergent themes developed from my initial interactions with staffers associated with the Select Committee increasingly focused my purposive sampling approach on legislative staffers and shifted my assumptions about the staffers I considered peripheral to the processes under investigation. While I believed communications staffers and perhaps chiefs of staff could offer valuable insight into internal office processes, I quickly discovered their experiences were largely detached from those of their legislative colleagues. Legislative staffers often discussed credibility and message substance with colleagues in their specialist network(s) and less so

among colleagues in their office. Even when discussions occurred in the office, participants noted they were more generalized to account for the lack of relative expertise of those involved. Rather, networks of legislative staffers offered these individuals the ability to freely engage in substantive and nuanced discussions about information sources and the topics at hand, as opposed to generalized talks that seemed to offer less insight. To confirm the appropriateness of my intent to increasingly focus on legislative staffers, I conducted interviews with communications staffers and one chief of staff. I also probed legislative staffers on the extent of their colleagues' interactions towards the end of constructing knowledge claims about risk. While I only interviewed a few communications staffers and one chief of staff, their reports were consistent with those of legislative staffers, such that issue substance and the determination of source credibility was the primary responsibility of the legislative staffer, along with the substance of claims that emerged from each office. As I continued the data collection process, I found no theoretical need to extend sampling to individuals who were only peripherally involved in the process of perceiving and negotiating knowledge claims about climate risks, which ultimately included communications staffers and chiefs of staff, not to mention individuals involved in office operations (such as staff assistants). Rather, the themes I developed and refined throughout the data collection process were supplanted through the robust and rich data I gathered almost exclusively from legislative staffers.

Conducting Interviews

Between September and November of 2019, I conducted semi-structured in-depth interviews with 23 congressional staffers affiliated with the Select Committee or the CSC. Interviews lasted between 18 and 60 minutes. Table 3.1 details the number of staffers interviewed in terms of political party and group affiliation. For context, Table 3.1 also notes the

participation rate calculated against the population of staffers focused on environmental legislation, those managing office communications or press-related activities, and chiefs of staff.[13] As noted in the previous section, interviews conducted in the initial stage of data collection with staffers affiliated with the Select Committee revealed that experiences of communications directors/press assistants and chiefs of staff were largely detached from those of their legislative colleagues. Theoretical sampling throughout the data collection period shifted my assumption that peripheral staffers—such as those associated with communications, political strategy, or even office operations—could offer substantive insight on the internal social processes involved in the perception and negotiation of knowledge claims about climate risks. These processes were far more nuanced in terms of the individuals they occurred among than I previously imagined, in part given that discussions between staffers often occurred within legislative staffer networks that allowed specialized talks to occur. As such, I adjusted the focus of sampling towards legislative staffers specifically prior to recruiting staffers associated with the CSC. In turn, this exercise in theoretical sampling is the reason why some areas in Table 3.1 are left blank.

[13] I withhold from disclosing specific job titles of individuals in the sample given that some individuals held titles that were unique relative to the study population, thus making such individuals identifiable. Yet, the substance of these individuals' positions was entirely similar to the positions noted in Table 3.1.

Table 3.1. Participant Counts from the Select Committee and the Climate Solutions Caucus

		Select Committee			Climate Solutions Caucus			
		Number of Participants	Population Count	Participation Rate	Number of Participants	Population Count	Participation Rate	Total Participants
Democrats	Legislative Assistants/Directors	5***	12	41%	7*	41	17%	12
	Communications Directors/Press Assistants	1	10	10%	–	–	–	1
	Chiefs of Staff	1	9	11%	–	–	–	1
Republicans	Legislative Assistants/Directors	2	7	28%	5**	22	22%	7
	Communications Directors/Press Assistants	2	7	28%	–	–	–	2
	Chiefs of Staff	–	–	–	–	–	–	–
	Total Participants	11	–	–	12	–	–	23

Note. The number of asterisks denotes the number of participants whose interviews were conducted over the phone. Interviews conducted over the phone were at the request of participants and did not diminish the substance of information conveyed in these discussions. As I noted in Chapter 3, staffers conducted such interviews using their mobile phones, which allowed them to move freely to private spaces outside their offices or remain flexible for unknown scheduling changes.

Although the overall staffer populations for the Select Committee and CSC involved more Democrats than Republicans (see Figures 3.1 and 3.2), participation along partisan lines was not tangibly different, nor was there any substantial difference along the lines of group affiliation. It is also worth noting the relatively high participation rates compared to the population of available staffers considered eligible for participation. These counts were also not notably different along partisan lines, and perhaps even high for Republicans given the relatively small population of relevant staffers for those focusing on legislation or communications. Additionally, some interviews took place over the phone at the request of participants. In brief discussions with participants before and after the interviews took place, this preference was generally due to time constraints or the need to maintain a flexible schedule in case a last-minute cancellation was necessary. Nonetheless, one participant observed her preference for calls (using a mobile phone) provided a way to find spaces away from her "cramped" office where others could otherwise hear her discussions. In-person interviews were conducted in and around the offices of Capitol Hill and mostly in coffee shops inside the Longworth House Office Building (a Dunkin' Donuts on the basement level) and the Cannon House Office Building (Au Bon Pain, first floor). These locations in particular are popular meeting places for off-the-record discussions between staffers and journalists or researchers such as myself. While situated within the House office buildings, these coffee shops provided a somewhat relaxed but separate space from staffers' congressional offices that otherwise lacked privacy. They also provided plenty of background noise to allow for disclosures to which only I was privy. Similarly, I conducted one interview at a Whole Foods grocery store near the House office buildings and another at a nearby Starbucks (both at participants' requests).

Following the strategies of scholars noted above (i.e., Borer, 2006; Herod, 1999; Oakley, 1981; Richards, 1996; Woliver, 2002), I approached each interview with the intention of focusing on the participant and their experience with selecting information sources and negotiating with colleagues. I remained mindful of the terms I used depending on the individual's political affiliation and created a set of conceptual parameters in which I sought to let the discussion flow freely. Similar to the recommendations offered in Lofland et al. (2006), this specifically involved an initial introduction of my work that involved a one- or two-sentence description as it being my "dissertation research." This seemed to emphasize a sort of intellectual earnestness on my part to conduct a study of social processes rather than a politically damaging exposé. Within that description, I also noted my focus on examining what makes information sources credible to staffers when they are developing public-facing materials such as hearing questions, "dear colleague" letters, or semi-public documents such as briefing memos or conceptual justifications for members to co-sponsor bills. I also noted participants were welcome to use specific examples from their district or speak more generally about their previous experiences. For all but one interview, this strategy successfully created the parameters in which discussions remained, and as such, conversations flowed freely but remained entirely relevant to the research goals at hand.

Ensuring anonymity and documenting discussions. As I interviewed various staffers throughout the data collection process, I quickly realized how the first few minutes of each discussion set the tone for the remaining time, and in turn, participants' trust in me to maintain confidentiality of their reported thoughts and experiences of which I could take notes and audio recordings. This became most apparent the few times I deviated from my standard procedures to initiate the discussion (which occurred early in the data collection process), wherein I reverted to

off-topic discussion after the oral consent. In these instances, I felt formal procedures were a burden on the participant for which casual discussion would negate, but my lack of consistent adherence to formal procedures in these few instances led the participant to question my work further and the veracity of my intentions. This happened twice, and in these instances the participants did not permit me to record audio of the interview. A third participant also prohibited audio recording, but clearly stated this was due to being "burned" in a previous interview, wherein someone ensured anonymity but later disclosed incriminating information attributed to the participant. For all other interviews, I adhered to the formal procedures described in the interview guide (see Appendix C for the interview guide; see Appendix B for the informed consent form). In turn, all but three participants allowed me to record audio, although all permitted me to take notes.

Debriefing. Interviews often took place within a specified window of time (usually 30 minutes) that required debriefs to remain quick but informative. As each interview reached its natural conclusion, I asked participants to offer any additional thoughts they had on the topic or if they had any questions about my work (Sieber, 1998). This tended to provide a segue into some of the patterns I had begun to see in other interviews or from documents I had examined. The debriefing period tended to last around five minutes but at times this was the point at which participants were most relaxed, casual, and forthcoming about their current work and experiences on the Hill. In this light, debriefs provided context for the participants but also served to shed additional light on the issues of information use on the Hill.

Observations

While interviews served to elicit reports of personal experiences on the Hill, in-person observations provided a sense of cultural context to the substance of these reports by shedding

light on questions of *why* rather than just *what*. My focus on staffers associated with the Select Committee and CSC resulted in a vast social landscape that included 78 congressional offices in total, in addition to the majority and minority staffs of the Select Committee. Observations of each office would have required considerable amounts of time and access that were beyond the scope and resources I was afforded in this work, and as such, I approached each visit to Capitol Hill as an opportunity to observe (albeit briefly) the environments in which interactions took place and the spaces through which culture was circulated. Given my relative position as an "outsider" throughout the course of data collection, observations took two forms that (first) contributed to my interpretations of interviews and (second) provided context to the Select Committee's performances of knowledge claims about risk.

First, in the case of in-person interviews, I was able to observe "glimpses" of staffers' social settings on the few occasions they requested we meet in their offices before departing for a nearby coffee shop. Although this occurred only a few times throughout the data collection process (three in total) it did provide exposure to the material structures of each office layout and a brief snapshot of how extemporaneous interactions might or might not occur in these spaces. These snapshots also resulted in distinct office experiences for each of the three I visited, where the interactions in one carried a substantially different tone and sense of comradery than the virtual silence of the other two. Capitol Hill is also a place of serendipity, so traversing the halls to various interviews often allowed me to briefly observe otherwise private or confidential interactions around (and sometimes within) congressional offices, which did shed further light on the broader cultural context in which social processes of the Select Committee and CSC were situated. Taking an approach of "breadth" to these particularly brief observations (Becker, 1996),

I considered these glimpses as supplemental forms of data collection from which to interpret interview data rather than experiences that would reveal notable information on their own.

Second, I attended and observed seven hearings the Select Committee held throughout the data collection process in which members advanced, or rather *performed*, knowledge claims about climate change risks (see Table 3.2). Given that hearings were streamed live online, archived on the committee's website, and transcribed shortly thereafter, I attended a sufficient number of these events not necessarily to document the substance of claims and counter-claims, but to observe the peripheral social interactions that are not captured in official accounts of committee proceedings. This included observations of staffer interactions with colleagues and committee members, staff and member reactions to knowledge claims from members of the opposite (or same) political party, and even consideration for audience characteristics and reactions to members' and witnesses' claims throughout hearings. The forms of these interactions and reactions did illuminate what staffers and members in particular seemed to think of certain claims from those of the opposite political party, typically in terms of smirks, laughs, brief talks with colleagues (and exaggerated gesticulating therein), and head shaking. While I was not privy to the content of these interactions during the hearings I attended, my visual access to them did seem to open the proverbial stage curtain (albeit slightly) to the backstage processes of staffer interactions, for both the majority and minority sides of the committee. I also considered the role(s) of the spaces and places in which hearings were held, which were considerably different throughout the data collection period and for each hearing I attended. Contrasting this against some of the general complaints I heard from House staffers on the Select Committee's lack of legislative jurisdiction—such as its creation as purely a "political ploy" (as one Democrat House staffer put it)—provided some insight on the speculation for why the

committee seemed to enjoy little stability concerning the hearing rooms it used throughout the congressional session. In turn, observations of Select Committee hearings did provide some hints about the social structure of committee staffs and their general orientation towards their colleagues on the other side of the political aisle. Relative to the content of the hearings, I considered this data to provide clarity rather than obscurity to the overall aim of this work.

Table 3.2 Select Committee Hearings Schedule during the 116th Congress

Date	Time	Location	Hearing Title
April 4, 2019	9:00am	2318 Rayburn House Office Building	Generation climate: Young leaders urge climate action now
April 30, 2019	10:00am	2247 Rayburn House Office Building	Solving the climate crisis: Drawing down carbon and building up the American economy
May 23, 2019	9:00am	2247 Rayburn House Office Building	Creating a climate resilient America
June 13, 2019	10:00am	2318 Rayburn House Office Building	Solving the climate crisis: Ramping up renewables
July 16, 2019	10:00am	2172 Rayburn House Office Building	Solving the climate crisis: Cleaning up heavy duty vehicles, protecting communities
July 25, 2019	2:00pm	2261 Rayburn House Office Building	Creating a climate resilient America: Business views on the costs of the climate crisis
Sept. 10, 2019	2:00pm	1334 Longworth House Office Building	**Solving the climate crisis: Manufacturing jobs for America's workers**
Sept. 18, 2019	10:00am	2172 Rayburn House Office Building	**Voices leading the next generation on the global climate crisis**
Sept. 26, 2019	2:00pm	Capitol/House Visitor Center (HVC) 210	**Solving the climate crisis: Reducing industrial emissions through U.S. innovation**
Oct. 17, 2019	9:00am	2020 Rayburn House Office Building	Solving the climate crisis: Cleaner, stronger buildings
Oct. 22, 2019	2:00pm	1302 Longworth House Office Building	**Solving the climate crisis: Natural solutions to cutting pollution and building resilience**
Oct. 30, 2019	2:30pm	210 Cannon House Office Building	Solving the climate crisis: Opportunities in agriculture
Nov. 14, 2019	1:30pm	1300 Longworth House Office Building	**Member day (featuring the testimonies of various congressional members)**
Nov. 20, 2019	1:30pm	1334 Longworth House Office Building	Creating a climate resilient America: Reducing risks and costs
Dec. 11, 2019	2:00pm	210 Cannon House Office Building	**Creating a climate resilient America: Smart finance for strong communities**
Feb. 5, 2020	9:00am	1300 Longworth House Office Building	**Creating a climate resilient America: Overcoming the health risks of the climate crisis**

Note. Bolded hearing titles indicate the hearings I attended in person. Additionally, this list is limited to the hearings held in Washington DC: One field hearing is omitted that was held on August 1, 2019.

Thick description. The central aim of in-person observations was to deploy an interpretive approach to the places and social actions through which information was conveyed, either during the interview process or throughout Select Committee hearings. Observations served to do more than allow for simple descriptions of previous events in various spaces throughout the study period; rather, they helped provide an understanding of the meaning(s) associated with staffers' actions, perceptions, and processes of negotiating knowledge claims among colleagues from which I sought to uncover the cultural parameters of learning on Capitol Hill. In turn, my effort to derive meaning from action was not the function of observations *per se*, but of my effort to engage thick description of the social events I encountered throughout the data collection process.

The concept of thick description references an approach to ethnographic fieldwork that was originally developed by British philosopher Gilbert Ryle (1949) and later refined by anthropologist Clifford Geertz (1973) and sociologist Norman Denzin (1989) among others (Holloway, 1997; Liebow, 2003; Schwandt, 2001). The idea may be contrasted against what Holloway (1997) describes as "thin description," which is "a superficial account … [that] does not explore the underlying meanings of cultural members" (p. 154). In other words, "thin description" is the simple documentation of actions without any consideration for the cultural norms of behavior in which such action intentions were aroused (Ponterotto, 2006). Geertz (1973) famously refers to Ryle's previous writings on thick description and the process of interpreting culture to derive meaning from an otherwise minute movement of one's eyelid—i.e., the ability to distinguish meaning of one's action in this sense as either a blink, or a wink:

> Consider … two boys rapidly contracting the eyelids of their right eyes. In one, this is an involuntary twitch; in the other, a conspiratorial signal to a friend. The two movements are, as movements, identical; from an I-am-camera, 'phenomenalistic' observation of them alone, one could not tell which was twitch and which was wink, or indeed whether

> both or either was twitch or wink. Yet the difference, however unphotographable, between a twitch and a wink is vast; as anyone unfortunate enough to have had the first taken for the second knows. … Contracting your eyelids on purpose when there exists a public code in which doing so counts as a conspiratorial signal *is* winking. That's all there is to it: a speck of behavior, fleck of culture, and—*voila!*—a gesture (Geertz, 1973, p. 6).

Applying this approach to the context of Capitol Hill opened up a cultural milieu in which to consider how patterns of perception and negotiation occurred, and indeed, the aspects of social norms they were often related to. This approach also provided a lens through which to view the very public interactions—or rather performances—of claims throughout hearings during the congressional session. Rather than simply document what was said and when, I considered the tone of how claims were made, members' gestures during such efforts, reactions of staffers on the periphery of hearing rooms, and the often audible gasps or visual nods of agreement in the audience (when there was an audience present). I also sought to consider the broader political, strategic, and legislative tensions pulling at the will of those I interviewed, and even the notable professional risks participants faced when talking to an unknown researcher whose assurance of anonymity was nothing more than a verbal promise. Collectively, what did these aspects of my experience offer to my interpretations of the research questions at hand? For one, they helped me distinguish the wheat from the chaff—i.e., the culturally important forms of behavior versus the unimportant ones. And second, approaching my experience through the lens of thick description revealed the tenets of this culture and their relation to Capitol Hill as both a symbolic and literal embodiment of the legislative branch of government. In turn, my use of the term "thick description" and its overarching aim to understand contextual motivations and meaning is not meant to arbitrarily interpret actions in the field, but to ascribe meaning to behaviors where evidence suggests it is appropriate to do so, and where it helps answer the questions I have sought to explore in this dissertation.

Document Analysis

The Select Committee and CSC are both public-facing organizations enmeshed in the underlying expectation to distribute public-facing materials throughout the congressional session. This inevitably requires staffers to deliberately consider the form(s) and substance of the materials they help produce, which in turn, offers the opportunity to examine the meanings of claims as they are distributed as formal expressions of knowledge. Because I examined expressions of knowledge claims as inherently performative efforts in the sense of self-presentation (Goffman, 1959, 1961a, 1961b, 1963, 1974, 1979) and through the metaphor of the stage (Hilgartner, 2000), I was more interested in deriving meaning from documents and other artifacts encountered in and around the research site rather than attempting to establish a set of frequencies by which some event or form of claim occurred. By focusing on the meaning of written or sometimes visual documents, I sought to remain consistent with my ethnographic approach to in-person observations of the research site and my experiences in the site during in-person interviews. In this sense, document analysis served more as an extension of fieldwork rather than a distinct method or analysis of how claims were performed.

Ethnographic Content Analysis

My approach to document analysis diverged substantively from normative studies in the tradition of quantitative content analysis. Remaining consistent towards my effort to uncover the meanings of actions, I applied the lens of thick description used during observations (Geertz, 1973) to my encounters with public-facing materials associated with the research site. In turn, my sampling of such materials was purposive rather than systematic; my research goals aimed towards discovery rather than verification; and my consistency of observations was oriented towards dependability and confirmability (among others discussed further below) rather than

measurable reliability. I considered documents as the artifacts from which I discovered and compared emergent themes (Glaser & Strauss, 1967) as they related to the formal performances of knowledge, and to a lesser degree, how they illuminated processes of perception and negotiation among the staffers I interviewed. Additionally, I did not examine documents in isolation from my encounters with the research site or my interactions with staffers; rather, documents emanating specifically from the Select Committee and CSC served as supplemental data points from which I ascribed meaning (mostly) to formal performances of knowledge claims about risk.

While some may consider my approach to documents and other public-facing materials as simply qualitative content analysis, I considered my strategy as ethnographic given my primary aim to examine meaning rather than trends across a systematic sample (Altheide, 1987, 2004). The particular term for this approach, ethnographic content analysis (ECA), has been deployed among myriad scholars who have sought to apply the tools of ethnography to unconventional spaces (i.e., the spaces located in documents, texts, images, among others) from which holistic and deeply contextual analyses have emerged (Altheide, 1987; Cho & Lee, 2014). ECA has been applied to examine media portrayals of illicit drug use (Jernigan & Dorfman, 1996), the ways a particular television show discussed Islam following the September 11 terrorist attacks (Gormly, 2004), the propagation of status indicators in bridal books (Besel, Zimmerman, Fruhauf, Pepin, & Banning, 2009), and the historical emergence of anti-gambling movements in various pamphlets and related materials (Bernhard, Futrell, & Harper, 2010), among many others (e.g., Connolly-Ahern & Castells i Talens, 2010; Kuhn-Wilken, Zimmerman, Matheson, Banning, & Pepin, 2012; Phillips, 2013; Vickovic, Griffin, & Fradella, 2013).

Features and forms of documents analyzed. Given the focus of ECA on meaning and contextual understanding, my ethnographic analyses of documents and other public-facing materials (such as social media posts) were not necessarily constrained to a particular unit of analysis or a distinct feature of artifacts collected online and off. Rather, I considered documents as virtual, visual, and textual spaces in which claims were made and performances were propagated. I considered not only the substance of content within public-facing materials, but the ways they were distributed, their condition (in the physical world), styles of layout (such as fonts, colors, images, or other forms of emphasis) and their organization(s) in relation to other documents (particularly on websites). In turn, I focused primarily on the outlets from which performances of knowledge claims were intended to be most visible to the broader public: the majority and minority websites of the Select Committee and the congressional websites (and relevant website pages therein) of CSC Chair, Rep. Ted Deutch (D-FL), and Co-Chair, Rep. Francis Rooney (R-FL). These digital platforms served as the loci of performances from which knowledge claims were disseminated and/or ultimately redistributed through secondary channels—social media in particular. They also provided a form of unobstructed closeness to the public-facing performances of the Select Committee and CSC that would not have been afforded through secondary accounts, such as those of the media. While a systematic analysis of media coverage could have indicated the frequency of themes associated with the Select Committee and CSC, this was not necessarily the focus nor concern of my work. I used ECA to take a deep dive into the specific outlets controlled by staffers of the Select Committee and CSC, which also allowed a degree of flexibility to consider not only the substance of public-facing materials, but the peripheral features of these materials that would have otherwise been overlooked in a systematic account.

Sampling procedure. I examined materials published on official websites affiliated with the Select Committee and CSC in addition to the social media channels associated with both organizations. For the Select Committee, this included materials hosted on official websites associated with the minority (Republican) and majority (Democratic) sides of the committee. Social media accounts associated with the majority side of the Select Committee included Instagram, Twitter, and Facebook, whereas social media accounts associated with the minority side of the committee included Facebook and Twitter. For the CSC, I initially examined the websites and social media accounts associated with the Chair (Rep. Deutch) and Co-Chair (Rep. Rooney); however, after initial inspection, I found a considerable distinction in the number of materials I considered relevant between these two members: On the one hand, Chair Deutch's materials related to the CSC and climate change more generally were numerous, whereas Co-Chair Rooney's website and social media accounts contained no more than five pieces of material I found relevant to climate change or his work with the CSC. To compensate for Co-Chair Rooney's lack of material relative to that of Chair Deutch, I expanded my scope of data collection for the CSC to include the websites and social media platforms of all Republican members of the CSC. In general, Republicans seemed less likely to engage in discussions or publish materials/social media posts about climate change or their work with the CSC, so this expansion of my scope essentially made the volume between Chair Deutch and CSC Republicans approximately equivalent. In turn, I examined Chair Deutch's website and accounts on Instagram, Facebook, and Twitter, in addition to the same channels for all Republicans affiliated with the CSC at the time of this writing.

In order to take an appropriately ethnographic approach to my analysis of public-facing materials, I did not examine documents with any sort of *a priori* criteria by which to determine

their relevance or qualify their inclusion. Rather, I sought to first understand the context(s) in which materials were published or claims were made to determine whether such discourses contained (in)direct knowledge claims of risk. This provided me the ability to consider materials that did not necessarily mention specific key terms (such as "risk" or "climate change") but were nonetheless related to issues of climate risk and the broader patterns of performative credibility associated with them. As I discuss further in Chapter 6, this approach was especially helpful for examining Republican discourses of climate risk that often focused on issues of technology and the physical resiliency of communities to withstand impending climate impacts. Rather than mention "risk" specifically, their discourses of climate-related issues (and performances of credibility therein) seemed constructed *as reactions to* many of the explicit risk claims that emerged from Democrats.

As I examined materials published on official websites and social media accounts associated with the Select Committee and members of the CSC, I developed emergent themes and conducted comparative and negative case analyses of them. I attempted to find alternate explanations of my burgeoning themes and slowly began to coalesce my focus around a collection of materials that seemed to most appropriately represent the themes I discovered. It was at this stage of data collection/analysis that I collected the relevant documents I found of interest and categorized/counted them for display for Table 6.1 in Chapter 6. While I collected 576 forms of material in total, this number should not be interpreted as a representative or systematic sample. Rather, I arrived at this number after conducting repeated analyses of materials through the grounded theory process of data collection and my deeply contextual consideration of materials through the ECA approach.

Data Analysis

The application of ethnographic approaches such as thick description to various social contexts does not, and should not, preclude systematic forms of data analysis from which theories and hypotheses may be generated. Given my aim to examine the relationship between processes of perception and social negotiation—and the extent to which patterns of both indicate cultural parameters of learning—I analyzed data inductively to consider the flows of information between and among congressional staffers, in addition to how such flows related to the cultural values and meanings of those embedded in the research site itself. While I offered an integrated model of risk sense-making that accounted for perception, negotiation, performance, the stability of risk definitions, and civic epistemology in Figure 2.1, I left the substance of relationships between these processes open to the emergence of themes throughout the data collection period. To do this, I followed the principles of grounded theory as laid out by Barney Glaser and Anselm Strauss in 1967.

Grounded theory. Glaser and Strauss (1967) developed grounded theory in response to what they describe as stagnation of new sociological theories during the 1960s that included sociologists' increasing reliance on the broad social theories of previous generations and un-reflexive, deductive explanations of data. Rather than adhere to the existing paradigm of research during the time, Glaser and Strauss (1967) advanced an idiographic approach to theory-building that emphasized induction while retaining the rigor and systematic forms of analysis that comprise of explanatory or transferable theories. One of the most notable attributes of grounded theory is the notion of examining the research site and artifacts therein for general trends that emerge early on in the data collection process. During this time, broad and formative codes are developed according to the researcher's experiences, which are revisited, refined, or narrowed as

data collection continues. Following this, the emergence of select but salient codes may be used to guide the direction of purposive sampling procedures to explore the codes of interest (i.e., theoretical sampling). And as data is coded, phenomena should be constantly compared against the codes of interest (i.e., the constant comparative method) to identify imperfections in the parameters of these codes or the possibility that alternate codes might be identified. No doubt, these procedures are cognitively burdensome to the analyst at hand, and as such, Glaser and Strauss (1967) discuss the process of creating "memos" to capture otherwise fleeting ideas as these procedures are performed. Memos also provide documents that may be referenced later on as data collection concludes and comparisons between codes and/or phenomena are finalized. In such a final stage—where the codes of interest are appropriately nuanced and accurate to the phenomena at hand—the researcher reaches the temporary state of theoretical saturation.

Following the direction of Glaser and Strauss (1967), I applied a grounded theory approach to examine emergent themes of phenomena within field notes, interview transcripts, hearing transcripts, and various textual and visual data located within public-facing materials from the Select Committee and CSC. Consistent with the guidance from Glaser and Strauss (1967), I developed emergent codes during the data collection process that were refined as my experiences with participants, the research site, and public-facing materials matured. I often drafted memos as I collected and analyzed data, which provided clarity on previous ideas and impressions as I refined and compared codes against each other. I also relied on previous experiences before the formal research period to sample the individuals whose perspectives would be most helpful for the research questions at hand—i.e., legislative assistants and directors—which I confirmed was an appropriate and accurate form of theoretical sampling through subsequent discussions I held with staffers peripheral to the main phenomena of interest

(i.e., chiefs of staff, and communications directors/press assistants). I collected various forms of data that were textual, visual, and experiential, so constant comparison of codes with each other and the phenomena at hand allowed for continual refinements, and in some cases, new codes altogether.

How data was defined and documented. Taking an ethnographic approach to observations and interviews, I remained intentionally agnostic towards a specific definition of data during my time in the field and with interviewees. While data of interviews consisted primarily of participants' discourses during these interactions, I also remained open to considering the peripheral experiences of these interviews that could inform my understanding of Hill culture and the very processes I sought to explore. As noted earlier, these experiences provided brief glimpses into the environments in which staffers were frequently embedded, and in turn, illustrated the approximate parameters in which processes of perception and negotiation might occur in these spaces. Similar principles applied to my observations of Select Committee hearings: while I understood these events were well documented, otherwise unseen staffer interactions and reactions also provided glimpses into the meanings of certain gestures and claims members made throughout hearings that would have otherwise gone unnoticed and undocumented in the official record. And for document analysis, I similarly accounted for the substance of materials in addition to their aesthetic qualities and relationships with each other (if, for example, they were published on the same website). Thus, the guiding principle of data collection was not necessarily to collect specific forms of data, but to document the words, actions, environments, and materials that could inform my understanding of the culture, and in turn, my interpretation of meaning from the actions I observed and heard about during interviews.

Such a broad approach to the definition of data might leave one wondering how I came to identify points of salience, or put simply, things worth documenting. No doubt, my entrée to the research site and discussions with interviewees were informed by my previous experiences on the Hill and around it in the private sector. While I did not come into this project with preconceived notions about what I might discover, I did have a sense of the general decorum of Hill culture, but only enough to pique my interest and provide a general sense of the questions I should ask, such as those related to the focus of this study. In this sense, I had some idea about where to look for interactions of interest, and in turn, I also had some idea about where I had not looked before (such as staffer interactions during hearings). This allowed me to approach staffers and the research site with a sense of familiarity, but with a sufficient amount of distance to "make the familiar strange" (Borer, 2006, p. 22). While Lofland et al. (2006) advocate that researchers "achieve intimate familiarity with the setting" to collect rich or comprehensive data, I sought to distance myself from this familiarity to look at the places and interactions that could have otherwise been overlooked (p. 16). In so doing, I sought to disregard all previous assumptions I held about the research site that would have otherwise placed certain boundaries on the scope of data I collected.

Throughout the data collection process, I followed the recommendations of Lofland et al. (2006) as they relate to note-taking and drafting memos on ideas and experiences of the research site and related materials. For the interviews I was permitted to record audio, I took light notes throughout and highlighted terms that seemed salient during the discussion. These notes would usually range from one-half to one full written page. For the interviews I was not permitted to record, I took copious notes and attempted to document full quotations that seemed notable in the discussion. These interviews were more laborious and even strenuous as I often felt my efforts to

write quickly were tantamount to a race against time. Following these interviews, I documented my reactions to the discussion and made additional notes on the characteristics of the discussion that I did not previously consider. I usually performed this exercise using my phone in the form of an email to myself, which allowed me to reflect on discussions while traveling to the next interview or to my apartment via the Metro. For observations of Select Committee hearings, I usually arrived around 15 minutes early to secure a seat—typically in the back to provide a wide visual perspective. I also took copious notes of these events and documented (a) the tone of the sites (which were new locations for each hearing), (b) the number of journalists in attendance in the press section, (c) how staffers interacted before and during proceedings, and occasionally, (d) audience reactions. Staffer interactions and reactions often occurred during the question-and-answer periods wherein committee members made statements or posed questions to the hearing witnesses. I jotted light notes of these interactions to reference the times at which staffers interacted or reacted to statements, questions, or interactions between members and witnesses. Similar to in-person observations, I approached public-facing materials from the Select Committee and CSC as spaces in which texts and images were conduits of, and windows into, culture and meaning. Given my emphasis to examine the materials and platforms intended to be most visible for the distribution of knowledge claims—i.e., websites and social media channels of the Select Committee and the Chair and Co-Chair/Republican membership of the CSC—I repeatedly visited these spaces, took notes of characteristics that appeared salient, and captured screenshots of materials in case changes were made later in time. Through this iterative process, I developed emergent themes in relation to the materials I found most salient and attempted to find alternate explanations for the themes I found through negative case analyses in addition to constant comparative analysis of the themes and sub-themes that began to emerge. In turn, my

use of multiple methods and forms of data collection resulted in forms of text (either in terms of notes or interview transcriptions) from which categories were developed, refined, and constantly compared until I reached a point of temporary saturation.

Analogs to Validity and Generalizability

Critics of qualitative analyses have long raised questions about the lacking ability of such forms of data to yield findings that may be generalized across broad populations or provide models that reveal the predictive power of certain variables over others (Denzin, 2009; Hammersley, 2005; Kirk & Miller, 1986; Leininger, 1994; Schofield, 1990). On the other hand, critics of quantitative analyses have argued that statistical models remove the meanings and contexts associated with social action, and encourage researchers to overlook deviant cases that are nothing more than outliers relative to the mean (Guba, 1981; Guba & Lincoln, 1981, 1994). Aside from paradigmatic contradictions that may arise between those who draw from exclusively quantitative or qualitative methods (Guba & Lincoln, 1981, 1994), one of the primary issues at hand between these two approaches stems from the question of whether qualitative methods are sufficiently trustworthy to generate findings from knowledge claims that may be made and used for subsequent studies across different contexts.

For Guba (1981), this form of trustworthiness in social scientific research is commonly associated with particular constructs in the "rationalistic paradigm" that allow investigators to gauge whether findings are worth publishing or using for future work. These include internal and external validity, generalizability, reliability, and objectivity (i.e., replicability), and are most commonly associated with (a) quantitative methods, (b) *a priori* theory testing through hypothetico-deductive study designs, (c) the use of measuring instruments to examine phenomena, and (d) the use of laboratories to control the environments in which phenomena are

measured. Contrarily, studies in the "naturalistic paradigm" generally inhere diametrically opposite features, such as (a) qualitative methods, (b) inductive theory design through observations of the research site and its inhabitants, (c) the use of one's self as the instrument of data collection, and (d) the observation of (relatively) unaltered social processes as they occur in the natural world.[14] Rather than attempt to fit both paradigms into the same constructs of trustworthiness—or more specifically, fit the naturalistic paradigm into the trustworthiness constructs of the rationalistic paradigm—Guba (1981) suggests analogous but distinct constructs to assess the usefulness of qualitative research. These include credibility (rather than internal validity), transferability (rather than external validity), dependability (rather than reliability), and confirmability (rather than objectivity or replicability).

Credibility. Guba (1981) considers credibility and internal validity to be the underlying constructs that address the truth value of a given study. While quantitative approaches may reference internal validity as the extent to which data and phenomena are isomorphic, credibility in qualitative studies refers to the accuracy by which phenomena are portrayed, and specifically, the extent to which accounts are believable for the reader or participants. Similar efforts towards accuracy also occur in the form of "member checks" whereby the researcher actively solicits feedback among those involved in the study to ensure interpretations of social processes are accurate (Lofland et al., 2006; Maxwell, 1996).

Transferability. Transferability and external validity (or generalizability) both reference the extent to which findings may apply to other settings, contexts, groups, or populations. External validity or generalizability tends to refer to controlled and systematic processes from which hypotheses have been falsified (or supported) and findings may be applied to the broader

[14] Indeed, this is somewhat idealistic, as the researcher's presence in the field can at times influence how social phenomena occur. See England 1994; Holmes, 2010; Salzman, 2002; Underwood, Satterthwait, & Bartlett, 2010.

population(s) from which the study sample was selected. On the other hand, transferability inheres certain contextual parameters that limit the settings to which researchers may apply (or transfer) findings. These contextual parameters are detailed through careful descriptions, such as those in ethnographic analyses and the use of thick description (Geertz, 1973).

Dependability. Dependability and reliability both refer to forms of consistency by which phenomena are measured or observed. Depending on the research design, reliability for quantitative studies generally involves the process of estimating the internal consistency of measures or the inter-rater reliability of quantitative codes, among others (Trochim, 2006). In turn, quantitative reliability estimates indicate the extent to which measures or codes are consistent across a series of data points in a given sample, such that low reliability scores indicate errors in the measurement instruments or intersubjective inconsistency between raters. For qualitative studies, dependability is not a quantified assessment as is reliability, but an accounting of the changes that occur in the setting throughout the data collection process. As qualitative approaches tend to involve the researcher as the instrument of data collection, "errors" in this process cannot be captured using quantitative reliability techniques, and may be attributed to such things as one's fatigue. In this sense, dependability requires careful documentation of one's experiences in the field and interaction with participants to create a form of "trackable variance" for which subsequent researchers may account (Guba, 1981, p. 81). This form of tracking is also referred to by others as "auditing" (Lofland et al., 2006; Maxwell, 1996). By acknowledging and considering one's interaction with the field and data collected therein, qualitative studies may become dependable accounts that provide credible and relatively transferable findings.

Confirmability. Confirmability and objectivity refer to the replicability of a given study such that others may observe the same phenomena in the context or sample at hand. Quantitative studies tend to approach questions of replicability through explicit disclosures of measurement procedures and data analysis. Such disclosures suggest a form of objectivity in the work that separates the data and findings from the biases of those who conducted the study. Yet, suggestions of objectivity and replicability in quantitative analyses have been challenged in recent years amid the so-called "replicability crisis" in the social sciences, wherein scholars have attempted to directly (rather than conceptually) reproduce findings of previous works with little success (for discussions on direct vs. conceptual replication, see Pashler & Harris, 2012; Simons, 2014; Stroebe & Strack, 2014; Van Bavel, Mende-Siedlecki, Brady, & Reinero, 2016). For qualitative studies, confirmability references the extent to which other observers or inhabitants of the research site could corroborate one's findings after accounting for any potential biases the researcher may have held. Through the researcher's accounting of such potential "errors," others could presumably visit the research site and its inhabitants and produce similar findings to those in the original report—i.e., the researcher's original findings could conceivably be confirmed by others (Guba, 1981).

Thinking about alternative approaches to validity and generalizability. Credibility, transferability, dependability, and confirmability offer alternative approaches to conceptualize the overall trustworthiness of qualitative studies that account for characteristics that diverge from the quantitative constructs of internal validity, external validity, generalizability, reliability, and objectivity (i.e., replicability). While some scholars argue the use of such alternative constructs is arbitrary or unnecessary (Kvale, 1989; Maxwell, 1992; Morse, Barrett, Mayan, Olson, & Spiers, 2002; Phillips, 1987), criteria for assessing the trustworthiness of qualitative studies have largely

been discussed only in terms of quantitative approaches. This has required qualitative researchers to grapple with quantitative concepts that have generally not accounted for circumstances encountered in qualitative designs, such as the focus on and description of deviant cases (rather than their exclusion), or the acknowledgment and use of personal biases in the analysis of data rather than the rejection of bias through the use of instruments and reliability estimates (Trochim, 2006). Additionally, while the emergence of mixed-method research has provided scholars with a pragmatic approach to expand the limitations inherent in purely quantitative or qualitative studies, such studies have not circumvented questions related to paradigmatic discrepancies between quantitative and qualitative methods. In turn, credibility, transferability, dependability, and confirmability serve to provide an appropriate application of trustworthiness assessments that are analogous to (rather than in competition with) those used for quantitative approaches.

The Current Study

Given my use of entirely qualitative data, I refer to the trustworthiness of this work not in terms of validity or generalizability to other contexts, but to the degree my data and analyses from it are credible, transferable, dependable, and confirmable. To do this, I took a series of practical steps as I collected and analyzed data.

First, to ensure my accounts are credible, I sought to retain a form of accuracy in my interpretations of staffers' experiences. As themes developed and codes were refined, I began to check-in with participants who were willing to have brief discussions about the state of my work. In these discussions (which sometimes took place over the phone, via email, or in person) I briefly explained key findings and patterns that began to emerge from the data, and asked participants if these preliminary findings "sounded right" or seemed accurate based on their personal experiences. For Maxwell (1996) and others (e.g., Lofland et al., 2006), these

discussions served as “member checks” to ensure my observations remained accurate to participants’ experiences rather than tangential or divergent from the lived realities of those involved.

Second, to ensure findings from this work could be transferred to settings with similar structures and expectations, I disregarded my previous assumptions about the research site and its inhabitants to make what was otherwise familiar seem strange and new. Towards the end of seeing the individual and social processes of Capitol Hill through the lends of thick description, I sought to provide rich detail of my experiences, the phenomena observed, and the cultural meanings of such actions throughout the data collection process and throughout my interpretations in the following chapters. In turn, I sought to provide sufficient detail to describe the cultural parameters of this context from which subsequent researchers could account and consider if seeking to transfer my findings to other social environments.

Third, to ensure my accounts are dependable and consistent, I sought to account for changes in the research site (and even myself) throughout the data collection process. This included noting my impressions of interviews after they concluded, my experiences with the varying spaces of Select Committee hearings, or even how distinct interview locations related to the demeanors of those I interviewed and the substance of their insights. Such details were necessary to consider for tracking the qualitative variance that occurred during data collection and analysis, and in turn, providing a sense that the work is indeed dependable.

Fourth, to ensure findings could be confirmed by others, I employed the techniques noted above (i.e., member checks, thick description, documenting changes in the research site) in addition to what Lofland et al. (2006) and Maxwell (1996) refer to as negative case analysis. This involved considering the instances that contradicted emergent themes during the data

collection process to gain a sense of the varied phenomena that could occur among participants. This process helped distinguish whether negative cases were deviant from emergent themes or separate burgeoning themes altogether. In turn, this provided increasingly precise accounts of phenomena and enhanced confirmability.

The Coming Chapters

Throughout the following chapters, I consider (sometimes explicitly or implicitly) the roles of credibility, transferability, dependability, and confirmability towards enhancing the overall trustworthiness of this work and its potential application to other institutional or policy contexts. By also interpreting phenomena through the lens of thick description and analyzing data using grounded theory, I have sought to provide a sufficient amount of detail from which the reader may interpret my experiences with a sense of closeness, clarity, meaning, and accuracy. In the following chapter, I discuss processes of perception on Capitol Hill and the patterns of perceived credibility that came to make sources either useful or useless. In Chapter 5, I discuss how perceptions of information sources related to the social negotiations of knowledge claims among staffers associated with the Select Committee and CSC, and the role of credibility in these processes. In Chapter 6, I examine expressions (or rather performances) of credibility and expertise in knowledge claims among members of the Select Committee and CSC. In Chapter 7, I consider the extent to which patterns of perception, negotiation, and performance across Democratic and Republican staffs and their members indicate overlapping or divergent cultural parameters of learning by which knowledge claims about climate change risks are interpreted and constructed (i.e., civic epistemology). And in Chapter 8, I discuss the implications of these findings for theories of risk in the field of communication and studies of

policy or institutional contexts in particular, in addition to overall strengths, limitations, and recommendations for future research.

A Final Note on Participant Anonymity

Anonymity is frequently promised but rarely maintained on Capitol Hill. This is not to the fault of those who publish reports about the site, but the ability for staffers to intuitively triangulate the linguistic structures of quotes with the offices in which "anonymous" sources work. Even when media reports conceal the employment information of a tipster, the patterns and substance of quoted rhetoric are often enough for others to identify the sources with a fairly high level of certainty. During my professional tenure on the Hill, guessing (or rather determining) the identity of anonymous sources was often a sort of game among the most experienced staffers. And on a few occasions, one senior staffer told me they were entirely certain of a source's identity who was cited in various scathing articles about the new Trump administration at the time. In turn, there seems to be a general paranoia on the Hill about speaking to the press or even any individual seeking "inside" information about concealed processes.

The focused population of this study provides attributes that must be carefully considered to ensure participant anonymity is protected and maintained. In turn, I find it necessary to conceal certain characteristics that could reveal participants' identities, including staffers' job titles (or general positions), gender identity, and any state-specific information discussed throughout the interviews. Populations of the Select Committee and CSC are small enough that naming any state office affiliated with these organizations will yield one representative (aside from California), and in turn, usually one legislative staffer affiliated with that office. In this

light, referencing a Democrat chief of staff from the Montana[15] office who is affiliated with the Select Committee would identify the attributes of only one specific staffer. Even when omitting state-specific information, referencing a Republican legislative assistant affiliated with the Select Committee narrows the population to seven people (Table 3.1), which could be a small enough group for any cunning reader to identify the participant based on rhetorical style alone. While I do not anticipate this dissertation reaching a "wide" audience, the risk of inadvertently identifying participants outweighs any potential benefit from including job titles, gender identity, and/or state-specific information. Moreover, this information does not provide any substantive insight about the research questions and the theoretical aim of this study.

Given these considerations, I refer to participants in the subsequent chapters in terms of their political and organizational affiliations. Additionally, I assigned numbers in random order to Democrats from the Select Committee (n = 7, numbers 1 through 7), Democrats from the CSC (n = 7, numbers 1 through 7), Republicans from the Select Committee (n = 4, numbers 1 through 4), and Republicans from the CSC (n = 5, numbers 1 through 5). In turn, I cite Democrats and Republicans from the Select Committee as "D, Select Committee, [number]" and "R, Select Committee, [number]" and Democrats and Republicans from the CSC as "D, CSC, [number]" and "R, CSC, [number]".

[15] I deliberately use Montana for this example. There are no Democratic members of the Select Committee from Montana.

CHAPTER 4

PERCEPTIONS OF INFORMATION SOURCES

Capitol Hill is an environment that requires staffers to make various forms of decisions on a daily, and perhaps hourly, basis. As a place of legislative process above all, deciding who or what to listen to is perhaps the most significant decision one can make—carrying potential political ramifications for members' re-election efforts or even their general likability among constituents or major campaign donors. Considered against this backdrop alone, it seems unlikely that Congress is a place in which information flows purely from institutions of science to climate legislation (or other forms in which knowledge claims might take shape). Of course, political tensions, members' relationships with lobbyists or stakeholders, and the future plans of members must all be considered as information is assessed and either used or disregarded. In turn, processes of assessing credibility may not necessarily be a function of science literacy or blind partisan affiliation, but members' strategic goals—political or otherwise. While often invisible in public-facing materials (as discussed further in Chapter 6) staffers are the central network through which information is assessed, used, or disregarded—determined as credible or not. What, then, makes information credible for staffers working on climate legislation?

Towards the end of examining how information source perceptions relate to social negotiations to construct knowledge claims of risk, I first consider questions of *how* and *why* staffers determine particular sources as credible versus not credible. This encompasses three research questions on (1) staffers' use of contextual cues to assess the credibility of information sources; (2) the relationship between staffers' political affiliation and their use of contextual cues to assess source credibility; and (3) the relationship between information source characteristics and staffers' use of contextual cues and credibility judgments. As noted here and earlier in

Chapter 2, these questions more broadly examine staffers' uses of contextual cues and mental shortcuts (heuristics) to determine source credibility and whether there is evidence for difference(s) in the use of contextual cues across politically affiliated sources and information source characteristics (i.e., [in]formal, [un]official). A summary of the findings may be found at the conclusion of this chapter.

Research Question One: How Staffers use Contextual Cues to Assess the Credibility of Climate Risk Information Sources

Throughout the following section, I detail the major themes that emerged in my discussions with staffers regarding their credibility assessments of information sources towards the end of developing knowledge claims or other materials related to climate risks. These themes include (a) credible sources as familiar and established; (b) limited time constraints in which credibility assessments may be made (i.e., limited "bandwidth"); (c) inherent skepticism applied to essentially all information sources; and (d) staffers' use of professional networks to assess source credibility. Given my use of grounded theory in this process (Glaser & Strauss, 1967), I discuss each major theme in terms of various minor themes that emerged throughout the data collection and analysis process.

Credible Sources as Familiar and Established

Staffers often find themselves in situations that require quick assessments of source credibility to complete the task at hand. For the legislative staffers with whom I spoke, these tasks often included the preparation of public or semi-public materials such as "dear colleague" letters or briefing materials on forthcoming or existing legislation. On any given day—perhaps with exception to those in August recess—time is always scant, and staffers subsequently attempt to avoid all possible risks that may be associated with consulting information sources

they have not previously used, heard others use, or are familiar with in some general capacity. In their effort to remain conservative in their information-seeking behaviors, staffers frequently reported their preference for sources they feel are familiar, "established," or possess a "name brand" that is affiliated with *de facto* credible institutions such as the Congressional Research Service (CRS). One staffer observed:

> So honestly, it tends to come from sources that I feel are already well known. You know that's kind of the key to it. You know, like CRS, like well-known analytical groups like McKinsey or something. You have even ... to a certain extent, some of the advocacy groups like Solar Energy Industries Association, Union of Concerned Scientists, you know, folks who have always kind of been in that field and have a good reputation (D, CSC, 7).

The notion of having "been in that field" and maintaining a "good reputation" was an attribute that most staffers expressed in similar terms, whether such perceptions included previous direct experience with a particular information source (e.g., such as having worked for a lobbying firm, think tank, etc.) or the more broad notion that credible sources held a form of "credence" that made claims from those groups worth considering above others. Further, the notion of familiarity with or perceived credence of sources was not entirely limited to institutions *per se*; rather, some staffers noted the importance of familiarity with individuals situated in information-providing organizations. As one staffer noted, "I guess I would go to people I have had good experiences with in the past and have been reliable on subject matter because, you know, you have that level of trust with them" (D, Select Committee, 2). In a similar vein, another staffer said,

> I mean, there are groups that we know or individuals we know that we can trust and others that we're skeptical of and sometimes we have brand new organizations or new constituents come up to us that we have no background knowledge of (R, CSC, 5).

Referencing the sources others use or recommend. Determining the credibility of information sources is both an individual and social process for staffers affiliated with the Select Committee and CSC. While those I interviewed were often the sole managers of climate issues in

their office, they sometimes referred to colleagues or legislative staffers in other offices to determine the credibility of otherwise unknown sources. As one staffer put it, "[I]t's really just sort of word-of-mouth credibility and, you know, where I know my trust can be placed" (D, CSC, 7). For another staffer affiliated with the Select Committee, viewing certain environmental groups and trade associations as "reputable" was developed in relation to their own and others' experiences: "I know that they are straight shooters, and sometimes that'll be based on my experience, sometimes that may be based on other people's experiences" (D, Select Committee, 2). While personal or second-hand accounts of sources may provide viable assurances of credibility, merely observing public references to sources from members on the House floor or in hearings could also have the same outcome:

> It will be sources that I've seen other people use. It'll be sources that I'll hear members refer to in hearings or on the floor. Yeah, just kind of a safe space of well-known and trusted sources that I've seen and heard referred to before (D, CSC, 7).

Avoiding the unfamiliar. Juxtaposed against the role of familiarity in credibility judgments, some staffers discussed their experiences with sources they considered unfamiliar as a way to further expound on the qualities of sources they deem credible. While perceptions of being "established," a "name brand," or used by others may help construct a sense of familiarity and trustworthiness of a given source, unfamiliarity might raise initial suspicions about the professional credentials of the authors or individuals in question. One staffer referenced an experience they had with individuals who supported a controversial and complex nuclear energy-related initiative in their state. While this staffer's office did not support the initiative, the individuals in question did, but failed to demonstrate sufficient credentials or brand recognition to compel the staffer to consider their position with equal weight to that of established sources:

> Lack of an established name, what their credentials are. And I don't judge someone solely by their credentials. If someone is actually well-versed on the issue then they may

> know just as much as the so-called expert. But, there are a couple of groups that are just random concerned citizens or advocates that have taken an interest in the issue and one of these groups—keeping them completely anonymous—like I had some engagement with them on the campaign trail. Five, six years ago. And they were all on board, like the Tea Party Express and all that. And then they just, I don't think they have a whole lot of science or engineering credentials. They're just adamantly [supportive of the issue]. So I kind of have to put that into perspective (R, CSC, 5).

CRS as an established and credible institution. For many staffers, CRS is the archetype example of an "established" and "recognizable" source from which "objective" information on climate policies and issues may be attained. On the question of why CRS is credible, staffers tended to allude to the institutional structure of CRS as the research arm of Congress in the legislative branch, thereby making it credible by default given its duty to remain removed from politics or from providing any policy recommendations. Put simply by one staffer, "they're mandated to exist for us" (D, Select Committee, 4). Expounding on this further, another staffer noted,

> Well, for CRS, I mean, they work for the Congress. So they have to be honest with us. Most of their stuff has to be like non-partisan. They can't really go into, you know [politics], I think they'll always tell you like we can't make recommendations on legislation or give you [legislative] text on something, but they will like walk you through like if you need help understanding a bill, things like that (D, CSC, 5).

In the more general sense of credibility, others noted their perception of CRS as an institution "dedicated to research" (D, CSC, 6) or the first resource they consult when investigating a new issue:

> I'd say the first source I go to is CRS—the Congressional Research Service, just because I know for the most part that is going to be unbiased, neutral facts ... it's gonna' kind of lay the land for you. Like you'll see what the issue is, where some of the different angles of it are ... different factors that play into it (R, CSC, 2).

Another staffer stated,

> In terms of credibility, I think, just establish sources, you know, like, I will generalize both from a variety of sources, and I'll start with CRS, and they are public now, but

> what's great is that their main purpose is to serve congressional staff and members (D, CSC, 2).

CRS was also frequently discussed as an approachable institution, where staffers could easily arrange meetings or calls with authors or other CRS specialists:

> If there's a specific report that I'm reading, and I'm not quite understanding what they're saying, or I want to get a better sense of the issue, you know, it's pretty easy to set up a briefing with them and they walk you through their report and answer any questions you have (D, CSC, 5).

Agencies as publishers of "raw facts." In addition to CRS, staffers also mentioned the credibility of government reports and data therein, specifically from agencies in the executive branch such as the Environmental Protection Agency (EPA) or reports from the interagency National Climate Assessment (NCA). Such reports on climate-related issues from these and similar institutions were discussed as "always credible for looking at the climate topic" despite political turmoil (R, CSC, 1). Even with a Republican administration in the White House, one Democratic staffer noted their "comfort" in citing agency reports and described such texts as a "safe space" from which to assess climate issues that have developed over time:

> I think it's just sort of where I feel comfortable. I mean, in all honesty, I feel most comfortable quoting the federal government. Like if an agency puts out a report ... like the, you know, the climate assessment [NCA], for instance ... I mean, that came from the current administration. So that to me is a very safe space to quote ... Yeah, I think it's just a sort of general trust that develops over time (D, CSC, 7).

Similarly, another staffer affiliated with the Select Committee referred to government climate reports as "gold," "gospel," and "the true and raw facts, period":

> I mean, if you can find, you know, US Energy Information Administration, or EPA data, or, you know, USDA [United States Department of Agriculture] data or something like that, you know, I mean, that's just like … that's like gold. If you can find data that's relevant to whatever you're talking about, it is almost like gospel. You know, that is the true and raw facts, period. We can argue over what's next but we can't argue over what these say (R, Select Committee, 4).

The notion of government reports as arbiters of "raw facts" (and thus credible sources) was not due entirely to the reports themselves or their explicit affiliation with the federal government. One staffer noted their experience with seeing government data in a separate report from the Union of Concerned Scientists and its usefulness for considering state-level impacts of Obama-era fuel economy standards. This observation seemed to not only suggest the adaptability of government data to various perspectives but its affiliation with a notable non-governmental source as further evidence of the NCA's credibility:

> The most credible things come from federal agencies. So the National Climate Assessment is something that we cite with a lot of regulatory. And then, you know, we also look for stuff that is ultimately derived from the peer-reviewed literature, is in the peer-reviewed literature, or is based on government data that puts a local county, district, or state-based filter on information about climate, climate consequences, climate impacts, and climate energy policy. For instance, when we talk about fuel economy standards, the Union of Concerned Scientists has like a state by state break down of what drivers can expect to save over time if the Obama fuel economy standards stay in place. So something like that is a great way to sort of localize why these national standards are good or good for households (D, Select Committee, 1).

Seeing "direct science" through scientists and scientific reports. In addition to reserving credibility judgments for "established" and relatively known institutions—such as CRS or any of the executive agencies—staffers also discussed scientific reports and affiliated institutions as the sources from which to understand the fundamental mechanics of climate issues, or, as something to cite that carries a form of "inherent credibility" compared to alternative sources. In this light, scientists themselves were presumed to apply the necessary rigor and integrity to make their work worth listening to, devoid of opinion and politics, in addition to holding the necessary credentials to legitimize their expertise. One staffer affiliated with the CSC also discussed the role of scientific peer-review as a sufficient deterrent against disputability in this regard:

> Well, I think that academic sources are inherently more credible, certainly compared to articles or, you know, op-eds, which are all basically bullshit. Academic sources, you know, you may disagree with some of their assessments, but if something is peer-reviewed—especially in a scientific field—then it is much harder to dispute and especially in the energy space, unless you are opposed to anything dealing with climate change. It's pretty easy to find out information about that. I mean, it's certainly been such a hot topic lately, that there's no shortage of places to look for information (R, CSC, 4).

While many scientific works are developed and pursued within academic institutions, staffers did not discuss universities as the specific places affiliated with the climate research they preferred to cite. Rather, some specifically noted their affinity for reports from the IPCC, NCA, or the Union of Concerned Scientists, in addition to the scientists working with(in) these organizations. As one staffer affiliated with the CSC said,

> I'd rather get it [climate information] from scientific organizations. I'd rather get it from scientists within the federal government. You know, I think it's helpful to kind of know how people are interpreting those scientific facts, because obviously, people have different opinions about things. But if ... when I quote things, particularly with climate, I like to stick to ... here's what the IPCC [Intergovernmental Panel on Climate Change] said, here's what the National Climate Assessment said, like here's what the UN [United Nations] report on the ocean said. You know, these are the experts ... they all have PhDs (D, CSC, 7).

Similarly, another staffer affiliated with the CSC not only considered IPCC and NCA reports as credible, but a lens through which to view science directly, without any form of interpretive distortion—what the staffer termed as seeing "direct science":

> When you yourself are working on something, you will want to know the exact science directly. So luckily, with climate, it's pretty easy because we have the IPCC reports and we have the National Climate Assessment. So functionally, it's really easy for us to see direct science (D, CSC, 1).

Finally, credibility may not be limited to particular institutions, credentials, expertise, or the peer-review process. As one staffer pointed out, credibility may rest on the presumed altruism of the scientists embedded in the organizations staffers prefer to cite:

> Yeah, I don't believe in like this nefarious worldview that scientists want to promote climate change in order to get increased NSF funding in order to have permanent

> employment for scientists. So I am a little predisposed to trust the science papers, to trust the NGOs (D, Select Committee, 6).

The credibility of lobbyists. The proliferation of lobbyists in Washington DC is no secret to Hill staffers or the public. What is discussed less, however, are the forms of insight such external sources may provide to staffers who often lack the expertise equivalent to those who lobby them. As previous scholars have found (Bauer et al., 1972; Hall & Deardorff, 2006; Hojnacki & Kimball, 1998, 1999; Weiss, 1989), lobbyists tend to possess a degree of expertise that can provide clarity on issues that would otherwise cause confusion. Yet, this could also provide the opportunity for lobbyists to wield unknown degrees of influence over legislation that impacts client interests. While this sort of influence has indeed been abused in the past (Abramoff, 2011; Stone, 2006), it is not necessarily the view staffers hold of these individuals or the firms with which they are affiliated. Staffers I spoke to often discussed lobbyists—or "stakeholders" and their representatives (i.e., lobbyists)—in a way similar to government agencies, scientists, the CRS, and other "established" or "familiar" sources. This is not to say staffers ascribed a form of scientific credibility to lobbyists, but a form of credibility associated with the often difficult tasks of disentangling complex legislation or legislative processes.

For many staffers I spoke to, having such expertise readily available was viewed as a benign resource from which to obtain information about district stakeholders (such as businesses and NGOs). One staffer even reported a perceptual shift about lobbyists after coming to work on the Hill:

> I came in with just a negative view of lobbyists because we hear about lobbyists and it's always negative. But they're not. I mean it shouldn't be, it shouldn't be. But we hear about lobbyists having undue influence, and so on. But there really are lobbyists out there doing ... They're just advocating on behalf of a group because they have the tools and they have the wherewithal and they have the knowledge of how it works. It doesn't have to be negative. That's one thing that I hope enlightens (D, CSC, 4).

The ability for staffers to access information from individuals with the "tools" and the "wherewithal" of legislative processes may not be limited to their expertise alone. Rather, lobbyists are also privy to confidential or undisclosed information about their clients that could aid staffers' interpretation of an issue or how they should recommend their boss votes, among many other possible outcomes. One staffer noted:

> And a lot of times, I think some of the most valuable information comes from stakeholders because they have information that they haven't necessarily made public yet, or information that, you know, there's not necessarily a reason they haven't made it public, but it's just kind of like their internal, like, work that they're doing and research that they'll pass along (D, CSC, 2).

The perceived credibility of certain lobbyists considered experts or stakeholder insiders may be contrasted against the perceived credibility of constituents who are actively involved in similar efforts to distribute information to the staffers of their district representatives. Among my discussions with staffers affiliated with the Select Committee and CSC, constituents who sought to distribute information were generally dismissed as ill-prepared or unfamiliar and thus not necessarily trustworthy sources of reliable information (at least not without thorough vetting). One staffer described their experience with such competing sources in terms of a controversial and ongoing energy program in their state. The staffer describes their experience with an individual who advocates on behalf of the state and is seen as the "go-to guy" against information from interested constituents that is viewed with caution:

> I trust him and I know that he's the go-to guy for anything [about the issue] from the state's perspective. I still look at the source just to make sure it's verifiable. There are a couple groups in [the state] that are kind of ... I don't want to say amateur, but ... there are a couple of groups who are pro-[the issue] that don't really seem to have that strong of a research basis or anything. And they sometimes send me over stuff that I really am skeptical of. But yeah, it really depends on, of course, the source of the information and also who sends it to me, too. Some people I know I can trust. There are others that I have to be a little more skeptical of (R, CSC, 5).

Considered together, perceptions of credibility tended to hinge on staffers' familiarity with a source or their perception of it as an "established" institution or individual. In this light, staffers seem to rely on various *types* of sources they consider familiar or established—such as the CRS, government agencies, scientists, and lobbyists—who each provide certain forms of expertise for the situations at hand and the demands for which they call. For example, staffers seem more likely to consult CRS for the history of particular climate legislation rather than IPCC reports. Likewise, staffers also seem likely to consult IPCC reports to obtain information about general climate change impacts across the planet rather than the CRS. Both sources are considered credible, established, and well-known, but for different purposes and applications towards the end of obtaining information related to climate change risks and legislation.

Limited "Bandwidth"

Staffers' use of credibility cues across distinct information sources is a necessary cognitive strategy given the ratio of expected work output to time in a given day, week, or month. Indeed, deep dives into unknown or unfamiliar sources are both temporally irresponsible and professionally risky: should one choose to explore the unknown without success, they lose time they could have otherwise spent cultivating information from a known or trusted source. As one staffer put it, "My most precious resource is time, so I always ask myself if the time I spend on a report will be useful" (D, Select Committee, 4). Staffers referred to this temporal and cognitive restriction in the form of a metaphor to data transfer rates in a computing system: bandwidth. Like the machines on which they work, staffers are faced with limited temporal and cognitive parameters (i.e., bandwidth) to examine all the information sources that are available to them. Yet, they must remain nimble to the demands of new legislation or hearing topics for

which a level of nuanced understanding is necessary. As one staffer affiliated with the Select Committee said:

> … [T]hat is something that's been very interesting about this job, particularly the past three months: Different topic every week in the hearing, with very little repetition, has required me to become an expert in a new thing every week. That is much different than other things I've experienced. There is always the element of like, you have to learn what's on the floor any given week and that's always going to change but ... learning the depth that's needed to speak confidently about the topic has been an interesting challenge (D, Select Committee, 3).

For another staffer affiliated with the Select Committee, limited bandwidth may, at times, restrict one from fully vetting a particular source that is needed to, for example, support a member's desired argument. While the best-case scenario might involve information from an "established" or "well-known" organization or agency, sometimes the situation calls for the use of lesser-known or completely unfamiliar sources for which time permits only brief assessments of their credibility:

> I mean, we want to be able to fact check and point to something that has like a little scientific background to it. You don't want to point to a blog. But at that same time, it's rare that constituents or members or other people are going to dig deep into the source. So you know, as long as it … it has to pass the surface test … because I'm not going to do background to see where each researcher got their funding. … We can't, we're not the body that is doing scientific integrity background checks. We hope, you know, like National Academies can do that (R, Select Committee, 2).

Here, the staffer references the use of a "surface test" that entails brief inspections of sources and other materials to ensure it appears reasonable and useful on its "surface," or, at first glance. This includes quick attempts to identify features or cues that may diminish credibility, or at least, make the source unusable for the task at hand. While the surface test may prove helpful in certain situations, it may also be leveraged for political strategy. As one staffer recalls:

> I mean, if the name is ... you can tell so much about a bill just by its name and it's funny, now that we [Republicans] are in the minority we're seeing spins on different bill names, too. I mean, even from energy bills … for example, there was an oil bill. It wasn't the ANWR [Arctic National Wildlife Refuge] bill but it was one of the coastal drilling bills a

> couple months ago that was called the "Protecting whatever Coast Land Act or whatever," and then we went to Whip and Whip started labeling it the, "Take More Oil from Russia" bill or something like that. They were just trying, on the surface level, to raise some red flags, like say it's a terrible bill (R, CSC, 5).

While the exact intentions of those in the Whip's office may never be known, it seems reasonable to expect the use of bill names as a credibility cue for staffers' brief surface test inspections. In this particular instance, perhaps the goal was to deter Democrats' co-sponsorship of the legislation, or, an attempt to bluntly reveal a feature of the legislation that involved Russia in some capacity (considered a *faux pas* in the current political zeitgeist). In either sense, this staffer took notice and reiterated the important feature of bill names towards the end of making quick credibility judgments.

Organizations and individuals as interpreters of information. Limited bandwidth seems to encourage more than just one's use of the surface test. In other cases where scientific or technical information is needed, staffers may rely on external organizations or individuals to interpret information for them—providing such organizations or individuals meet the general credibility criteria noted above. As one staffer said,

> I don't have the bandwidth to be reading studies. Yeah, I somewhat depend on organizations that make more digestible products out of those studies. Maybe USGS [US Geological Survey] puts out a study and they do a press release on it. That's a more digestible version of the major takeaways from the study. Chances are I don't need the methodology. I just need the high-level points. Yeah, that's where I'm more likely to get that. So, I guess I end up depending on, you know, the reputability of an organization, too, so I know they have done that distilling in an honest way (D, Select Committee, 2).

Another staffer I spoke to discussed the Select Committee as a sort of interpretive mechanism of its own, particularly with regard to serving as a central hub of internal and external sources who possess the necessary expertise to provide advice on climate science and policy:

> Yeah, I mean, most people are too busy to, like, ham and haw over that kind of stuff. And that's part of, like, one advantage of this committee existing is like, okay great, there's

> credible people who know what they're doing who I can rely on to just ask questions about climate change, climate related policy and stuff like that (D, Select Committee, 1).

As one might suspect, lobbyists may also serve as interpreters or "distillers" of technical information, which may be especially compelling when the information in question is presented in a way staffers might consider clear, simplified, or easily digestible. As one staffer observed:

> I mean, any kind of lobbyist, their whole job is to make ... is to influence people. And the best way to do it is to make my life easier. So, if you can give me exactly the information I need that makes this make sense, like it's not nefarious in any way, that's how ... like an everyday citizen could be that lobbyist. So the easier you can make it for me to make my decision ... or if you lay out all the information, then there we go, you've convinced me, you've done a very good job in making your case ... [and] it makes it that much easier for me to do it (R, CSC, 2).

Taken together, expressions of limited bandwidth shed light on the environmental factors that may affect staffers' assessments of credibility, and the necessary use of tacit cues in the form of "surface tests" to make quick judgments for lesser-known, unknown, or technical/complex information sources.

Interpreting all Information with "a Grain of Salt"

While credibility assessments rely on affiliations with established individuals, institutions, or within constrained time parameters, they also seem to inhere a level of skepticism that comes with cultivating information for legislative or political purposes. Towards this end, staffers often expressed their tendency to interpret essentially all information they encounter with "a grain of salt"—i.e., as information with inevitable bias. Indeed, such skepticism may not necessarily be applied equally to all sources one encounters: those with whom some staffers are unfamiliar may endure more salt than, say, CRS or the National Academies. This sort of stance sometimes involved allusions to broader questions of "truth" or "facts" as they may come from external sources, to which staffers expressed ennui. As one staffer said,

> I almost never take things as facts. … Like on a macro level ... because we're handed so much information and I know it has an agenda almost 90% of the time, you have to take it with a grain of salt. So, I don't implicitly trust anything (R, CSC, 2).

Others noted their tendency to apply skepticism more heavily to lobbyists or other organizational representatives with whom they meet: "You have to understand the motivations of the organization. And then understanding that schema of the lens with which they operate" (D, CSC, 1). Similarly, another staffer reported:

> As a Hill staffer, you always want to be willing and open to talk to people and work with people, but like, with a grain of salt. Everybody has their cause. You know, they're always going to communicate their perspective on it (D, CSC, 7).

And while most staffers reported a sense of camaraderie with their colleagues in other offices and even across the aisle, one staffer reported a particular degree of skepticism applied to the information received from them—keeping a so-called "shit list" of the staffers with whom they worked who allegedly provided inaccurate information in the effort to gain co-sponsorship on various energy-related bills (R, CSC, 1). This was indeed not the norm, but one example of the pervasive culture of critique I encountered throughout my discussions on the Hill. As I note below, such skepticism made its way into assessments of sources that may appear ripe for such scrutiny (such as external groups, lobbyists) or others where enhanced skepticism may seem less warranted (such as scientific reports).

Understanding the "bottom line" of trade associations and other external groups. Meeting with representatives of trade associations and other external information sources seems to encourage staffers to develop (or use) a sense of others' motivations. For many district stakeholders, lobbyists, and other organizational representatives, meeting with staff—or interacting with them via phone or email—requires time, energy, and often significant financial resources. Such efforts are not executed without a particular goal in mind or a strategy in place.

At times, these goals are made clear; other times they are not; and on rare occasions, a goal is too misaligned with one's boss to justify time for a meeting or to consult written materials. As one staffer noted, "There are certain groups I won't listen to" (R, CSC, 1). In the events where an organization's motivations are not necessarily clear, some may examine written reports from that organization to assess how certain assumptions in the work could reveal politically motivated reasoning. One staffer affiliated with the Select Committee noted, "Obvious bias is never good, and sometimes assumptions in the work will raise these questions" (R, Select Committee, 3). Along similar lines, another staffer described their experience with sensing an organization's motivations and the ability to detect one's goals based on a "gut feeling" or from general knowledge one may possess of the organization in question. Yet, with lesser-known organizations and topics, sensing bias or motivations becomes increasingly opaque, as was the case for this staffer working on issues related to biofuels:

> So it's usually not one of in-depth research. It's usually a ... a gut feeling is too passé ... but an evaluation of where they might be coming from. If something seems really out of left field, I might look into it more, but for the most part, you can pretty much sense what ... the Wind Association ... you know what their motivations are. That doesn't require any sort of thinking it through. One that's a little trickier is biofuels. Those organizations ... how much of the information they're giving me ... where's their science coming from? Is it science supported and put out by industry? Is it external? On that issue in particular, I've been actually looking ... I've asked groups that I trust more to be more independent to please give me more holistic research on that issue, and all the different pieces with mixed success of them giving it to me ... rather than just asking industry groups. But yeah, there ... it's not common that it would need to go a step beyond that to figure out where the motivations lie (D, Select Committee, 3).

In the instance where staffers are familiar with the organizations at hand, sensing their underlying motivations—or at least possessing a general idea about why they have them—may not require copious amounts of time or effort. As one staffer said,

> And if it's a trade association, I understand that their bottom line is going to influence how they see an issue. It doesn't necessarily mean that they're going to be wrong, but when I get a meeting with the American Forests Association about bioenergy and timber

> being great for carbon sequestration, that is going to influence me differently than if it's, you know, the Wilderness Society talking to me about the benefits of trees. I mean, both of them could be pro-tree but they have different reasons for coming at it (D, Select Committee, 6).

In a case similar to this, one could assess the potential motivations of a group based on Google searches of the group names, or conduct brief reviews of any materials they may provide in meetings. While the utility of this process is clear enough, questions of how and why these processes begin are less so, but seemingly related to one's familiarity with the organization or individual at hand. In turn, the evidence here suggests familiarity could diminish one's need to expend one's cognitive capacity towards understanding underlying motivations.

Taking a grain of salt with agency reports. While agency reports are inherently credible to most, some staffers—Democrats specifically—expressed their tendency to view agency materials with an enhanced level of skepticism compared to previous administrations. This may not necessarily be surprising given the comingling of "career" (i.e., permanent, non-political) and "political" employees in these organizations (Brewer & Maranto, 2000; Pfiffner, 1987). Yet, those I interviewed expressed some divergence on what or who specifically may be associated with the need for enhanced skepticism of agency reports. One staffer suggested the Trump administration influenced agencies to the extent that non-political staff might skew new reports:

> I mean, I would say like agencies are a pretty big one. But, you know, honestly, I think, like, with this damage, we take it with a little bit of a grain of salt. And trying to, like, you know, understand that, like, usually we can trust the information, but maybe in the past few years just understand that it might be slightly skewed (D, CSC, 2).

On the other hand, another staffer attributed the need for enhanced skepticism to an uncertainty in the flow of reports from their authors to the public:

> … [R]eports by the government agencies are ... it's something that we have to take with not a large grain of salt, but with a little bit more of a grain of salt than we used to ... of

> what is particularly not being included ... or ... I mean, the government tends .... It tends to not be so much of an issue of withholding information within ... like striking language within a report. Like we've seen some examples of that in those IG [Inspector General] reports or investigations in that. But it's mostly hiding reports or not putting them out at all (D, Select Committee, 3).

This distinction is not purely semantic, but evidence of distrust in the structure of agencies to either release credible reports or commission reports produced by dishonest authors. While the cues for detecting this may not be entirely clear, this general suspicion contributes to the perceived necessity to apply skepticism to essentially all agency materials.

Taking a grain of salt with scientific reports. On less frequent occasions, some staffers—Republicans specifically—expressed a sense of inherent skepticism towards scientific reports or knowledge claims about climate-related issues. In these instances, some discussed their *a priori* belief that "all climate science is biased" (R, Select Committee, 1), or, the notion that scientific bias—however explicit or undetectable—is inevitable but not grounds for its dismissal. Regarding the latter viewpoint, one staffer observed:

> I think that's just a grain of salt you have to take with everything. And it's just, you know, I think, again, going back to scientific integrity, having your work peer-reviewed and all that, like, yes, there might be some underlying bias. But if it's thoroughly peer-reviewed and put in the public and commented on … if you can reach a general consensus among scientists ... there might be a little bit of bias, but that's, you know, that's anything from polling, to you know, voting. With anything like that there's always a plus or minus percentage. So, you just kind of, I mean, that's just the name of the game, you kind of have to factor that in (R, Select Committee, 2).

While this view was expressed by only a small number of staffers, it was also limited to those affiliated with the Republican party. This may not be surprising given the historical association between Republicans in Congress and skepticism towards climate science (Mann & Ornstein, 2016), but I also found this notable given that skepticism was distinct from overarching denial and rejection of all scientific materials. From this perspective, the professional or political expectations associated with the Republican party may encourage associated staffers working on

climate-related issues to be particularly skeptical of climate science, just as Democrat expectations may encourage affiliated staffers to enhance their skepticism towards agency reports and the processes involved in their production and release.

Credibility as Inherent to the Office

As I have suggested thus far in the analysis, staffers' credibility judgments seem to involve the use of contextual cues based on their familiarity with the source or its overall perceived legitimacy. Such judgments are often made within constrained time parameters and a cultural norm of critique that raises questions of truthfulness for essentially all forms of information (more or less depending on the "type" of information at hand). As I probed further into this process, I found some evidence for staffers' consideration of sources based on environmental factors, such as the relationship of one's boss with a source; the relationship of one's boss with other members with whom they work on particular issues; or one's office policy towards certain sources. While mentioned less often among those I interviewed, I found it worth noting given the high degree of likelihood that virtually all staffers on Capitol Hill make similar considerations. This is primarily due to the rather rigid hierarchies among office staff that situate one's boss as an individual with the power to override or influence how staff investigate issues—particularly in terms of who they listen to or should perceive as credible—despite the extent of staffers' expertise. In its extreme, such control could seem draconian, but evidence of this influence in subtler forms did manifest in the extent of credibility staffers ascribed to the sources their office had a relational history with, or, a general policy towards use or avoidance. For example, one staffer noted the tendency to consult certain "groups" (i.e., lobbyists) given their boss's relational history with them, and in turn, the usefulness of such groups for acquiring information about legislative developments:

> Again, I have to say, given the office that I work with … that office has been working with the same groups for just a million years. … So other staffers—and I do this as well, don't get me wrong—go to our usual groups. So we have our usual ... so I was just this morning texting with somebody from one of our groups because we think, they know who the senior members are, they know where there's movement, and we keep pretty close (D, CSC, 4).

In terms of office policy, another staffer noted their experience with avoiding a particular organization based on the discretion of their superior:

> There's like the American Action Forum or something. Yeah, we don't really consider that as a source to use in our office. My LD [legislative director] would kill me if I used that as a source (R, CSC, 2).

This staffer then noted their avoidance of this source despite its popularity among many other Republican offices: "I know like, a lot of Republicans quote them, but our office does not consider them as like an actual credible source" (R, CSC, 2). In terms of relational history, one Democrat staffer noted their boss's tendencies to co-sponsor bipartisan climate legislation with various Republican members, which required frequent interactions and forms of information exchange with the staffers in those offices. In my discussion with the staffer about this process, I asked about their general experience with this sort of collaboration, to which the staffer said,

> I mean … honestly the vast majority of experiences I've had with other staff on the Hill have been good, with both parties. I think there's this understanding that we are all kind of in the trenches together, regardless of which side we're on. We're in this like, weird little club, like super weird club. No one else can understand it. And so, I think there's a certain amount of respect and understanding that comes from that (D, CSC, 7).

Taking these three examples together, one could question whether an office only hires staff who hold preferences for source selection that are consistent with the member, or, whether the member's existing relationships, preferences, and office policies create an environment within which staff seek to fit. While both are possible, I am inclined to suggest the latter: It is reasonable to suspect that staffers will pay close(r) attention to sources with whom their boss has a close relationship, or view certain sources as less credible (or even unusable) when such a

position is office policy. And if one's boss enjoys working on bipartisan climate legislation, it is reasonable to suspect that staff will come to develop a favorable opinion of collaborating with political opposites. At the very least, members' preferences seem to be a salient component of office dynamics in which staff make source credibility judgments.

Staffers' Specialist Networks as Vetting Mechanisms to Assess Source Credibility

As one might suspect at this point in the analysis, staffers' credibility judgments seem to involve individual assessments with consideration for environmental/contextual factors, such as one's limited time and cognitive capacity, in addition to the existing relationships and the preferences of one's boss. What is also worth noting in this process, however, is the role of staffers' social networks towards the end of "vetting" or determining the credibility of unknown sources. Individuals within these networks may include one's colleagues in the office, legislative staffers in other offices, or even expert lobbyists with whom the staffer has a relationship and trust in to make credibility assessments. In this light, the confines of one's office or political caucus are not the defining parameters of this network: environmental legislative staffers would find little use consulting colleagues in their office or party who do not possess the necessary knowledge or experience to provide insight on the credibility of a given source. Rather, trusted individuals with sufficient knowledge of or experience with otherwise unknown sources may serve as specialists to help staffers determine the credibility of sources who staffers would otherwise need to vet themselves or disregard altogether—despite their physical location or political affiliation.

In a discussion of this process, one staffer reported their reference of "personal staff connections" to find others who can "vouch" for unknown sources—despite their office's political affiliation: "If someone can vouch for another person, that means a lot in terms of

someone being credible, whether they're Republican or Democrat. There are people I trust on the other side [of the aisle]" (R, CSC, 1). Similarly, another staffer noted their increased willingness to meet with or listen to sources when they are recommended by other trusted individuals in the network: "I am much more willing to sit down and talk to someone and listen to them and trust what they're saying when someone I trust has also vouched for them" (D, CSC, 7). Recounting previous experiences, this staffer noted the help of colleagues within the office when such individuals held previous experiences with a particular unknown or lesser-known source:

> We will ask each other "Do you know so-and-so? Have you had experience with so-and-so in your career? This is what they told me. What's your impression of it?" Like we definitely have conversations and get feedback from one another (D, CSC, 7).

Additionally, staffers' networks may be especially useful for assessing the claims of external groups who seek to increase the co-sponsorship of forthcoming or recently-introduced legislation. As one staffer reported, assessing the claims of external sources in this effort has involved contacting other legislative staffers who may be trusted given both of their offices' overlapping political values or their members' overlapping committee assignments:

> Usually like if people ... if I'm like not 100% sure of the information they're trying to give me ... like maybe if there's an office that I know has co-sponsored a bill and they have similar priorities as my boss or similar committee assignments … sometimes I might give them a call and say, "Hey, you know, what was your thinking of like adding on to this bill? We've heard some concerns from [other offices]. Have you guys heard the same?" And you can walk it through (D, Select Committee, 3).

Finally, specialist networks may include those of the members and accessed by staffers when a credibility judgment is needed about an unknown or lesser-known source. As one staffer noted:

> There have been a couple times where we've met with one group that talks a good game, but presents something that the Congressman has second thoughts about. And then if he knows there's a mutual connection with someone else he knows and trusts, he'll ask me to reach out to that other person to see what their thoughts are on this person or their group (R, CSC, 5).

While I did find evidence for the use of specialist networks for credibility judgments, the use of such networks also required staffers to trust those from whom advice or confirmation was sought. Just as staffers ascribed credibility to familiar or "established" sources (as reported earlier), they also seem to require trust in others to listen to their credibility assessments. In other words, the use of one's specialist network to aid efficient credibility judgments hinges on one's trust in other specialists in the network to make such initial assessments.

Research Question Two:
The Relationship between Staffers' Professional Norms and their use of Contextual Cues to Assess Source Credibility

Perceptions of source credibility towards the end of interpreting knowledge claims about climate risks inevitably occur in the context of professional norms with which staffers are affiliated. On Capitol Hill, these norms are largely guided by the political affiliation of one's boss, whose beliefs may not only shape how or which sources staffers perceive as credible, but contribute to the parameters in which broader conversations about environmental issues take place. Indeed, Republican and Democratic staffers affiliated with the Select Committee and CSC expressed sincere interest not only to find information sources of "facts" or "truth" about climate-related issues, but sources from which to derive a sense of how these issues might be discussed among offices with various, and sometimes divergent, belief systems. Rather than view issues in terms of being strictly anti-Republican, pro-Democrat, or vice versa, staffers tended to think about sources in this regard in terms of their potential to illuminate the normative (i.e., political) boundaries in which legislative discussions or activities could take place. In turn, familiar and "established" sources affiliated with explicit political stances were viewed as entirely credible for achieving this aim, even if the politics of such sources were in opposition to those of the staffer in question. Moreover, such sources were often used as reference points for

primary sources from which "truth" and "facts" could be attained. Put simply, staffers' professional norms seem to motivate the use of recognizable but partisan sources to understand not only how to think about politics, but the most prevalent primary sources involved in the ongoing conversation. In the following section, I discuss (a) staffers' use of politically-affiliated sources to satisfy professional norms, (b) the use of politically-affiliated sources to find primary sources, and (c) what this means for the use of contextual cues.

Using Politically-Affiliated Sources to Satisfy Professional Norms

As I have suggested thus far in the chapter, staffers are embedded in environments that require issue assessments and credibility judgments within constrained periods of time. While much of this includes referencing credible sources to collect information about certain issues or their legislative histories, some of this also involves considerations for the rhetorical styles of issue framing that collectively represent the political arguments of Republican and Democratic members. In turn, staffers' professional norms involve issue assessments and information sources that are both scientific/technical and rhetorical/political. With this in mind, many staffers I spoke to discussed their propensity to consult sources with what they viewed as explicit political affiliations—or "bias" relative to government or scientific reports—to gain a sense of the rhetorical, political, and legislative parameters within which the issue had been discussed. In terms of rhetorical and political parameters, one staffer observed:

> I will purposely go to biased sources just to see what those sides are, especially because being in a ... or like my myself being a more moderate person, I sometimes don't see the angle of like, why is this a Republican issue or a conservative way of viewing it versus this way or whatnot. So I'll go to AEI [American Enterprise Institute] or Heritage and see what those scholars are writing about it. And then I'll go see what the other ones are talking about. And so I try to get a variety so I know what it is and kind of take it on its merits. And then I use that to kind of just inform (R, CSC, 2).

Another staffer noted their use of politically-affiliated sources as a way to gauge the "middle ground" or moderate position on issues:

> I like to look at both sides to kind of get an understanding of where they're coming from. You know, I worked for a very center-left moderate member, and so, you know, I tend to avoid both of those fringes, but it's helpful understanding where each side stands to kind of figure out what ... how to toe the line, what's the appropriate middle ground, you know, what might be sane versus not, you know, something along those lines. So yeah, it's almost like oppo [opposition] research I guess at some level (D, CSC, 7).

And another staffer noted their preference to consult conservative and progressive think tanks as a way to approximate the stances of political opponents:

> I do take a look at what Heritage Foundation sometimes puts out just to get a sense of, you know, this is maybe not a group we typically align with ... but let's see what they're saying to try and get a sense of what people are thinking about that potentially might not agree with us. And, you know, how can we like educate them on certain issues? I think the same thing with CAP [Center for American Progress] sometimes, too (D, CSC, 5).

Along more of the lines of understanding the partisan language of certain policy issues, one Democrat staffer (previously quoted above) noted their use of politically-affiliated sources to initiate discussions and potential collaborative efforts with Republican offices:

> I just like to know where everybody kind of falls, you know, on the spectrum and what they think and believe how they interpret things ... because I think it's helpful ... because then if I know I need to speak to say, a far left office, I can figure out from the past, what sort of language might be working there, and how to, you know, appeal to that. And the same thing with pulling from Heritage if I'm speaking to a member on the other side of the aisle, or, a far right member. What appeals to them? Can I find common ground? Is it even worth it? (D, CSC, 7).

In a similar capacity, another staffer noted the helpfulness of political sources to assess discourses of opposition to arguments for legislative programs that are otherwise unfamiliar. Specifically, this staffer recalled an experience working on legislation with a stakeholder group who claimed the bill's program would clean rivers and increase fish populations in local waterways of the state. While this staffer did not have previous knowledge of this argument or if the program would be effective, the staffer felt sources in opposition to such a program would

help identify any "real problems" that would have otherwise been overlooked while allowing the staffer to consider whether such opposing arguments held sufficient veracity to take a similar stance:

> If there's something I feel like I don't know anything about, I will try to specifically look for what the opposition to it is. Not necessarily, with the goal of getting like a fair and balanced view, but more that, like, if there's a real problem with it, there's a decent chance someone has identified it. And so ... but in other cases, you might find people who oppose it, because they have to and you would expect them to, but you can look and see like, oh, do you oppose it for sort of a flimsy reason? Or were you motivated to dig up something that's actually plausible? So then you just read that critically and use all the other techniques you would do to evaluate whether something's valid to try to find that info. And so I basically couldn't find any opposition to this program, and I checked with CRS too, and I also had one of my interns look, just to kind of be like, do we see anything? (D, CSC, 6).

Providing Ideas and Primary Sources

While sources affiliated with partisan belief systems may be used to assess the parameters of political rhetoric about scientific or technical issues, they may also be used as initial points of reference from which primary sources are collected. Throughout my discussions with staffers, I was somewhat surprised to learn about staffers' preference to think of some politically-affiliated sources not necessarily as purveyors of "truth," but as interpretive mechanisms in which arguments were made about primary sources of interest. Just as Weiss (1989) noted staffers' efforts to apply a "correction factor" to sources suspected of expressing underlying ideological positions, some staffers seem to regard some politically-affiliated sources as curators of potentially interesting bibliographies *vis-à-vis* indicators of political discourse parameters. As noted above, these sources may specifically include the American Enterprise Institute and the Heritage Foundation (as affiliated with conservative positions), in addition to the Center for American Progress (CAP) (as affiliated with liberal positions). Towards the end of

uncovering primary source material, staffers referenced the Brookings Institution (as containing a general "slant" at times) and CAP in particular. As one staffer reported:

> So, like, you know, Brookings sometimes has this slant to it as well, but, you know, what I found is like, usually they have some pretty interesting ideas. … And you look at their reports, and sometimes I look through their sources to see where they got it from. And sometimes that leads to some interesting stuff (D, CSC, 5).

And another staffer discussed their impressions of CAP as a source from which one could think about arguments and assess whether primary sources used within such arguments could be viable for use with the Select Committee:

> If I saw they [CAP] put out a report, and I decided to read it and use it, I would ... that is one where I would definitely turn to what sources they're borne from more and then find the paragraph that seems interesting to me and relevant, and then go to where they pulled that from to see if I can actually support that. And then probably rely on the document that I find from them rather than what they actually put out (D, Select Committee, 3).

Yet, just as one *could* rely heavily on such secondary sources to find primary documents, some staffers explicitly reported their aversion to this practice, especially when they first investigate unfamiliar issues. As one staffer observed, "If my boss comes to me and says, 'I need you to compile research about this topic,' I wouldn't go straight to CAP" (D, CSC, 2). Also on CAP, another staffer said, "They just don't feel like a primary source enough. They feel like a secondary source" (D, Select Committee, 3). On the other hand, one staffer affiliated with the Select Committee reported their preference to initially consult Heritage when researching a particular renewable energy program: "I always like to first see what their arguments are" (R, Select Committee, 3).

Forms of Credibility and Contextual Cues

Staffers' propensity to consult sources with explicit political affiliations may be explained as a form of professional due diligence, but it also suggests that credibility and "facts" or "truth" are not necessarily colinear ideas. Rather, credibility may be ascribed to sources whose

political or legislative usefulness far outweighs its resemblance to existing climate knowledge. While I did not explicitly ask staffers to describe their perceived variances of credibility *per se*, I did have one conversation with a staffer whose observation seems apt to the accounts I have noted here. At the end of our discussion, the staffer asked me to expound on my work and some of my preliminary findings on perceptions of source credibility, to which they replied:

> I will say that there's different types of credibility. So there's like, true quantitative credibility, right, and there's like the peer-reviews, like, you'll have more of the National Academy of Sciences and the IPCC report. But then there's also like, the qualitative credibility. And so that's a little harder. And so you get ... this is less in the climate space just because a lot of things you can just say, "Okay, this is what the latest science says, this is what we have to do." But so much of politics is also understanding that you have to make a decision on arguments that don't have scientific data to necessarily support it. So it's understanding the importance of opinion and sentiment and feeling, and change. So like, how do homebuilders feel about responding to the climate? Right, like, that's not ... that's going to be a little harder to base something scientific off of … (D, CSC, 1).

This staffer's distinction between what they call "quantitative" and "qualitative" forms of credibility refer to the necessity to make decisions that, at times, may be too niche or specific to the state/district to allow for informative uses of scientific or technical reports. Much of this involves making decisions about arguments that require consideration for "opinion and sentiment and feeling, and change"—i.e., decisions about the overarching issue discourses that collectively encompass the politics of the matter at hand (D, CSC, 1). In this light, staffers' obligation to seek "useful" information is not limited to reports based on empirical knowledge; indeed, much of staffers' professional expectations lie at their ability to quickly assess the issue at hand in addition to its political ramifications—judgments that inherently require deviations from strict adherence to ideas of decision-making based on science alone. As one staffer similarly observed about this process:

> Because of the complex nature of making decisions here it's not purely based off the facts all the time of "okay this is this, this is that" in terms of like ... the human element, the political element of it (R, CSC, 2).

While staffers are inclined to make credibility judgments for sources to support more scientific/technical or rhetorical/political arguments, preferences for familiar or "established" sources seem to remain—i.e., the tenets of credibility on which efficient judgments are made seem consistent across sources used for scientific/technical and rhetorical/political means. For example, one Democratic staffer affiliated with the Select Committee described CAP as "trustworthy" and having "a consistent track record" (D, Select Committee, 7). One Republican staffer affiliated with the Select Committee described both Heritage and CAP as "familiar" to many Republican and Democrat staffers on the Hill (albeit with vastly different arguments about most issues) (R, Select Committee, 3). Additionally, one Democratic staffer affiliated with the CSC described CAP as an "established" and trustworthy source from which to consider arguments and the data used to support them:

> CAP is one of those places that is very established. I mean, obviously, they're pretty left leaning, but they base their analysis and thoughts on, like, actual facts and data. So I think I can still generally trust the data that they're putting forward, granted it's probably taking the data that will help them prove their point, which, you know, is always something to keep in mind (D, CSC, 2).

Aside from think tanks such as CAP or Heritage, stakeholder groups such as trade associations may also serve as information sources that are explicitly affiliated with partisan beliefs and different from the staffers with whom they meet. For one staffer, this difference in politics does not make the group at hand any less "legitimate" than those with whom the staffer agrees politically. Citing one notable trade association with a presence in the staffer's district—the Cattlemen's Association (known as a conservative-leaning organization)—this staffer observed:

> The Cattlemen's Association … they're very far right of center. And I'm not saying that's right or wrong, I'm saying that's where they come from. So I don't want to defend. ... there's still the same amount of legitimacy with them because they still have a valued resource. My boss represents them as much as he represents the people doing, you know, progressive issues (D, CSC, 4).

This staffer's reference of the Cattlemen's Association as being legitimate and having "a valued resource" inevitably touches on the group's organization of cattle farmer members in the district, and, perhaps even the group's ability to organize a large number of these constituents and/or provide information on their experiences and collective opinions around various policy issues (aligned, or course, with a conservative belief system). Similar to politically-aligned think tanks, perceived legitimacy (and, arguably, familiarity with the association given its presence in the staffer's state) seems to be the primary indicator of credibility rather than alignment between the staffer's and source's political affiliations. In other words, one's partisan affiliation may not necessarily deter their use of politically-affiliated sources to understand the parameters of issue arguments. Additionally, partisan sources perceived as familiar or "established"—and depending on their format—seem similarly useful for providing political assessments or exposure to primary sources.

Research Question Three:
How Information Source Characteristics Relate to Staffers' use of Contextual Cues and Perceptions of Source Credibility

Aside from the environmental conditions and professional norms to which staffers are exposed on a daily basis, I sought to consider how message characteristics might relate to staffers' uses of contextual cues in the process of collecting information about various climate issues. As noted in Chapter 2, message characteristics in risk communication contexts may relate to how risks are perceived or how attribution for the responsibility of risk is assigned (Agadjanian & Menjívar, 2008; Ford & Kaphingst, 2009; Howze et al., 1992; Rickard, 2011, 2012). Here, I consider interview data with regard to the types of messages staffers consider more or less credible as these judgments are made. While perceptions of sources as familiar or established are notable components of credibility judgments, staffers' uses of contextual cues

seem prevalent for written (i.e., scripted) sources, whether they come from the Select Committee/CSC or outside organizations (i.e., whether formal or informal; see Table 2.1). On the other hand, staffers seem to express somewhat of an enhanced degree of cognitive complexity for sources with whom they engage interpersonally—stakeholder groups and lobbyists in particular. Based on my observations of staffers' work environments—and indeed even my own professional experiences on the Hill—I sense this distinction may be related to the time required to vet unknown written sources versus unknown sources with whom staffers interact interpersonally: Vetting written sources takes time not only to investigate but to find in the first place; whereas interpersonal interactions afford otherwise unknown and unfamiliar sources the ability to personally interact with staffers in order to develop familiarity and allow for the staffer to conduct somewhat more complex credibility assessments (perhaps by asking someone about their background, clients/funding sources, or meeting repeatedly over time, among other things). It thus follows that staffers may be inclined to rely on extant source perceptions (familiarity and establishment in particular) when assessing the credibility of written (scripted) sources more so compared to sources that afford interpersonal interactions. Below, I review the evidence to support this suspicion (first) for scripted sources from the Select Committee/CSC and external organizations, and (second) for interpersonal interactions between staffers and external lobbyists/stakeholder representatives.

The use of Contextual Cues to Assess Scripted Sources

Put simply, staffers' uses of contextual cues to make credibility judgments seem to be somewhat pronounced for formal (i.e., scripted) sources from the Select Committee/CSC or outside organizations compared to informal (i.e., unscripted) sources. This is *not* to say that formal (i.e., scripted) messages are perceived as inherently credible, but that formal messages

may restrict how staffers interact with them to the extent that contextual cues may be the most efficient way to determine source credibility. Yet, I also found staffers' reports of perceived credibility for scripted government sources or media coverage as providing the most convincing evidence for this point. For example, one staffer noted their tendency to regard (formal/official) materials from the Select Committee as "gospel" without the need of further scrutiny:

> I will say ... anything that we do through the Select Committee, I mostly can treat as gospel. And so then it tends to be more about filling in the gaps from what's the next step of depth underneath that (D, Select Committee, 3).

Another staffer reported their preference to receive information about climate change legislation (or other policy developments) through "media reporting" (formal/unofficial), and in turn, refer to expert stakeholder groups (informal/unofficial) for further clarification rather than investigate the media report further or attempt to find other written sources on the matter at hand—i.e., consulting informal sources to help gain a "faster" understanding of the reported development:

> But I was just thinking, like, there's a lot of different things with the media reports ... like, oh, the Trump administration is rolling back this rule and so we'll be like "oh okay," and then we might turn to some of the other groups to help us understand it faster (D, CSC, 1).

Furthermore, another staffer referred to research from government agencies (formal/unofficial) as mostly "standard," devoid of context, and without "spin" compared to materials from politically-affiliated sources such as the Heritage Foundation. In turn, it seems unlikely this staffer would feel the need to conduct background research on reports from the BLS or other government agencies, simply because they come from those sources and not from a politically-affiliated organization:

> I use our government research, government agencies ... I consider that to be standard. Like ... not infallible, but like that's kind of where ... like ... it is what it is. Like using labor statistics from the BLS, that's fine. So that's ... I try to use kind of the original data as much as there is a data point to use ... as much as possible, so there is no context to it,

> there is no spin on it ... this is what the data says. That's different from looking at someone like Heritage versus an agency report (R, CSC, 2).

A similar argument may be made for staffers' opinions about the credibility of CRS as a source that is generally "unbiased" or "neutral"—indicating that essentially all written (formal/unofficial) materials from CRS may be assessed efficiently as inherently possessing these characteristics: "… I know for the most part that [CRS] is going to be unbiased, neutral facts ... it's gonna' kind of lay the land for you" (R, CSC, 2). The institutional structure of CRS and its legislative mandate to produce non-partisan research may further reinforce staffers' confidence to rely on the notion of CRS (and its reports) as possessing inherent credibility characteristics: "Well, for CRS, I mean, they work for the Congress. So they have to be honest with us. Most of their stuff has to be like non-partisan" (D, CSC, 5). This staffer further commented on the ease with which CRS's authors may be contacted if additional clarification is needed about a report, especially compared to the authors of reports not affiliated with CRS. Here, it seems that prior knowledge of additional affordances (i.e., the ability to contact authors with ease) associated with CRS's written reports allows the staffer to efficiently ascribe a higher level of confidence to all CRS reports compared to written materials from other organizations:

> … [I]t's pretty easy to set up a briefing with them and they walk you through their report and answer any questions you have. In terms of like outside authors, sometimes it's a little bit more difficult to kind of reach out to them ... it's just you have more trust with like CRS (D, CSC, 5).

While the quotes here suggest that some staffers perceive certain government or media sources as inherently credible, they also suggest that scripted materials may relate to staffers' uses of contextual cues to make credibility judgments—first by affording efficient assessments of *where* materials come from and whether the veracity of content within them may be considered. This particular relationship becomes somewhat more compelling when compared

against the evidence below on the role of interpersonal interactions involved in the process of building credibility, such that interpersonal interactions seem to afford staffers additional time and resources (such as their specialist network) to determine the credibility of unknown/unfamiliar sources. Nonetheless, my argument here is also consistent with the restricted time parameters and limited cognitive bandwidth staffers must work within on a daily basis—in addition to my own professional experiences on Capitol Hill.

Interpersonal Interactions as Affording the Development of Credibility

Staffers' credibility assessments of unscripted (informal) sources seem less reliant on contextual cues compared to those of scripted (formal) sources. This is likely due to the interpersonal means through which informal sources transmit information and the ability for staffers engaged in these discussions to interact in ways that are fundamentally different than treatments of scripted materials. Rather than search for information in printed text, for example, interactions with informal sources allow staffers to pose questions or raise concerns extemporaneously. Such interactions also focus staffers' time and attention on the source at hand, and meetings with the same sources may be repeated over the course of weeks, months, or years. In turn, staffers discussed informal sources in terms of their interactions with them and the time needed to "build" perceptions of trustworthiness, credibility, or familiarity, *not* as means through which to identify contextual cues for efficient credibility judgments. This not only suggests that interpersonal interactions afford the ability to develop credibility and familiarity, but that staffers' engagement in these processes results in credibility judgments that are based more on relational histories than contextual cues. On the importance of such relational history, one staffer observed:

> I think you usually develop a history of working with folks especially because you develop niche areas where you work. So, there is ... credibility is sort of developed based

> on histories, either with your office or with other offices. And that can change if the person leaves, right? So, it often is person specific (D, CSC, 1).

Another staffer described interactions with informal sources as a "unique human relationship" that takes "time and effort" to develop to the point where credibility may be ascribed:

> There's some people that I can go to and I'll trust what they give me. With people I just met, it's kind of ... over the years, like so you meet with ... everybody has their clients in the industries, or even like advocacy groups ... they just meet with you and they do the leg work. They push it. And so it's more of a ... it takes time and effort. It's kind of a unique human relationship (R, CSC, 2).

And one staffer noted the importance of "experience" with informal sources but suggested how interactions allow the staffer to reference their specialist network and other sources for vetting purposes:

> It really just kind of comes from a place of like experience with someone ... other staffers or people vouching for them ... you know, how well received they are kind of with the general public and, you know, the mainstream media (D, CSC, 7).

Similarly, interpersonal interactions were also discussed as means for actively vetting unfamiliar sources for one staffer whose office practiced an "open door policy":

> So I mean, we try to have an open-door policy for our office in terms of who comes in ... people, you know, most of the time we try to, you know, hear people out and see what their ask is. You know, once they come in with like a bill or something, we go through a more thorough vetting process in terms of like, okay, this is what this group is saying, but who are they aligned with, too? And like who's behind this? What really does this bill do? (D, CSC, 5)

And when credibility is established through relational means, staffers may accept information without conducting thorough checks through which to ensure it is acceptable. As one staffer noted,

> It kind of goes to show like we're building relationships when it [assessing credibility] comes into play. It's like if I've worked with this group and I've talked to them a lot ... I would trust their stuff in a way ... like not run it through as many of the traps to make sure it kind of meets my threshold of what I would certify as good (R, CSC, 2).

Interpersonal Interactions as Affording Collaboration

Along with the process of developing relational histories towards the end of "building" perceptions of familiarity or credibility, interpersonal interactions with informal sources afford the development of collaborative relationships. In effect, staffers I met with discussed interpersonal interactions in terms of collaboration with official and (mostly) unofficial sources. For example, one staffer associated with the Select Committee noted that hearing witnesses are selected through interactions between senior staff and advocacy groups (D, Select Committee, 4). Another staffer associated with the Select Committee reported that language for legislation is based on input from stakeholders, lobbyists, and other advocates—i.e., "the groups involved" (D, Select Committee, 7). Similarly, one staffer discussed how interpersonal interactions with relevant experts outside Capitol Hill often provide feedback for internal reports and the arguments and analyses therein (R, Select Committee, 3). And another staffer described their interactions with a conservative pro-nuclear power organization as a "two-way street" in which occasional in-person meetings allow for discussions of energy technologies that may be otherwise esoteric:

> So our relationship [with the organization] is very, you know, a two-way street. We'll talk to them about ideas maybe we have or questions we have, whether it's about legislation or funding kind of ideas. And they'll come to us and say, "hey, these are some things we're tracking that might be of interest to your boss. We'd love just even sit down with you and talk through, you know, what a small modular reactor is, what's the future of those." And so on and so forth (R, CSC, 3).

The description of collaborative relationships as "a two-way street" does not necessarily limit staffers' interactions with sources to informal (unscripted) means. Indeed, it seems that once interpersonal interactions allow staffers to "build" a sufficient sense of trustworthiness, credibility, or familiarity, collaborative interactions may take forms that are scripted or unscripted. As one staffer reported, a particular organization with whom they have developed "a

really good relationship" is available to provide technical expertise through channels that are scripted (email) or unscripted (phone calls):

> We have a really good relationship with the [organization] within our district, and we work with them a lot. Cuz, you know, obviously, we care a lot about funding for research and development and renewables and clean energy. But then on top of that, they employ a lot of people in our district, and, you know, we help them get funding as well through appropriations. So, you know, if there's something that's super technical, that relates to something that they've been working on, you know, I'll just pick up the phone, give them a call, or send an email and ask them, like, "what exactly does this mean?" You know, and they'll usually like walk me through it in layman's terms (D, CSC, 2).

Expert sources as "hard to ignore" and "allies in the conversation." Interpersonal interactions may also allow differences in knowledge or experience with the issue at hand to become salient between the staffer and the source. As noted earlier, lobbyists often possess professional or specialized knowledge that exceeds that of legislative staff (Hall & Deardorff, 2006; Hojnacki & Kimball, 1998, 1999; Weiss, 1989). For those I spoke to, this knowledge differential made interactions with lobbyists compelling and their advice "hard to ignore" (R, CSC, 1) even to the extent of taking suggested legislative text and occasionally "pasting" it verbatim into legislation:

> In terms of external sources such as lobbyists, their experience tends to be substantially greater than the staffers they meet with so their influence is undeniable. Yes, it's often easier to copy and paste which can happen (R, CSC, 1).

For another staffer, interpersonal interactions with lobbyists allow such sources to "become allies in the conversation" in terms of providing feedback on niche climate-related legislation that may not have enough incentives for such sources to suggest legislative text *a priori*:

> So usually they're just more like allies in the conversation. Because at least in the climate change space, you're not seeing a lot of ... like ... unlike ... so I also handle healthcare ... and in the healthcare world, all these lobbyists are creating the legislation and then pitching it to offices, right? In the climate change space that's not how it's happening. It's like the offices are figuring out how to cultivate legislation, and then they're trying to get feedback from a bunch of people that have experts who've worked on this issue. And

> then they'll say, "no that's dumb," or, "you need to change that," or, "that's not how that works" (D, CSC, 1).

Yet, expert sources are not always limited to lobbyists; one staffer associated with the Select Committee said they sometimes arrange calls with the authors of various climate-related reports to provide clarification on the issue at hand: "If a report doesn't get there all the way, a call will help" (D, Select Committee, 7). Similarly, another staffer associated with the CSC described their preference to sometimes call state officials who may be familiar with particularly niche issues, which in this case, included the process of finding information about an emerging public health threat due to the presence of per- and polyfluoroalkyl substances (known as PFAS) in their state's drinking water supply:

> The issue with like PFAS, like, that's an issue that's obviously really big nowadays and something that's in [my state], and there's only so much out there beyond like, "this causes an issue." Everyone knows that it's like a problem, but like, there's nothing else really out there. So I'll call the [state health department] and talk to them, and ask them, you know, if they have a good place to point me towards, or if they have any reports (D, CSC, 2).

Staffers as reciprocators of inside information. Interpersonal interactions with unofficial sources in particular seem to also afford staffers the ability to become brokers of "inside" information rather than just recipients of specialized knowledge in collaborative exchanges. While discussed less often among those I interviewed, reciprocal exchanges may indeed be a common trait of interpersonal interactions between staffers and various informal sources, especially considering the support for such forms of information exchange that scholars have found in other contexts (Anderson & Martin, 1995; Imlawi & Gregg, 2014; Martin & Anderson, 1995). As interpersonal exchanges occur between staffers and sources, staffers may offer (i.e., disclose) their own observations about what they may be "hearing" about a particular bill or developing issue. Speaking in general terms, this staffer observed:

> So like, sometimes you work more directly with specific groups. So you're working pretty hand-in-hand with them to develop legislation so they're offering their expert feedback on something that you yourself are working on. And then you could, you know, talk about—and this is pretty broad, it can apply to anything—and you can explain, like, what we do with any issue ... "here's what we're hearing from X group on X topic." But it's usually with that kind of contextual phrase (D, CSC, 1).

Similarly, another staffer discussed this form of reciprocal exchange as part of their professional obligation:

> If we know it's going to impact a particular group, either positively or negatively, you know, it's part of my job to reach out to those and get their feedback and get an idea of what it would mean for them if active policy were implemented (R, CSC, 3).

Taken together, interpersonal interactions with official or unofficial unscripted sources seem related to enhanced cognitive complexity with which staffers make credibility judgments and interact with sources over time. Compared to staffers' efficient credibility assessments of scripted sources, informal (unscripted) sources involve interactions that focus staffers' time and attention to the source at hand—allowing them to actively probe the source, and in many instances, develop collaborative relationships. In turn, credibility may indeed be a relational process for sources involving interpersonal interactions and a form of judgment based on contextual cues for scripted sources that do not afford such dynamic interactions. At the very least, I find it reasonable to argue that staffers' uses of contextual cues to make credibility judgments diverge in terms of how messages are structured and the types of interactions they either restrict or allow.

Chapter Summary

Throughout this chapter, I examined the characteristics of sources staffers consider credible and the processes of determining credibility amid distinct professional norms and message characteristics. As summarized in Table 4.1, credibility judgments do not occur in isolation of one's professional environment or the expectations therein, nor do assessments of

credibility always result from observations of contextual cues alone. Indeed, staffers are situated in rather dynamic environments that may relate to whether a source is immediately disregarded or engaged over the course of years. Yet, notable patterns may be observed that in many ways seem to cross political boundaries. For example, Democratic and Republican staffers reported processes of credibility judgments that were generally consistent with each other, particularly with regard to preferences for sources they consider familiar or "established," in addition to their high regard for external sources such as lobbyists and stakeholder groups. Differences did emerge in terms of the slight degrees of skepticism Democrats ascribed to reports from executive branch agencies compared to Republicans' slight skepticism of scientific reports, although both Democrats and Republicans generally maintained the need for at least some amount of skepticism applied to all forms of information one encounters on Capitol Hill.

Finally, Capitol Hill is a site of interaction that is often interpersonal, especially between official and unofficial sources. Indeed, staffers interact with other staffers, but much of their substantive discussions seem to occur with expert lobbyists who have developed a deep understanding of the issue at hand. Again, for both Republicans and Democrats, interactions with expert lobbyists are frequent and often helpful. But more importantly for the purposes of this work, these interpersonal interactions seem to afford staffers the ability to interact with lobbyists (i.e., information "sources") in ways that are simply not possible with scripted (formal) materials. Staffers may ask questions extemporaneously or think about responses in real-time—characteristics that seem to suggest an enhanced degree of cognitive complexity to assess credibility compared to scripted materials. With regard to these interactions, staffers discussed their critical function for building impressions of credibility over time, through repeated exposures or meetings. In turn, Capitol Hill seems to function on these relationships, and the

evidence I gathered seems to suggest some degree of a relationship between complex assessments (i.e., the use of fewer contextual cues) and interpersonal interactions.

Table 4.1. Summary of Findings for Perceptions of Information Sources: Research Questions One, Two, and Three

Research Question	Summary of Findings

RQ1: How do Select Committee and CSC staffers use contextual cues to assess the credibility of climate change risk information sources?	• Credible sources are those staffers consider to be familiar and "established."
	  o Sources may become familiar and credible if one sees others citing them.
	  o Staffers generally avoid unfamiliar sources.
	  o CRS is largely viewed as an established and credible institution.
	  o Executive agencies and their reports are mentioned as producers of "raw facts."
	  o Some staffers feel scientific reports issued from institutions such as the Intergovernmental Panel on Climate Change allow them to see "direct science."
	  o Lobbyists are often viewed as experts in their field—information sources from which sources can gain understanding efficiently.
	• Staffers are required to make credibility judgments within constrained periods of time—i.e., they have "limited bandwidth."
	  o To overcome time constraints, staffers sometimes rely on external organizations and individuals considered credible to serve as interpreters of information.
	  o Given time constraints, staffers apply a degree of skepticism to all information they encounter—i.e., they take all information "with a grain of salt."
	  o Staffers often seek to understand the underlying motivations—i.e., the "bottom line"—of external information sources when they assess their credibility.
	  o While perceived as credible sources, staffers do apply a degree of skepticism to agency and scientific reports—Democrats for the former and Republicans for the latter.
	• Source credibility may be an inherent feature of one's office.
	  o Staffers' bosses may have existing relationships with various individuals or organizations on and off Capitol Hill. These relationships seem to encourage staffers to view such sources as credible without enhanced scrutiny.
	• Staffers may consult specialists in other offices or outside of Capitol Hill to determine the credibility of unknown sources—i.e., specialist networks sometimes serve as vetting mechanisms.

RQ2: What is the relationship between staffers' professional norms (e.g., political party affiliation) and their use of contextual cues to assess the credibility of climate change risk information sources?	• While staffers are expected to grasp complex concepts quickly, they also feel a professional expectation to understand the rhetorical parameters within which complex concepts are discussed. In turn, staffers often seek sources explicitly affiliated with political positions to achieve this form of understanding. • Politically-affiliated sources—especially those considered familiar or "established"—not only serve as indicators of rhetorical parameters, but secondary sources within which primary sources may, at times, be found. • Credibility may be ascribed to sources of "truth" or politics. Yet, the tenets of credibility remain consistent across source types and the political affiliations of staffers who use them.

Table 4.1. (Continued)

Research Question	Summary of Findings
RQ3: How do information source characteristics (i.e., official/unofficial, formal/informal) relate to staffers' use of contextual cues and perceptions of source credibility?	• Staffers seem inclined to use contextual cues to assess the credibility of formal (i.e., scripted) sources, be they official or unofficial. • Staffers seem less reliant on contextual cues to assess the credibility of informal (i.e., unscripted) sources. o Informal sources involve interpersonal interactions that afford staffers the ability to ask questions, probe knowledge claims, and generally interact with the source in ways that are constrained with scripted materials. In turn, staffers discussed informal sources in terms of developing relational credibility over time rather than making efficient credibility judgments (as they did for scripted sources). • Interpersonal interactions with informal sources not only afford dynamic interactions towards "building" credibility, but they often result in collaborative relationships between staffers and sources (stakeholder groups and lobbyists in particular). Not only do lobbyists and other experts provide specialized knowledge through interpersonal interactions, but staffers reciprocate by providing "inside" knowledge about developments with key issues or legislation on Capitol Hill.

CHAPTER 5

HOW PERCEPTIONS OF INFORMATION SOURCES RELATE TO SOCIAL NEGOTIATIONS OF KNOWLEDGE CLAIMS

In the previous chapter, I examined how staffers associated with the Select Committee or CSC assess the credibility of information sources, in addition to how these judgments may relate to environmental conditions or message characteristics. Here, I consider how processes of credibility relate to social negotiations involved in the development of knowledge claims about climate change risks. Throughout the data collection process, I asked staffers to describe their experiences with colleagues within and outside of the office, particularly in terms of the general interactions that occur as public-facing materials are developed, including (but not limited to) legislation, hearing questions (for those associated with the Select Committee), briefing memos or other background documents about climate-related legislation ("dear colleague" letters in particular). What I sought to probe specifically were comments on the importance of source credibility in this process, staffers' references of contextual cues when discussing information sources with colleagues, or any mention of source characteristics as these discussions took place. In turn, what I found were social processes not necessarily limited to the social networks of staffers on Capitol Hill, but inclusive of trusted technical or political external specialists with whom public-facing materials were developed.

While credibility judgments may be associated with the social environments in which staffers are embedded—such as existing relationships between one's boss and external sources, or, office policies towards the avoidance of certain sources—legislative staffers generally remain the primary individuals whose credibility assessments are the deciding factor for whether information is used or disregarded. Once credibility is established, information from the source in question seems to become nested within broader strategic discussions about the issue at hand.

In this light, environmental legislative staffers seem to act as gatekeepers of perceived source credibility whose initial assessments are rarely questioned after credibility is established. In turn, the question at hand does not remain as to whether a given source is sufficiently credible, but whether or not the issue at hand is supported by enough evidence to make a compelling argument. Perceived credibility of information sources also becomes subservient to the broader political or legislative strategy that is at play. If the main concern is one's political strategy or getting a bill under the jurisdiction of a particular committee, then the credibility of a source is only as important as the necessary claims that come from it towards the end of achieving the goal at hand.

Just as source credibility is sometimes determined with the aid of specialized networks wherein legislative staffers contact similar specialists in their own or other offices (as noted in Chapter 4), negotiations of knowledge claims tend to also occur within this network. Chiefs of staff and communications staffers tend to remain peripheral to the substance of knowledge claims as they are developed since environmental legislative staffers are donned as the in-house "experts" whose expertise is paramount for the claims being made. Yet, as legislative staffers develop the substance of claims—i.e., the specifics as they may pertain to numbers or particular effects and climate risks—chiefs of staff and communications staffers are sometimes involved in discussions about the specific terms used to describe the issue at hand. In these discussions, issues are sometimes reframed to adhere to the political expectations with which the office is affiliated. It is key to note, however, such meetings and processes of reframing are relative to the political sensitivity surrounding the issue under consideration. For topics under less scrutiny, where the stakes are less severe, legislative staffers tend to be the primary individuals who determine substance and framing.

In the following chapter, I examine the evidence I encountered pertaining (a) legislative staffers as key decision-makers for credibility assessments; (b) the nesting of presumed credibility within negotiations of knowledge claims; and (c) the collaborative process of constructing knowledge claims between staffers and external sources, including efforts to reframe claims to fit political objectives. A summary of the findings may be found at the conclusion of the chapter.

Research Question Four: How Contextual Cues, Information Source Characteristics, or Perceived Source Credibility are Discussed in Social Negotiations to Develop Knowledge Claims about Climate Change Risk

Legislative Staffers as Key Decision-Makers for Credibility Assessments

One of the essential parts of staffers' interactions with colleagues or external sources includes some form of stability about the information from which claims may be developed. By stability, I do not mean to suggest scientific or technical veracity *per se*, but that the information on which claims may be based have passed inspection of those responsible to do so. For essentially all staffers I spoke with, ensuring the credibility (or even more generally, the "usability") of information sources was the primary responsibility of the legislative staffer in charge of all issues related to the environment, energy, natural resources, or climate change. In this regard, legislative staffers reported a considerable amount of responsibility for determining whether sources were used in (or to inform) public-facing materials—i.e., they served as the gatekeepers not only of credibility assessments but whether the information from credible sources was used (and to what extent). As one staffer simply noted concerning the formative stages of developing legislative texts, "It's very much like you become the point person for the office on that specific issue" (D, CSC, 5). In a similar vein, another staffer noted their primary involvement with climate-related issues before others become involved, either because the issue

at hand cuts across other policy portfolios (managed by other legislative staffers) or because the political stakes are raised for the staffer's boss:

> I kind of have the ... it's my issue area in the office and so when it becomes relevant, like somebody comes to the [House] floor about it ... more people in the office will get more involved. Like my LD [legislative director] will become more involved and talk about it more. But I'm definitely kind of the starting point. And so ... not to say like, anybody can go out and find other information ... but it's more like I'm the person taking charge (R, CSC, 2).

Another staffer associated with the Select Committee recalled a time when they worked on a particular renewable energy bill that involved interactions with stakeholders involved with public lands. During this process, the staffer was viewed as the "point person" for meetings who kept their boss informed on the progress of these discussions. During my time with this staffer, I asked if they worked with anyone else (in their office) throughout this process, to which they replied, "I guess it was mostly me because that's my space, right, and my colleagues are working on other issues. But, I mean, I certainly kept my boss in the loop as I was doing it" (D, Select Committee, 2). In a more general conversation, another legislative staffer described the tendency of information flows for the development of climate-related knowledge claims for press releases or town hall talking points at which the member interacts with constituents. For this office, the staffer emphasized their responsibility for the climate change portfolio, but also noted the communication director's involvement in developing talking points for interpersonal interactions:

> I have the climate change portfolio for my boss. So the other staffers aren't working on it so much and I can say that the communications director has to, and that's often what she's focusing on. We just had a couple of climate town halls, actually three town halls in the district. I was there for two of them. And so she has gotten adept at writing talking points for him and getting him prepared. You know they filter through me. I mean the information originates with me, it gets filtered through her and then gets filtered back to me in her words (D, CSC, 4).

What I find notable here—and consistent with others affiliated with the Select Committee and CSC—is this staffer's emphasis on their role as the originator of claims that are subsequently reframed by, or "filtered through," the communications director—almost as an explicit reference to this staffer's role as an information gatekeeper in the formative stages of developing public-facing materials or claims. Additionally, these observations are consistent with another staffer's perspective whose role focuses on communications rather than legislation. When I asked about their interactions with colleagues, this staffer also noted their tendency to defer to legislative staffers who interact with (informal/unofficial) sources of interest who are involved in the development of public-facing materials or claims:

> So on the comms side, our workflow is, I will usually talk to the policy staffer around that issue. And then they're the ones that have the relationship with the lobbyist, because they've sat in the meetings, whether it's with the boss, or even one-on-one. And sometimes they even have that relationship where they can just call them up and say, "hey, check this out for me." So that's kind of our workflow, which is I'll go to the policy staff; if they don't know it they'll go to their source, back to them, back to me (R, Select Committee, 4).

Indeed, this staffer's account seems to describe an information process that is symmetrical to the account of D, CSC, 4—although both work in offices that are political opposites and hold positions that are fundamentally different from each other. While some could argue this as coincidence, I find it more aligned with the culture of rigid hierarchies and job functions on Capitol Hill. Amid political turmoil, it would only make sense that staffs on both sides of the aisle retain clearly defined job functions to ensure the possibility of inter-office collaboration and bipartisanship.

Intra-office trust. The organization of office staffs as rigid in form and function does not diminish the role of specific individuals or the judgments of legislative staffers. As I have argued here, legislative staffers seem to act as the gatekeepers of credibility—determining (for the most

part) what sources are credible, not credible, used, or avoided. In turn, legislative staffers must be trusted to assess sources or interact with them in a way that advances progress towards (or achievement of) the legislative or political goal(s) at hand. Indeed, legislative staffers are not always the sole individuals working on legislation or those deciding what claims and forms of information to include in materials. As noted earlier, staffers' colleagues (such as those working in communications) or supervisors (such as one's legislative director) may become involved in scenarios where the political stakes are raised. Yet, in other cases where the political stakes are somewhat less pronounced, legislative staffers seem to retain considerable trust from their colleagues and boss (i.e., the member) to release materials without much oversight. On the development of less public-facing briefing materials (that nonetheless inform public statements) one staffer associated with the Select Committee reported little oversight with their process of assessing, vetting, and preparing reports: "Nobody tells me how to do it" (R, Select Committee, 3). Rather, this staffer noted a general process in which they approach their supervisor[16] to discuss the gist of their work and to ensure it aligns with the member's interests and the broader political aims of the office. Similarly, another staffer associated with the Select Committee explicitly noted their colleague's trust in the staffer to assess sources and develop an understanding of the issue at hand: "I would say the base assumption is that they trust that I have done the due diligence" (D, Select Committee, 3). Regarding dear colleague letters in particular, one staffer referred to what is seemingly their office's general trust in the legislative staff to release these letters under the assumption that claims within them fit the goals of the office and are clearly cited:

> I think a lot of times there's a lot of trust within the office to send out a dear colleague that our sources are correct. Most of the time I'll link to sources that are using like a big

[16] I omitted this supervisor's specific title to retain the anonymity of the staffer's office.

> number. Or like, they'll say, like, "oh, the American Society of Civil Engineers gave this scorecard" kind of thing. So it hasn't really been an issue (D, CSC, 5).

This staffer then juxtaposed their experiences with releasing dear colleague letters when collaborating with other offices on legislation (i.e., "leading" or co-sponsoring bills with others) compared to the instances when they have worked alone:

> When you're trying to lead something with someone else, then, you know, of course, you have to get the sign off to the other office, if it's a dear colleague. But if it's your boss's own bill, then, you know, it's your dear colleague, so you know, just send it around and ask people for their co-sponsorship (D, CSC, 5).

Such letters tend to serve as the first points of formal contact between staffers in different offices in order to assess who might be interested in co-sponsoring legislation (usually). And to compel such co-sponsorship, legislative staffers are generally the individuals trusted to develop and support knowledge claims in order to generate support from other offices.

In turn, not only are legislative staffers the gatekeepers from which sources are assessed and information is used (or not), they also seem to be the trusted colleagues whose judgments on some public-facing materials may not require thorough critiques from others. Aside from environmental conditions or existing relationships, these staffers seem to occupy a role in which they hold considerable power over whether and what information may be disseminated from their office, placed in legislation, or discussed in hearings, town halls, or other public events.

Source Credibility as Nested within Negotiations of Knowledge Claims

One of the unique challenges of interviewing staffers on Capitol Hill is finding the ability to elicit responses about prior conversations or experiences from a perspective staffers may have not previously considered. Throughout the data collection process, staffers were able to describe the characteristics of credible sources at greater ease than recall interactions in which questions of source credibility were raised. During these moments, I was met with some looks of

contemplation or prolonged pauses, sometimes followed with short answers of "no" or "it doesn't" while some others replied with tangents on legislative strategies that were not directly related to the question at hand, or, repeated statements about the types of sources they view as most credible. Some others, however, did provide observations that may explain some of the looks of puzzlement and contemplation I observed, especially when compared to the responses I originally considered tangential to this question.

As noted earlier, perceptions of source credibility and legislative staffers' roles as gatekeepers of credibility judgments and information use seem contingent on the issue at hand and the political stakes to which one's boss (the member) is exposed. In general, the higher the stakes, the more involvement of staffers who would otherwise remain peripheral to the legislative staffer's work. Similarly, as legislative staffers tend to act as the gatekeepers through which information passes, they are also expected to use primarily credible or vetted sources for broader discussions between colleagues within (or outside of) the office. Indeed, legislative staffers are not the only individuals whose time is scant—supervisors (such as chiefs of staff) also have little time to consider source credibility amid broader discussions (or individual considerations) involving political or legislative strategies. This rigid division of labor and expectation of efficiency seems to enhance the legislative staffer's role as credibility gatekeeper and trusted climate specialist to the extent that questions of source credibility become an assumed characteristic of information sources once issues are collectively discussed between staffers and others (e.g., lobbyists) within or outside one's office. In other words, source credibility seems to become nested within social negotiations by the time these discussions occur. In turn, salient questions in the negotiation process turn to whether the materials in question will achieve the office's preferred political or legislative goals, such as whether the

information at hand is supported by enough evidence to make a compelling argument (as discussed in the next section).

My suspicion of this process of credibility nesting comes from explicit acknowledgments of it *and* the absence of reported credibility questions in social negotiations. While many of the prolong pauses, looks of puzzlement, or tangents I observed could be dismissed as irrelevant to negotiation processes, I took these forms of contemplation as potential evidence that credibility may diminish in its importance over time, specifically after it is established with the legislative staffer in question either through judgments by use of contextual cues or through relationships that are the result of repeated meetings. One staffer associated with the Select Committee stated that questions of credibility are not necessarily raised when discussing climate issues with colleagues and committee staff because credibility is "assumed" in these conversations (D, Select Committee, 4). Another staffer associated with the Select Committee claimed that source credibility or the "objective fact about an issue" was not of primary concern when discussing legislation with external stakeholders, but that the individuals/groups involved in the process "could agree on the policy prescription" (D, Select Committee, 7). Another staffer associated with the CSC stated that intra-office negotiations about information provided by external sources seemed to focus more on questions of information sufficiency rather than those of source credibility:

> I wouldn't necessarily say it's like credible source versus non credible source. It's more of just like have we looked at the information they presented to us with like, a thorough eye? I mean, are we looking at it from all angles? Because you know, if you present a claim to us and it sounds great, you know, it's worth always considering, but what does this mean? What metrics are we using? What information are they basing this off of? And kind of just doing a little bit of a second look, before jumping to conclusions one way or the other (R, CSC, 3).

Additionally, another staffer associated with the CSC noted that intra-office discussions of source credibility diminish over time, or "fall into the background," given that staffers in the office are socialized to efficiently determine credibility cues without the need for further discussion after such judgments are made:

> It kind of falls into the background. I think we ... in our office ... like as soon as we've done our due diligence ... like, there are certain sources where we say "oh, that's where you got that? Like okay, so, this isn't true." So we've coached everybody to know this is credible, this is not ... where are they getting this? And so that kind of does fall to the wayside a little bit ... and even with our interns ... again, when they're doing their little projects in the office, it's like we try to maintain that standard of what's credible and what's not (R, CSC, 2).

As I note further below, my discussions with staffers about their negotiation experiences with other staffers and external sources reveal processes not centered around questions of source credibility or vetting procedures, but discussions about knowledge claims that function on the basic assumption that the individuals or sources involved are credible and trustworthy. In essence, nested credibility seems to be the foundation on which the social fabric of interactions stays connected, which does not appear specific to any one political party, office, or organization.

Knowledge Claims as a Negotiated Process

The negotiation of knowledge claims about risks related to climate change may occur in various circumstances and involve a wide range of actors. What I found most prevalent across my discussions with staffers, however, was (a) the necessity of a social infrastructure in which strategies could be refined; (b) the importance of political strategy as public-facing materials are developed; and (c) the ability for conceptual flexibility to shift or reframe issues to substantiate the political or legislative strategy at hand. Indeed, questions of source credibility were not noted as frequent points of discussion in this process, but it does seem to remain an underlying

assumption on which orders of strategic planning may occur. Additionally, presumed credibility or senses of trustworthiness seem to also apply to the individuals included in staffers' specialized networks, who are frequently involved in helping shape the substance of public-facing materials. Below, I first review evidence on the salience of specialist networks when negotiation processes occur followed by the role of these networks in the development of strategic considerations (i.e., questions of information sufficiency and reframing in particular).

The necessity of networks. Similar to processes of assessing source credibility, knowledge claims are often developed with the aid of specialized networks that may include individuals within and outside of one's office. These relationships appear to be exchanged-based interactions that require members of the network to hold expertise from which some form of substance or value may be derived. As argued in the previous chapter, staffers' interactions with external sources (particularly lobbyists) may allow knowledge differentials to become salient or for staffers themselves to become brokers of "inside" information. While such interactions seem to afford enhanced degrees of cognitive complexity, they also demonstrate the significance of specialist networks towards the end of constructing information substance and the value staffers and external sources may derive from their participation in such networks. On the one hand, staffers may use networks to gain insight or opinions from others familiar with the particular issue in question; on the other hand, sources in the network may gain insight into the salient issues on which staffers are seeking expertise—information that could indeed benefit those whose value is often dependent on such knowledge (i.e., lobbyists). Indeed, specialist networks are not always consulted when knowledge claims are developed, as the engagement of these individuals seems contingent on the political or legislative stakes at play, or more specifically, the degree of visibility that a particular document may yield and the need for precise forms of

rhetoric or legislative language (particularly when issues cut across categories beyond those of climate issues specifically). Yet, this seems less frequent than occurrences that warrant the engagement of one's specialist network, especially considering the visibility of legislation and related materials or rituals related to the Select Committee or CSC.

Several staffers I spoke to discussed the importance of interactions with individuals within and outside of the confines of their offices or the parameters of the Select Committee and CSC. One staffer associated with the Select Committee noted their frequent interactions with key stakeholder groups to discuss the veracity of arguments they developed about various climate-related reports (R, Select Committee, 3). Another staffer associated with the Select Committee noted the importance of the committee for providing "guidance" on the substance of hearing questions for their boss to read during question-and-answer periods between members and hearing witnesses (D, Select Committee, 7). And another staffer reported frequent interactions with Select Committee staff to discuss hearing topics or clarify questions for their boss: "We have weekly check-ins. Easily weekly check-ins, constant emails. And it's just depending on the boss's schedule, what he's attending and what questions he has to try to pin down" (D, Select Committee, 6). Additionally, the use of specialized networks may not be limited to legislative staffers specifically: one communications staffer noted their preference to hold open-ended discussions with another communications staffer who also works for a Select Committee member. Speaking in somewhat general terms about these conversations, this staffer noted their preference to "talk about things" in terms of the directions of issues and how they might be discussed in the future from a communications perspective:

> … so he and I will kind of talk about how to, you know, how to talk about things or just like, open ended debate on it. Like where have we been in terms of policies that we support? Where are we now? You know, and where are we going? (R, Select Committee, 4)

Specialist networks may span across various organizations and partisan belief systems, both on and off Capitol Hill. One staffer associated with the CSC noted their preference to discuss climate-related legislation with individuals they know from the Citizens' Climate Lobby (CCL)—the group who initiated the CSC in the House (and is courting Senate members at the time of this writing for a version of the caucus in that chamber). The CCL has a central office and local chapters across the country. Here, this staffer noted their preference to consult the local CCL members of the district given their role as constituents in addition to specialists on climate issues:

> So I think CCL is a good example … [my boss] engages with them so much, and he knows the local leader of it very well. And so that's why they started working with our office so closely. If, say, another group like "friends of whatever wilderness" or something like that reaches out and wants to run a bill by us and it's not raising any red flags on the surface, and we're considering getting on to it, sometimes we'll reach out to the local CCL chapter and see if this is something they like as well. And we'll get their input. If they say they don't like it, it doesn't necessarily put the nail in the coffin on it. But we do try to field some feedback (R, CSC, 5).

By "getting on to" a bill this staffer means the decision to sponsor or co-sponsor legislation. The former would allow this staffer and their colleagues to make adjustments to the suggested text before its formal introduction, while the latter would involve essentially endorsing legislation after it is already introduced. Nonetheless, both involve one's formal affiliation with legislation, and in turn, any claims within. In terms of networks that cross partisan belief systems or organizations, one staffer associated with the CSC discussed their tendency to consult staffers in offices across the aisle or those part of the committee that is covering the issue at hand (via hearings or markups):

> I mean sometimes offices will reach out to me and they'll be like, "hey, what are your thoughts on this?" And I'll legitimately be like "I haven't seen this yet," and I'll pick up the phone, and it can be a Republican office, you know, but ... someone I trust on that issue. And they'll give me their perspective on it. And then I'll call up maybe the

> committee majority staff, the Democratic staff that's handling it, and get their perspective on it and try to sort of figure out from these two trusted, reliable sources, like where we're at (D, CSC, 7).

Here, this staffer seems to value their trust in others (as it relates to expertise on the issue) over partisan affiliation. This staffer also noted the role of professional staff on various committees who usually hold experience beyond the average staffer and can provide insight similar to that from expert external sources. As another staffer noted concerning the help committee staff may provide:

> We have committee staff who are professional staff who tend to be experts on certain things ... so, it's communicating with them, and sometimes they can give you a good direction of like, "Hey, you know, actually we have looked at that issue in the past, and this is what we've come across" and you know, they can give you good guidance (D, CSC, 5).

While specialized networks may cut across organizations and partisan beliefs, some staffers may be more inclined to primarily reference colleagues within one's office rather than those affiliated with committees, other offices, or organizations off Capitol Hill. While certainly a distinct case compared to others I spoke to, one staffer noted their tendency to consult colleagues in their own office given their familiarity and sense of confidentiality from which honest discussions could occur. As this staffer said:

> I do want to get better at interacting with other offices and building those kinds of relationships, because it's a much more effective way of pushing things through, or like or getting things to happen. But most of our discussions, for me, are in the office. These are people I've worked with for a long time, I trust them to give me candid feedback and even in the office I know who kind of sits in where, and I can kind of push back and forth on that stuff. It's kind of the safe zone, if you will, to kind of experiment and ... again, I'm fortunate enough to be in an office where like [I can do that] (R, CSC, 2).

What I find notable here is this staffer's comment on the effectiveness of a distributed network and their preference to "get better at interacting with other offices" to become better at "pushing things through" or "getting things to happen." Yet, this staffer's confidence in their colleagues

seems to outweigh the benefits of developing a broader specialized network. In turn, while this is a deviant case from most staffers I spoke to, it nonetheless seems to further support my suspicion that specialized networks are an essential component of the process by which knowledge claims are developed—be they from trusted colleagues or distributed individuals from within or outside Congress.

The importance of political or legislative strategy. While specialized networks serve to provide a social infrastructure in which the substance of public-facing materials may be developed, they also provide sites in which claims may be evaluated for purposes of political or legislative strategy. As I have argued above, questions of information source credibility seem to become nested within these discussions rather than be the primary issue of concern for those involved in the negotiation process. In turn, staffers seem primarily concerned with how materials and claims therein may benefit their boss (the member), district constituents, or the broader Democratic or Republican caucuses with which they are affiliated. For example, one staffer associated with the CSC discussed their preference to consider legislation from various "angles"—such as whether a bill might benefit the office's district or be an issue in which the member is interested—before discussing further details with specialist colleagues in the office:

> For me, I mean, first and foremost, I look at something individually, whether it's something that we've proposed, introduced to someone else, something we want to introduce ourselves or we're going to just sign on as a sponsor … looking at it from a number of different angles. One is the district angle; if there's not a district angle, is there an interest from my boss's standpoint on the issue that then makes sense for us? And then from there, talking with our back office … we've got like six of us, and I'm talking to everyone, primarily my legislative director, who's my superior within our kind of group of legislative staffers. But also, like our comms director, you know, about ways in which we can message it back to the district, things like that. And then, of course also our chief of staff just to make sure that he's tracking some of these larger movements before it eventually then is proposed to the boss (R, CSC, 3).

Central to this process of individual and collective evaluation is the staffer's initial question of whether the legislation at hand may "make sense" for the office from which further details are discussed with others in the network. This assessment of "making sense" seems to encompass the broader essence of strategic thinking that includes becoming affiliated with legislation that may be passed in Congress and signed into law, or at least made visible enough around the time of its introduction to generate public intrigue or approval from constituents. For the process of sponsoring or co-sponsoring legislation, this form of strategic thinking was often embedded in formal procedures and written materials that required the legislative staffer to indicate their reason to support or oppose the bill at hand, in addition to the inclusion of evidence and the opinions of the staffer's supervisors (such as the legislative director and/or the chief of staff). As one staffer noted:

> So almost all the time on any bills, before [the member] co-sponsors a bill, we have to sign off. I fill out a co-sponsorship form. It's, "this is what the bill does, my own summary, my own opinion on it." If there's a CBO score then we include it, and then, if I know who they are, a list of groups that are in favor of the bill, a list of groups that are opposed to the bill. Not the deciding factor but then I have to send that to my LD [legislative director]. My LD reviews it. If she likes it, she'll sign off on it. And then that goes to the chief [of staff]. And then after he reviews it—whether it's a yes or no from either of them—we still bring it to [the member]. I'll say I think this bill is a good idea or I don't, and this is what my LD thinks, this is what the chief thinks. Usually we're all on the same page (R, CSC, 5).

This sort of formalized process was discussed (however briefly) among most staffers I spoke to, which seemed to instill a form of accountability for those involved. Another staffer noted their office's policy to keep a similar version of this form in a binder for years after legislation was introduced or co-sponsored in order to retain a collective memory of office positions amid staff transiency (D, Select Committee, 7).

The extent of granularity with which staffers discuss scientific or technical details within these negotiations seems to depend on the document under consideration and the goal(s) the

staffer seeks to achieve. One staffer I spoke to described their experience with working on legislation related to wetlands restoration, and more broadly, a bill to enhance wetlands for purposes of increasing carbon sequestration (i.e., blue carbon). Rather than develop the bill as a simple funding mechanism for restoration projects, this staffer engaged various specialists in their network to determine if the assumption of the bill's purpose (i.e., to increase the health of existing wetlands) was the most appropriate and environmentally advantageous strategy to implement. As this staffer recalled:

> So we could have just done a bill that says, you know, more blue carbon. But instead, as we were consulting with some of the academics and the stakeholders, at a theoretic level, we found healthy wetlands are good for carbon. But there has not been enough research to really key in like, should we be protecting the wetlands we have now? Is it possible to make investments in restored wetlands for a big carbon benefit? The science is just not entirely there. So instead of doing a grant program to implement wetlands restoration, we're now looking at how to promote the basic research into this science (D, Select Committee, 6).

In this scenario, the substance of the bill under consideration was shifted entirely from one that funds wetlands restoration projects to one that determines the need for scientific research on the sequestration effectiveness of existing or restored wetlands. Of course, this staffer's district contains various wetlands and a left-leaning constituency that is concerned about climate change impacts, risks, and mitigation projects (such as those related to blue carbon)—making this legislation politically appropriate for the voter base at hand and the physical environment in which they are situated.

In addition to reported discussions about strategy in negotiations within specialized networks, staffers also tended to discuss forms of their strategic thinking (or experiences with strategy) when I asked about their interactions with colleagues on and off Capitol Hill. In these discussions, some notable sub-themes emerged. First, staffers seem to abhor the idea of doing anything that will reflect poorly on their boss (the member), which also seems to encourage

staffers to remain honest or "frank" in negotiations with others that could result in the co-sponsorship or introduction of legislation. As this staffer noted:

> Yeah, like none of us want our boss to look like idiots. Right? So we all want to be right in what we're saying, because that's what our bosses are going to say. And so, it's just kind of an understanding on the Hill that like ... you know maybe that's not how it gets portrayed out in the world, but like, we're all honest with each other. You know, like, I have had conversations with staffers on both sides of the aisle. Like, "I know, this isn't 100% right, but like, this is where we have to be for X-Y-Z," and like very frank conversations. And, yeah, we appreciate that (D, CSC, 7).

Rather than remain concerned with the credibility of information on which a particular bill (or claim within) is based, this staffer notes their primary concern (i.e., retaining the integrity of their boss's image) as it relates to frankness in the negotiation process in order to make clear the necessary changes for this staffer's office to collaborate or lead the legislation at hand (i.e., "this is where we have to be for X-Y-Z"). This tendency to avoid risks of unfavorable coverage was indeed even a factor that led some staffers to only allow note-taking during our discussions, and one potential reason why some Republican offices refused to meet with me at all, particularly those who have expressed criticism of conventional climate science in the past. In an unexpected turn during one discussion I had with a Republican staffer, I was told that many Republican members accept the veracity of climate change science, but that engaging in activities that could suggest this acceptance (and their contradiction of previous criticisms) is seen as politically risky and something staffers keep in mind even when confronted by researchers such as myself. As this staffer observed:

> A lot of members are finding it hard to drop the old message [of climate science criticism] because it is difficult to be like [House Rep.] Matt Gaetz. There's people in the past that have been like, "it's not happening." And like, the worst thing you can do as a politician is three years later be like, "yeah I was wrong." That's how you get campaigns run against you. People are like, "he goes back on his word. What's he going to do this time?" So that's what I'm saying. It's difficult for personal offices to do it [meet with climate researchers] because they don't want to put their boss in a bad spot. And you can promise to be off the record all you want, but people on the Hill are so distrusting of

> people, because they think everyone's gunning for their job. And they're like, "if I say this, it's going to come back to me" (R, Select Committee, 2).

This form of strategy does not necessarily seem tied to partisan beliefs of the Republican party, but the need to maintain a public image of rhetorical consistency over time. This staffer's reference of Rep. Matt Gaetz provides one example of the emergence of Republican support for mainstream climate science, albeit with mitigation ideas that sometimes diverge from those of Democrats. In April of 2019, Rep. Gaetz introduced House Resolution 288, or, "Recognizing the Duty of the Federal Government to create a Green Real Deal." The resolution was a response to Democrats' "Green New Deal" introduced in the previous months and discussed climate change as a risk to "military assets, bases, and national security" (H. Res. 288, 2019, p. 2). Nonetheless, Rep. Gaetz was elected to office in 2016, and in turn, is not necessarily beholden to a previous track record of climate science criticism on the Hill.

Second, when asked about their interactions with other staffers or external sources, some staffers noted their intention to work with offices affiliated with the opposite political party but within the parameters of their own ideological values or the stances of their party towards certain issues. As one staffer recalled,

> My boss has made it a priority to reach out to folks across the aisle when we can, you know, and if there's an opportunity to work together, we should take it. That doesn't mean we're going to compromise our values for certain legislation. But if, you know ... if there's folks that are willing to work with us on this issue, or, you know, and if there's not then, you know, we tried and we made the outreach and we made the effort (D, CSC, 5).

Another staffer noted how interactions with other staffers after their boss's election involved discussions about the types of legislation they planned to support or avoid, which also included assurances that the member in question was not as moderate as others previously thought:

> So you kind of have to do your due diligence, particularly when you're reaching across the aisle. You know, I had an office reach out to me ... when my boss was first sworn

> in ... they thought he was more moderate, and they talked to him about like working on a bill to kind of open up things in the Gulf of Mexico for offshore drilling. And it was just like "that is not what we do," you know. So it requires a little due diligence and like looking into on the first pass (D, CSC, 7).

While these staffers (and many others) are likely open to the idea of acceptable legislative compromise, these accounts demonstrate the tangible parameters of partisan belief systems in which public-facing materials are developed and seemingly more or less controlled. As one staffer noted, partisan affiliation on either side of the aisle may, at times, obligate members to support causes or legislation without much consideration for dissent:

> That's how the House is run. And it has been for the longest time. It's just like ... there's not much debate in committee or really even if there is, you see, whatever bills are passed in committee, whatever comes to the floor is top-down driven, it's "oh we need this to happen" or whatever (R, CSC, 2).

While some might find this view pessimistic, it nonetheless demonstrates the salience of strategy in discussions that may occur about matters of politics or legislation. As I argued above, many of the discussions on political or legislative strategy seem to occur in negotiations within specialist networks. And for those that did not explicitly discuss previous interactions with colleagues, matters of strategy remained a notable theme among the responses I gathered after asking staffers about their interactions with others and questions of credibility in this process. This not only supports my suspicion on the diminishing importance of credibility questions over time, but staffers' enhanced focus on strategy as negotiation processes occur. To note, questions of credibility and discussions of strategy are not orthogonal; rather, political or legislative strategy as a general construct described above seems to emerge as staffers' primary focus after credibility judgments are made.

(Re)framing. Negotiations of knowledge claims within specialized networks seem to require a form of conceptual flexibility with which issues may be rhetorically or structurally

shaped to fit the political or legislative goals at hand. For some, framing may be used to shift the committee jurisdiction of legislation or to forge new connections with other staffers whose boss might be interested in co-sponsoring legislation. For others, framing may be a routine process of negotiating between staffers and external sources (such as stakeholders or lobbyists) or other staffers with whom one's boss may be collaborating. To be specific, (re)framing involves deliberate considerations for (or negotiations about) the substance of public-facing materials that may emphasize one aspect of an issue over another. As one communications staffer noted in general terms: "Hypothetically, I might consider using 'climate change' instead of 'global warming.' Right? Global warming is a very specific thing, climate change is much broader. And that is something that we would do" (R, Select Committee, 4). Indeed, much research has examined how these so-called emphasis frames are distributed through media outlets (Entman, 2004; Entman & Usher, 2018; Nisbet & Mooney, 2007), while others have considered how media organizations come to distribute particular frames in the first place (Breed, 1955, 1965; Fishman, 1980; Gans, 1979; Shoemaker & Reese, 1991; see also a discussion of "frame building" in Scheufele & Tewksbury, 2007). In general, frames are used to cause an effect to the individuals exposed to them (Clarke et al., 2015; McComas et al., 2015; Schuldt & Roh, 2014); however, in this context, (re)framing involved deliberate considerations for the substance of public-facing materials towards the end of achieving the political or legislative goal at hand. As one staffer reported:

> Yeah, I mean, if there's something I maybe would like to see changed or modified and it's something we're working on another office with, like, you approach that office right away and say, you know, "look, what flexibility do you have with the text of the bill and kind of the scope of the bill?" And, you know, work from there. And then if there's something maybe on our end that we can play around with a little bit in our office, like, we're always willing to try and make adjustments where it makes sense, while also trying to maintain the original intent of the bill. Now obviously we can't do that when it comes to just co-sponsoring other people's legislation because that's already been done and

> introduced and it's kind of like you're in or you're out. But for our own bills it's certainly a work in process, with an extent of a give and take between offices and then within our office as well (R, CSC, 3).

This sort of "give and take" may indeed occur between offices whose members are seeking to introduce legislation together, but it may also occur within one's own office when discussions encompass the viability of a bill in terms of its potential to pass committee markups and make it to the House floor. After a member introduces legislation, it is referred to the committee(s) whose jurisdiction oversees the area covered in the bill, which is usually followed by hearings, various forms of debate, and a vote from which the legislation is advanced either from subcommittee to full committee, or from full committee to the House floor. Most bills "die" before consideration in the full chamber, and as one might suspect, the chances of death are diminished if the member's bill is referred to a committee of which they are a member or with whom they have alliances. In turn, staffers may (re)frame legislative text to receive a preferred referral to a committee that offers a strategic advantage and the highest chances of receiving support from its members. One staffer affiliated with the CSC discussed the strategic advantage of framing climate change legislation as a financial issue to receive a referral to the committee of which their boss is a member:

> My boss is on the Financial Services Committee, so if you want to do something with climate change, then you've got to find a way to address it financially. So yeah, and I think that's the easier route to do it because you have those established relationships in the community, you're on the committee and you know what goes on in the committee. So if you didn't do that, you just kind of like let it go on another committee and hope that like, someone will see it's a good idea, maybe one of your friends will like advocate for it (D, CSC, 2).

Just as reframing may provide staffers with the strategic advantage of gaining bill referrals to their preferred committees, it may also allow staffers to form arguments that appeal to other offices across the aisle. According to one staffer, such forms of strategic adjustment may be

particularly effective for climate-related legislation that may be justified using arguments focusing on environmental well-being (that are generally more appealing to Democrats) or economic incentives (that are generally more appealing to Republicans):

> Solar energy, for example, you can very much use a kind of argument with Democrats, like, "transition to 100% renewable ... solar is like a very well developed technology", or "we just need to deploy it a little bit more" ... they're more into things that are like, "climate." With the Republicans, you have to do more of like an economic argument: "Okay, this is cheaper now" ... you know, "utilities are moving towards this anyway," like ... yeah, certainly a huge part of it is like figuring out who your audience is, the best audience for it, and the best argument for it (D, CSC, 7).

This staffer further noted the advantage of considering one's audience when contacting other staffers beyond their own network to co-sponsor climate-related legislation, such as that related to solar energy initiatives:

> There's certainly something to be said for sending targeted emails, you know, forwarding that to your colleague to an office in particular, and then mentioning in there, "I know your boss has like X-Y-Z amount of solar in your district" or like "I know your boss has talked about how important solar is" ... and like putting kind of that extra touch on it. And then from that staffer's perspective they're like "oh this person is really interested in having my boss co-sponsor or sign this letter ... I'm going to take a look at it." There's something to be said about personalizing things. There's so many members and you get a lot of blanket emails (D, CSC, 7).

Framing affords staffers the conceptual flexibility to shift the rhetoric or structure of materials under consideration, including (public-facing) legislation or (less visible) emails to unknown staffers in other offices. In turn, framing may be the work of one individual staffer or involve one's colleagues within and outside of their office, particularly when legislation is involved and the political stakes are subsequently raised. Additionally, framing could have subsequent effects that ultimately determine whether measures are passed through committee processes or whether staffers decide to consider co-sponsoring legislation. For climate-related legislation, the potential environmental and political ramifications should not be underestimated given that reframing

materials could allow certain members of Congress to consider legislation that might otherwise be politically troublesome while simultaneously benefitting the environment.

What is also important to note here is the lack of discussion about source credibility when reframing occurs. While credibility is likely considered at times during negotiation processes, it does not seem salient to the extent that it remains memorable. For those I spoke to, recollections of negotiation processes focused on the importance of networks, political or legislative strategy, and the ability to reframe public-facing materials or messages between or among staffers and others. This does not diminish the importance of source credibility in this process but suggests staffers' underlying trust in credibility gatekeepers to have sufficiently vetted the sources of information under consideration.

Chapter Summary

In this chapter, I considered how perceptions of information sources relate to social negotiations to develop knowledge claims about climate change risk. As summarized in Table 5.1, information source credibility is often determined by a single staffer either through efficient judgments or relationships over time. Once deemed as credible, information from the source at hand seems to become nested within broader strategic discussions related to politics or legislation. This sort of trust in the legislative staffer to make this distinction allows others to engage in negotiations about the substance of public-facing materials without notable concern for the information sources or the characteristics used to determine their credibility. Rather, negotiations with "others"—i.e., either colleagues within or outside the office in addition to external sources—focus on political or legislative strategy, including whether and how public-facing materials should be (re)framed to achieve a particular goal (such as attaining referral of one's legislation to their preferred committee).

While I often referred to salient reports of staffers' negotiation experiences, it is also important to note that public-facing materials are not always the result of staffers' negotiations within specialized networks: Just as materials may involve otherwise peripheral staffers in their development, so too might legislative staffers serve as the sole individuals who develop and distribute public-facing materials (such as dear colleague letters). Key to this distinction and whether negotiations occur are the political or legislative stakes to which one's boss is exposed. In circumstances where the intended outcome is highly desired (such as gaining co-sponsors of legislation or getting a bill referred to one's preferred committee), negotiations seem more likely and perhaps even necessary. Nonetheless, such "stakes" are in constant flux and dependent on the particular situation at hand. Yet, if a "win" is desired or a goal needs to be accomplished, staffers would be remiss to avoid consulting their specialist network.

Table 5.1. Summary of Findings for how Perceptions of Information Sources Relate to Social Negotiations of Knowledge Claims: Research Question Four

Research Question	Summary of Findings

RQ4: How are contextual cues, information source characteristics, or perceived source credibility discussed in social negotiations to develop knowledge claims about climate change risk?	• Legislative staffers are generally the key decision-makers for credibility assessments.
	  o Staffers have specific job functions on Capitol Hill and those overseeing legislative portfolios have considerable responsibility (and trust from others) to make appropriate assessments of source credibility.
	• Source credibility seems to become nested within negotiations of knowledge claims.
	  o Once credibility is established, information from the source in question seems to become nested within broader strategic discussions about the issue at hand.
	• Negotiations of knowledge claims may occur within social networks of other specialists (i.e., specialist networks) both within and outside of one's office (especially when the political or legislative stakes are raised).
	  o Specialist networks allow staffers to receive information from experienced individuals, both on and off Capitol Hill. These networks also allow staffers to provide "inside" information about their own tacit knowledge of political or legislative processes.
	  o Political or legislative strategy is of paramount concern in the negotiation process: As questions of credibility become nested in the negotiation process, staffers seem primarily concerned with how materials and claims therein may benefit their boss (the member), district constituents, or the broader Democratic or Republican caucuses with which they are affiliated.
	  o Negotiation processes may involve the active restructuring (i.e., framing or reframing) of public-facing materials to allocate collaborators or allies.

CHAPTER 6

EXPRESSIONS OF CREDIBILITY IN KNOWLEDGE CLAIMS ABOUT CLIMATE RISKS

In the two previous chapters, I sought to provide insight into the backstage processes by which staffers assess the credibility of external information sources and negotiate the claims that appear in public-facing materials. Here, I examine how credibility manifests in the messages that contain knowledge claims about climate change risks, and whether such expressions diverge across channels and partisan boundaries. Additionally, I compare two Select Committee hearings I attended that seem to reinforce the themes I found in the materials I examined. As noted in Chapter 3, I collected relevant press releases, newsletters, opinion editorials (i.e., op-eds), and news articles that were hosted on official websites of the Select Committee (for the majority and minority) and those of CSC members between the 115th and 116th congressional sessions.[17] Similarly, I collected and examined social media content from the official accounts affiliated with the Select Committee or members of the CSC during the same time frame. This resulted in a final sample of 576 documents and social media posts that I collected during the ethnographic process.[18]

My focus here on forms of credibility in messages about climate risks assumes that performances of credibility are more or less deliberate when knowledge claims are advanced in whatever form they may take. While in most contexts I would agree that the importance of credibility and expertise vary depending on the message, topic, sender, receiver, and channel

[17] As noted in Chapter 3, I examined and collected materials from CSC Chair Deutch (D-FL) and CSC Co-Chair Rooney (R-FL), in addition to all Republican members of the CSC. I devised this strategy after encountering far more forms of climate-related materials from Chair Deutch compared to his Republican colleague, Co-Chair Rooney. In turn, expanding my collection of materials to include all CSC Republicans allowed me to examine similar amounts of material from both sides of the political aisle.

[18] A discussion of my approach to ethnographic content analysis and the procedures by which I developed emergent codes and selected materials may be found in Chapter 3 (pp. 90-95).

(among others), Capitol Hill presents an environment in which credibility and expertise seem to embody the very core of members' identities and their political viability throughout the tenure of their service in office. Indeed, even the very architectures and structures in which members and staffers conduct their work (i.e., the House office buildings adjacent to the Capitol) seem to convey a sense of grandeur in which performances of credibility and expertise are often captured and disseminated to the public. Moreover, hearing rooms and the House and Senate floors are the literal stages from which knowledge claims are often advanced about legislation, issues of debate, or topics under consideration. Websites, legislative texts, press releases, and social media channels seem to offer a virtual extension of this stage that retains the social expectation to perform claims in a credible fashion. In turn, I consider knowledge claims about climate change risks to be inherently performative and thus subject to consideration for how such performances are expressed across political belief systems and channels.

While I presume a consistent social expectation for members to perform claims in a credible manner, I remain flexible to the general notion of risk and the varied substance of claims that could emerge in a dynamic political environment over time. In this light, I did not approach climate-related materials with any deductive framework by which to qualify certain claims over others. Rather, taking an ethnographic approach, I first sought to understand the contexts of the discourses and claims within them before considering whether such messages contained either direct or indirect knowledge claims about climate-related risks. This allowed me to consider a diverse range of materials and claims that may not have mentioned "risk" specifically but noted peripheral developments that are no less relevant to the overarching discourses of climate on Capitol Hill (and the expressions of credibility or expertise within them). One example includes many of the knowledge claims Republican members of the CSC and Select Committee made

concerning energy production and rising global levels of carbon dioxide in the atmosphere. Rather than discuss carbon dioxide as a risk to public health or the environment, as Democrats frequently did, Republicans often noted the trend of reduced emissions from the United States and the improvement or development of renewable energy technologies. This sort of technological determinism seemed to diminish the risks frequently discussed among Democratic channels of the CSC and Select Committee, and as such, I considered these claims as fitting under the broad umbrella of what I consider knowledge claims about climate change risks. As such, I consider knowledge claims of risk to include the statements of, or reactions to, chances of potential harm that are affiliated with climate change phenomena.

In the discussion that follows, I examine the themes of performative credibility I encountered across the materials I examined, in addition to whether such performances diverge across channels and partisan boundaries. In so doing, I discuss the overarching styles of materials that are both textual and visual, in addition to the substance of claims made within them. A summary of the findings may be found at the conclusion of this chapter.

Research Question Five: How Select Committee and CSC Members Express Credibility and Expertise in Messages that Contain Knowledge Claims about Climate Change Risks, and whether Expressions Diverge Across Channels and Partisan Boundaries

Throughout my analysis of various public-facing materials from the Select Committee and CSC, I remained focused on the outlets most closely associated with these two organizations, which included the websites and social media platforms of the CSC Chair and Co-Chair and the majority and minority sides of the Select Committee. Upon first inspection of these outlets, I encountered an abundance of materials from the websites and social media platforms associated with CSC Chair Ted Deutch (D-FL) and the majority side of the Select Committee. In contrast, materials from the websites and social media platforms associated with CSC Co-Chair Francis

Rooney (R-FL) and the minority side of the Select Committee were scant, even to the extent that I had to expand my search for Republican materials to include the websites and social media platforms of all Republican members of the CSC. Applying this same scope to all Democrats associated with the CSC would have resulted in a sample of materials in the thousands that would have been too large to examine with sufficient depth. Nonetheless, this stark discrepancy in the mere volume of relevant materials from Republicans and Democrats was an initial indicator of notable differences between Democratic and Republican discourses of climate change risks and the performances of credibility therein.

Based on volume specifically, CSC Republicans and the minority side of the Select Committee seemed reluctant to discuss issues related to climate change compared to environmental issues that were specific to Republican members' districts, such as harmful algae blooms or hurricanes. When climate change was addressed, Republican members seemed to avoid discussions of risks or community impacts, and instead focused on trends of emissions reductions in the United States, the need for enhanced resiliency, and the promise of technological innovation to produce energy devoid of carbon dioxide emissions. I found these discourses and forms of credibility notably different than those from CSC Chair Deutch and the majority side of the Select Committee. While Democrats also discussed the need for resiliency and continual advancements in renewable technologies, they also expressed credibility within a wider range that included discussions involving science, emotion, and members' personal experiences with climate change in their districts (i.e., lived experience credibility). Taken collectively, these distinctions culminated in performances of credibility that were thematically distinct along partisan boundaries, and to a lesser extent, across the channels through which expressions were disseminated. Table 6.1 illustrates these differences, which details the counts of

public-facing materials I collected during the coding process that contained forms of performed credibility I encountered from Republicans and Democrats.

In the sections that follow, I discuss the parameters of each theme I found concerning credibility expressions and some of the most notable examples of those themes I collected. I also discuss the extent to which forms of credibility diverged in form or volume across the channels I examined, in addition to the partisan distinctions and similarities I found for each theme. Finally, as a point of clarity, I often refer to channels or members affiliated with the CSC or Select Committee by their political affiliation—i.e., "Democrats" or "Republicans." While my sample was indeed focused on the CSC Chair, Co-Chair, its Republican members, and the majority/minority sides of the Select Committee, various members of each organization beyond those in leadership roles were often mentioned in the materials I examined. An example of this occurrence would be the Select Committee's official Twitter account retweeting the tweet of a Select Committee member (which occurred frequently). As this analysis is one of the possible differences across political boundaries and channels (rather than between the CSC and Select Committee) I find the shorthand use of "Democrats" and "Republicans" an appropriate and accurate reference to the themes and channels examined below.

Table 6.1 Counts of Relevant Materials Collected Containing Knowledge Claims of Risk and Associated Themes of Credibility Expressions

			A	B	C	D	E	Totals	
Democrats	Scientific or empirical credibility	Claims of climate risk	4	1	20	1	84	110	110
		Claims of emissions reductions	–	–	–	–	–	–	
		Claims of technological promise	–	–	–	–	–	–	
	Authoritative credibility	Declarations of risk	9	2	11	4	42	68	153
		Discourses of innovation and emissions reduction	14	1	2	2	2	21	
		The role of conservation and "resiliency"	–	–	–	–	–	–	
		Political conflict or unity	23	–	9	7	25	64	
	Emotional Credibility	Social or environmental justice	3	–	3	1	19	26	54
		Portrayals of public demonstrations	2	1	–	–	11	14	
		Evocative imagery	–	1	4	–	9	14	
	Lived experience credibility		5	–	5	3	20	33	33
	Relational credibility		–	–	3	8	5	16	16
	Democrat Total		60	6	57	26	217	366	
Republicans	Scientific or empirical credibility	Claims of climate risk	–	–	–	–	1	1	20
		Claims of emissions reductions	2	–	8	–	4	14	
		Claims of technological promise	–	–	1	–	4	5	
	Authoritative credibility	Declarations of risk	20	–	2	1	5	28	184
		Discourses of innovation and emissions reduction	28	2	27	4	29	90	
		The role of conservation and "resiliency"	4	–	7	–	4	15	
		Political conflict or unity	24	–	10	3	14	51	
	Emotional Credibility	Social or environmental justice	–	–	–	–	–	–	–
		Portrayals of public demonstrations	–	–	–	–	–	–	
		Evocative imagery	–	–	–	–	–	–	
	Lived experience credibility		1	–	1	–	1	3	3
	Relational credibility		2	–	–	–	1	3	3
	Republican Total		81	2	56	8	63	210	
	Combined Total		141	8	113	34	280	576	

Note. Columns A through E represent the following forms of material:
A = Articles/newspapers/press releases/op-eds/newsletters
B = Website pages or images
C = Facebook posts
D = Instagram posts
E = Tweets

Scientific or Empirical Credibility

Scientific or empirical credibility encompasses the explicit use of evidence to support claims about climate change risk or the emergence of technologies to reduce chances of harm. Put simply, this form of credibility involves the use of secondary informational material(s) to support the specific claim at hand. Such materials may be textual (such as a link to a report) or visual (such as a map that uses color to show temperature changes over the continental U.S.) and are easily attached to social media posts on Facebook, Instagram, or Twitter. The general notion of scientific or empirical credibility seems related to the idea that external evidence—especially that which may appear established and trustworthy—provides credence to the argument at hand that is independent of the individual or organization advancing the claim. If an established and trustworthy source publishes information about a particular climate risk, then merely promoting that report allows one to become affiliated with that source and the credibility it likely conveys.

The active promotion of claims accompanied by scientific or empirical reports tended to manifest in claims about (a) climate change risks explicitly, (b) reductions of emissions from the U.S., and (c) the promise of technology (particularly nuclear power) to provide energy that is not reliant on oil. As noted in Table 6.1, the prevalence of these expressions was distinct across partisan lines, with Democrats focused primarily on discussions of climate change risk. Republicans were generally less engaged in expressions of scientific or empirical credibility and tended to cite evidence for claims about trends of emissions reductions and the promise of new technologies to produce energy that is not reliant on fossil fuels or other sources of harmful emissions. Yet, even these claims were scant across social media platforms, press releases, or other materials hosted on official websites from which I collected 20 documents compared to 110 from Democrats.

Claims of climate risk. The number of materials released from Democrats and Republicans was notably different for claims of climate change risk, of which I collected 110 from Democrats and one from Republicans. As noted above, Republicans seemed to hold an aversion to discussing climate change in terms of specific risks to their districts, constituents, or to the general public *writ large.* The single piece of material in defiance of this trend was a tweet from the account of CSC member Rep. David Schweikert (R-AZ), which stated,

> Air pollution can cause asthma attacks, lung cancer, heart problems & premature death. A new report shows that climate change is making it harder to clean up. To learn more about Arizona's #StateOfTheAir 2019 report, click here: [lung.org/our-initiatives/healthy-air/sota/] (Schweikert, 2019).

In comparison, Democrats released materials addressing risk explicitly across Facebook and Twitter that discussed various issues beyond one's physical health in light of a changing climate. CSC Chair Deutch published tweets between 2019 and 2020 that discussed climate change risks in terms of potential harm to one's finances, agriculture, and various sensitive natural habitats:

> Climate change is not only impacting our environment, but also your finances. With increasingly severe natural disasters, insurance companies are paying record amounts to cover damages. But they are also charging higher premiums to offset those costs. [Linked article: https://www.axios.com/climate-change-home-insurance-f07655b5-969f-4523-8042-c546ca997801.html] (Deutch, 2019c).

> Climate change has already started to change agricultural output. That's why it's so important that we prioritize action on climate change. Farmers must be part of that conversation, if they're to be part of the solution. [Linked article: https://www.wlrn.org/post/florida-farmers-gearing-fight-climate-change#stream/0] (Deutch, 2019a).

> Rising sea levels are endangering our treasured Everglades. If Congress doesn't act, the consequences of climate change can be catastrophic to our communities & natural habitats across the country. We must do more to prevent further damage to our environment. [Linked article: https://www.nytimes.com/2020/01/27/travel/everglades-florida.html] (Deutch, 2020).

Similarly, the Select Committee frequently retweeted scientific or empirical risk claims from majority members and related organizations in Congress that occasionally address climate issues.

For example, the Select Committee retweeted a post from committee Chair Castor that contained claims about specific environmental issues in her district alongside a linked report from a local news outlet that contained the title, "How climate change is affecting your life in Tampa Bay":

> The #ClimateCrisis & warmer temps are impacting marine life and worsening harmful toxic algae blooms. Rising sea levels are a costly problem too. Let's protect our property values and way of life, and take #ClimateActionNow! Watch this from @10NewsWTSP: [https://www.wtsp.com/article/news/local/how-climate-change-is-affecting-your-life-in-tampa-bay/67-c92e5d5b-5fc4-4678-8d5c-f369b22ac87e] (Castor, 2020).

Additionally, the Select Committee retweeted a post from the account belonging to the majority side of the House Natural Resources Committee, which discussed climate-related impacts on the refugee crisis with a supporting article link from the World Economic Forum—a notable NGO that engages in a broad range of humanitarian efforts. The tweet notes:

> Climate change is destroying peoples' homes, leading to a climate refugee crisis and destabilizing our world. If we don't #ActOnClimate, we're destroying the safety, health & well-being of people across the planet. #WorldRefugeeDay [Linked article: https://www.weforum.org/agenda/2019/06/how-climate-change-exacerbates-the-refugee-crisis-and-what-can-be-done-about-it/] (Select Committee on the Climate Crisis, Majority, 2019b).

Further, the Select Committee also retweeted a post from committee member Rep. Joe Neguse (D-CO), which described climate change impacts as "devastating" in general along with a linked story from *The New York Times* that detailed the effects of wildfires in Australia during late 2019. The tweet is displayed in its original form in Figure 6.1 to provide context of its claim in relation to the accompanying article.

Figure 6.1 Retweet of a Claim from a Select Committee Member

In addition to Twitter, performances of scientific or empirical credibility were especially notable for posts on Facebook and Twitter that used some form of visual information to support the claim at hand. For many posts I encountered, this included a variety of maps, graphs, and charts derived from scientific or technical reports on the emergence of climate-related threats. For many others, empirical evidence involved images of climate-related risk events, such as flooding or effects of heat waves that accompanied claims of potential harm. Some images aligned more with scientific or technical reports, which are reproduced in Figure 6.2, whereas others aligned more with empirical or visual (i.e., non-technical) forms of evidence that are reproduced in Figure 6.3.

Figure 6.2 Scientific of Empirical Credibility: Uses of Scientific or Technical Imagery

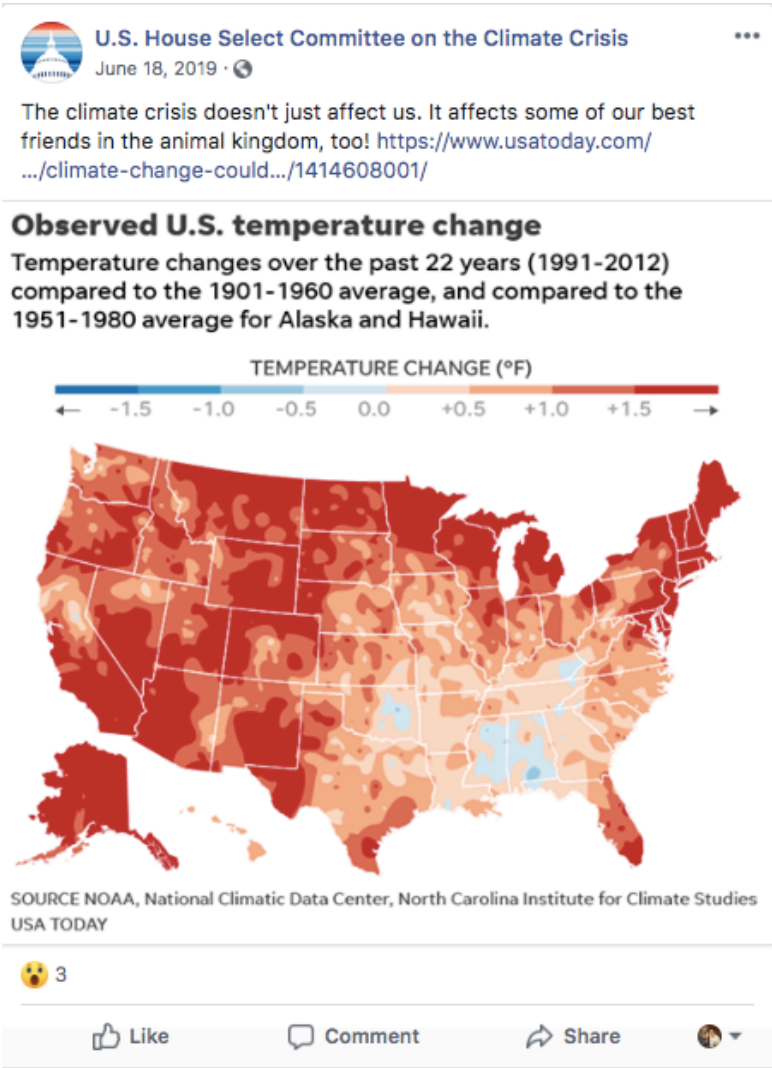


Figure 6.2 (Continued)

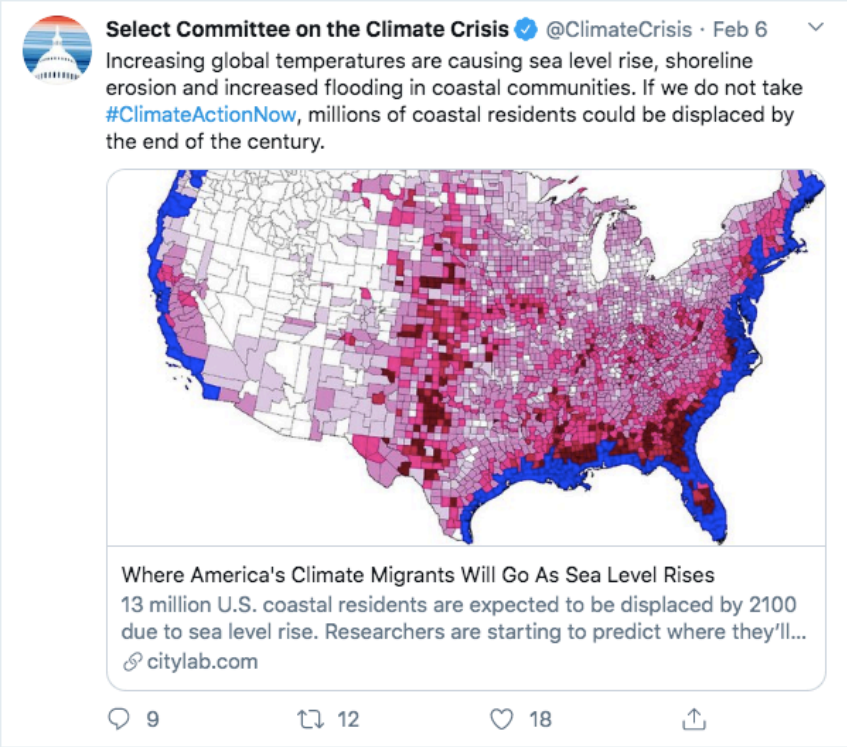


Figure 6.2 (Continued)

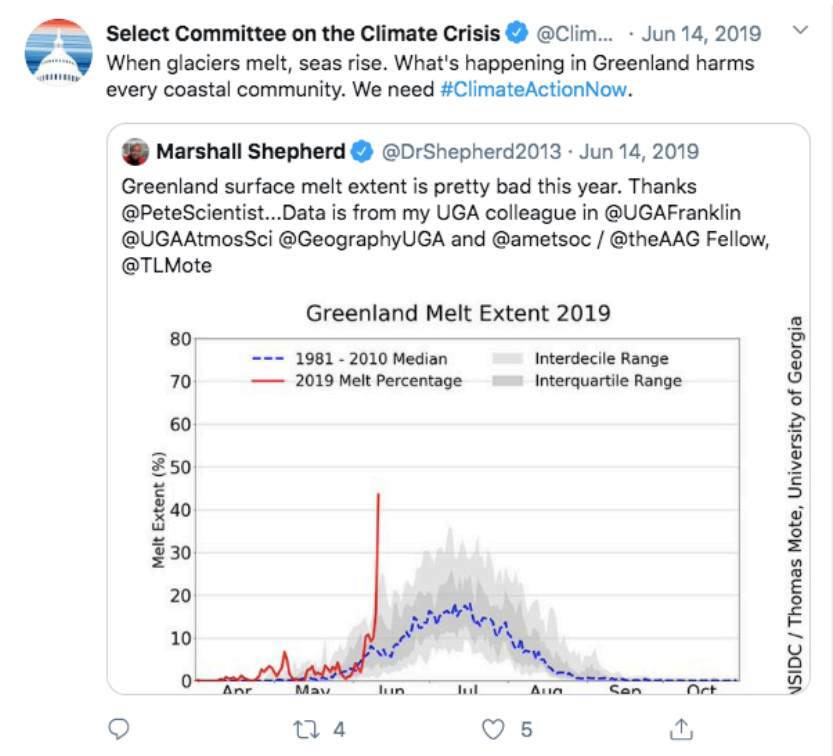


Figure 6.3 Scientific or Empirical Credibility: Expressions using Non-Technical or Scientific Imagery

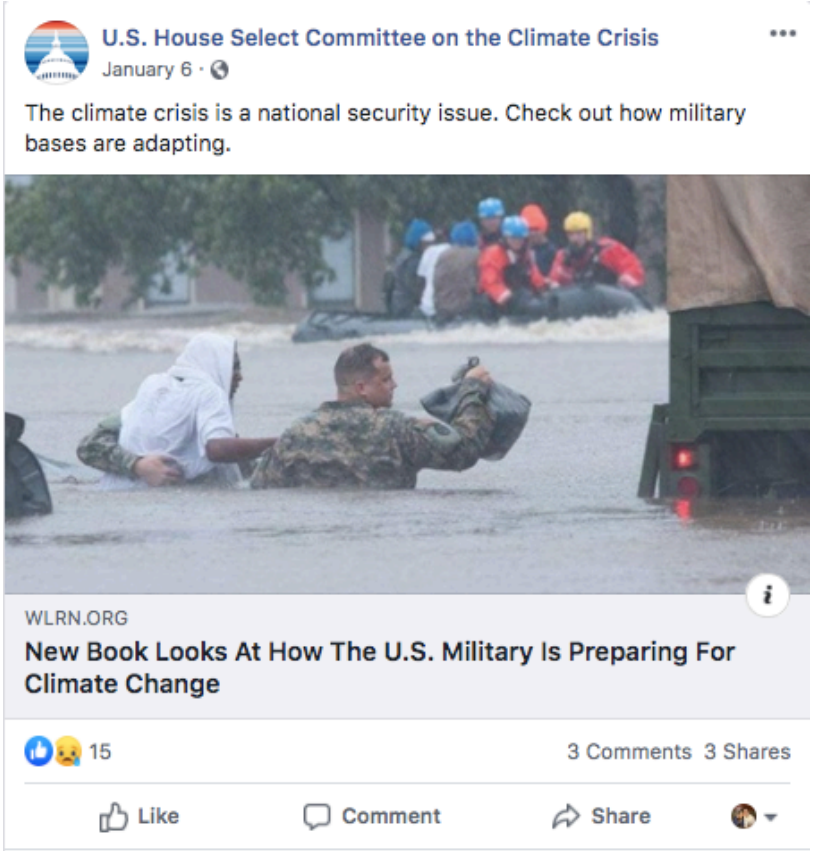


Figure 6.3 (Continued)

Figure 6.3 (Continued)

As one might suspect based on the images here, performances of scientific or empirical credibility did not necessarily require such claims to fit within the parameters of peer-review or what climate researchers might classify as scientifically accurate. Rather, some posts visualized here and others I encountered seemed to dramatize claims based on imagery that appeared to provide credence to the claim at hand, particularly for some of the empirical arguments reproduced in Figure 6.3. For example, the Facebook post published on August 19, 2019, in Figure 6.3 discusses summer heat records along with images from a *BuzzFeed* news article that show an egg cooking on asphalt and a person soaked in water—evoking a visual sense of heat accompanied by an invitation for viewers to "see how people and places across the globe were affected by the climate crisis." The adjacent post in Figure 6.3 published on January 6, 2020, shows two members of the military escorting an individual to safety through a high-water flood zone while noting, "The climate crisis is a national security issue." And two posts published on June 2, 2019, and July 9, 2019, in Figure 6.3 show incidences of what appear to be flooding in areas around Washington DC, stating, "The climate crisis touches so many facets of everyday life," and, "Some of our most treasured historic sites are threatened by the climate crisis, including ones right next to the Capitol." Indeed, the power of visual imagery as a form of empirical credibility is even more pronounced for a post from the Instagram account of CSC Chair Deutch that was published on May 31, 2017. The post visualizes the clubhouse of Mar-a-Lago—a country club owned and frequently visited by President Trump—submerged in water. While the image itself is digitally altered to simulate flooding, CSC Chair Deutch uses it to question the administration's use of climate science and the point at which further policy changes might occur. As noted in the post:

South Florida is already struggling with the effects of climate change. Yet the President

> responds by sticking his head in the sand in denial of the science and the reality in our own community. Will the President need to see Mar-a-Lago Country Club underwater to make a responsible decision about climate change? #parisagreement

The use of imagery to construct empirical credibility is not limited to the somewhat dramatic or exaggerated imagery in Figure 6.3. Indeed, the posts reproduced in Figure 6.2 also use a form of dramaturgical focus on scientific or technical graphs and charts that seem to visually amplify risky climate change phenomena (such as rising temperatures or seal levels) and provide visual evidence that is likely compelling for a sizable portion of viewers. While visual evidence of climate-related events may provide specific examples of climate change effects, scientific or technical images of graphs and charts could provide a broader sense of the phenomena at hand—i.e., a sense of objectivity—that could not only convince one's audience but provide a sense of credibility for the message and messenger. Furthermore, critiques of such images could potentially require viewers to raise questions about data collection methodologies, statistical procedures, presentation tactics, or even potential funding influences and bias—critiques that would likely require individuals to engage in a level of cognitive complexity that might be otherwise unusual when using social media platforms such as Facebook, Twitter, or Instagram. In other words, viewers may not normally be prepared to confront and critique such images on social media platforms but may be inclined to ascribe an acceptable level of credibility at first glance.

The use of numbers, graphs, and charts has long been recognized as an efficient and compelling channel through which to make scientific claims (Latour, 1983; Latour & Woolgar, 1979), but they may also be used as props in performances of knowledge claims towards the end of reassuring credibility (Hilgartner, 2000). Of particular note in Figure 6.2 are two kinds of technical imagery (or rather performative props): maps and graphs. Specifically, the maps

visualize temperature changes over time and projections of coastal land loss amid sea level rise, while the graphs visualize increasing temperatures over time and glacial melt rates in Greenland. Contrary to the images in Figure 6.3, the maps and graphs in Figure 6.2 provide what viewers may see as an overview of data that seemingly explains itself by use of color (e.g., red areas to indicate increasing heat over time; blue areas to indicate projected flooding or land loss in the future) and lines that indicate ascending average temperatures or unusual rates of glacial melting. Similar to other materials I encountered of this variety, the use of technical imagery provides a sense of undeniability to the claim at hand—i.e., a sense of absolution that seemingly must be accepted by the viewer. For example, the post published on February 6, 2020 (in Figure 6.2) regarding sea level rise states,

> Increasing global temperatures are causing sea level rise, shoreline erosion and increased flooding in coastal communities. If we do not take #ClimateActionNow, millions of coastal residents could be displaced by the end of the century.

In this image, the shades of blue encroaching on all shorelines of the country—especially against what seem to be county outlines laid on top of the map—provide an emotionless, objective, and apparently computer-predicted dystopian future that seems inevitable unless viewers take "#ClimatActionNow." Other claims I encountered were comparatively subtle, such as that in the post published on June 14, 2019 (Figure 6.2), which shows an unusually high level of glacial melting in Greenland during 2019 compared to the median melting rate between 1981 and 2010. The performativity of this image and claim are as notable as the data itself: a singular red line deviating from the average melting rate points skyward, indicating a highly unusual and accelerated rate. In turn, the post states, "When glaciers melt, seas rise. What's happening in Greenland harms every coastal community. We need #ClimateActionNow." Adjacent to this image is a post from January 15, 2020 (Figure 6.2)—a retweet from Select Committee Chair

Castor—that displays a line graph ascending almost beyond the confines of the page, indicating average temperatures over time. In turn, Chair Castor states:

> This is a #ClimateCrisis:
> 🔥2019 was the 2nd warmest year on record.
> 🔥The 5 hottest years on record happened in the past 5 years.
> 🔥19 out of the 20 hottest years on record happened within the past 20 years.
> Climate action is our moral imperative.

Contrary to the scientific literature, members of Congress and the staff who inform public-facing documents do not have to adhere to standards of peer-review; rather, political viability is paramount, which requires assurances of credibility in the claims they make. I would argue this even applies to claims with which specific members of Congress are not involved. For example, all but one of the posts reproduced in Figure 6.2 came from the Facebook or Twitter accounts of the Select Committee itself, which remains nameless and faceless while making various claims about climate risks. Nonetheless, performances of credibility and expertise remain salient for these accounts given their ties to all Democratic members of the Select Committee, particularly Chair Castor, who the Select Committee often retweeted during the period of time I examined. In turn, the scientific/technical or empirical imagery detailed here—and many others I observed during the data collection process—provide a form of dramaturgical leverage for the audience with which credibility and expertise are assured within knowledge claims about climate-related risks.

Claims of emissions reductions and technological promise. As noted in Table 6.1, claims of emissions reductions and technological promise were entirely limited to Republicans, and specifically, the Facebook and Twitter accounts of the minority side of the Select Committee. Between the 115th and 116th congressional sessions, I found no materials from Democrats containing language or imagery that seemed to appropriately fit within these

parameters in terms of credibility performances that cited scientific reports or forms of empirical evidence. In this sense, Republicans seemed partial to claims involving scientific or empirical evidence so long as they discussed climate change as an issue under control now or in the future, and at the very least, phenomena not beyond the grasp of technology. While Democrats cited reports and images to support claims of increasing average temperatures or other related trends and risks, Republicans cited reports supporting claims of an improving emissions profile in the United States. Take, for example, the following Facebook and Twitter posts from the minority side of the Select Committee:

> The U.S. has led the world in cutting carbon emissions since 2005, and the U.S. Energy Information Administration expects the cuts to continue. They project we will keep decreasing emissions this year and next. America must keep innovating and leading. [Linked article: https://www.eia.gov/todayinenergy/detail.php?id=42515] (Select Committee on the Climate Crisis, Minority, 2020a).

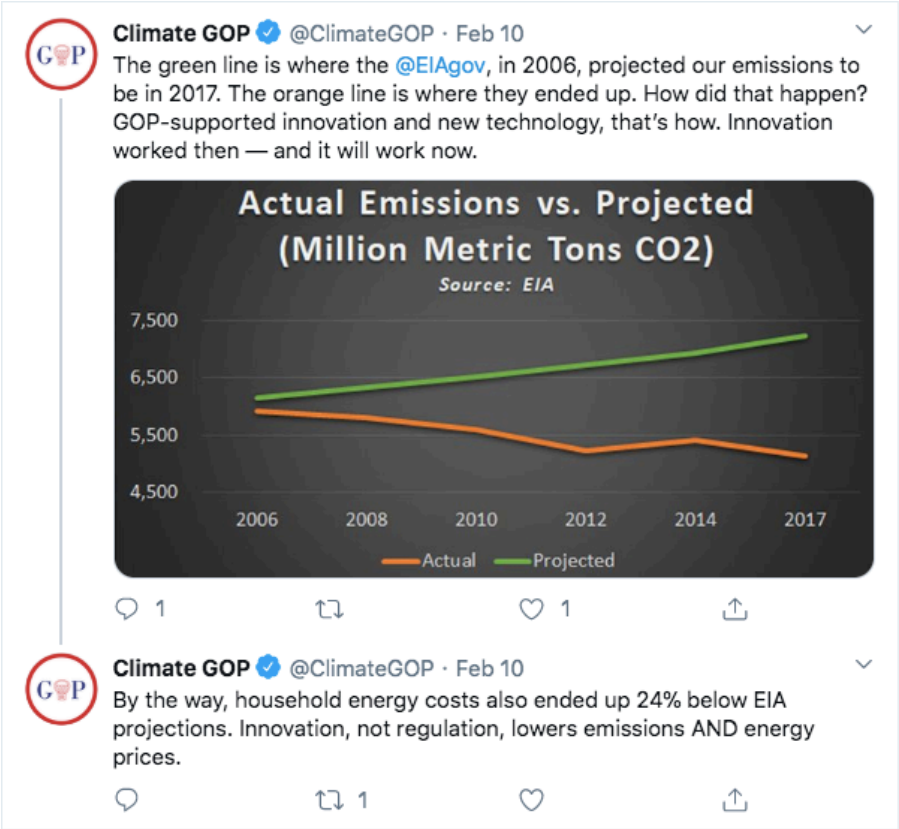
> New report from the Global Energy Institute: "Since 2005, the increased use of natural gas has helped reduce U.S. carbon dioxide emissions by more than 2.8 billion metric tons." Banning fracking would hike emissions and hurt our economy. [Linked article: https://www.globalenergyinstitute.org/sites/default/files/2019-12/hf_ban_report_final.pdf?fbclid=IwAR0YbdZHq-me-NHhdWDBaBpiBnpfwbRFuEjjeg47GWxKyz8ugW5JC-LGGQo] (Select Committee on the Climate Crisis, Minority, 2019d).

> The International Energy Agency (IEA), reports that the U.S. reduced energy-related CO2 emissions by 2.9% last year—more than any other country. They also say that America cut more emissions since 2000 than anyone else. The U.S. has been leading on climate, and we must keep leading. [Linked article: https://www.iea.org/articles/global-co2-emissions-in-2019?fbclid=IwAR08C2gkjwSyZClxHPXSwgdhm40blpd9HtdzxUyzpliRiVsaE2EY2h5VAGU] (Select Committee on the Climate Crisis, Minority, 2020b).

> According to a just-released report projecting emissions for 2019, U.S. CO2 emissions continue to drop—while China's continue to increase. No surprise. [Linked article: https://www.earth-syst-sci-data.net/11/1783/2019/?fbclid=IwAR2fEqwZ1EymUQlWidoZV6EWOY9hBuKwt9jEN4VGnRJC7ngRHYjWmzB4yIw] (Select Committee on the Climate Crisis, Minority, 2019b).

Taken collectively, the posts cited here (and others I encountered) seem to construct a discourse of diminishing emissions that is focused entirely on improvement rather than risk or realized collateral damage. Presented as textual posts accompanied by links, they also seem withdrawn (deliberately or otherwise) from the dramatic emphasis I found in many of the Democratic materials that contained knowledge claims about risk explicitly. Yet, imagery was more prevalent in materials about the promises of technology to continually ameliorate carbon emissions, and presumably, all associated issues in the years to come. Two Twitter posts reproduced in Figure 6.4 provide an overview of this trend for the materials I found most aligned with claims of technological promise. While both discuss emissions reductions, they do so in regard to the links they cite and with apparent dramatized empirical support from the images within. For the post published on February 10, 2020, this drama is visualized in the form of a line graph that seems to display data from the Energy Information Agency—as noted in the graph itself, positioned at the visual center of the image. As noted in the tweet, this image shows two trend lines moving in opposite directions that indicate decreased emissions from the U.S. between 2006 and 2017 versus levels of emissions "projected" at some point from some unnamed source. Referencing this divergence, the tweet asks and answers in almost the same line, "How did that happen? GOP-supported innovation and new technology, that's how." Extending this further, the tweets then reaffirms what I have called the promise of technology: "Innovation worked then—and it will work now."

Figure 6.4 Expressions of Technological Promise: Scientific or Technical Imagery



The tweet published on February 14, 2020, and reproduced in Figure 6.4 diverges slightly in terms of substance from that in the adjacent post (published on February 10, 2020), but it nonetheless uses imagery as a dramatic and empirical device to construct credibility. While the image visualizes some sort of object rather than data, the objects and processes within it appear abstract and removed from anything the average viewer may see as immediately recognizable. Only upon reading the accompanying text of the post might the viewer come to understand the image as one Republicans might argue as being innovation itself as it manifests in the lab: "Innovative @RiceUniversity researchers have developed an affordable way to turn coal into graphene, which is 200 times stronger than steel. Using it in concrete could slash industrial emissions." Indeed, the otherwise foreign process is thus the technical procedure by which coal is converted into graphene, or, one among many materials that could boost efficiency towards the end of reducing emissions. By showing this process itself, innovation materializes as a visual procedure that is concrete rather than ephemeral. And for the Republicans, such procedures and arguments about efficiency are not only engaging but potentially compelling for the viewer at hand.

While scientific or empirical credibility involves divergent forms of messages in terms of style and substance between Democrats and Republicans, it nonetheless involves fundamental processes of performance and dramatization that are consistent across these two partisan camps. In its most fundamental form, scientific or empirical credibility involves the use of evidence to support the claim at hand, whether it is one of risk or innovation to reduce such risks. Patterns of demonstration towards the end of advancing credible claims are indeed consistent across Democrats and Republicans in terms of their propensity to use sources and images for dramatic effect, and it appears this consistency extends to the propensity to use social media to express

credibility when external sources are cited. This is not necessarily unusual compared to the channels used to express the other themes I review below, but it does suggest that dramaturgical effect may be most freely expressed on platforms that allow dynamic forms of messages beyond just text along with a singular image (such as the format of a typical press release). In turn, scientific or empirical credibility is an expression that requires additional information beyond statements performed in a credible manner, and it seems social media platforms may provide sufficient leniency to construct posts in a way that both inform, provide evidence, and in turn persuade in the same message.

Authoritative Credibility

Authoritative credibility involves expressions of claims that rely on the presumed legitimacy of scientific or legislative institutions and the individuals within them. Rather than cite scientific or technical reports to support claims of risk or emissions reductions, authoritative expressions use dramatic devices to either reinforce the presumed legitimacy of the institution/individual at hand, or, to advance claims of truth without accompanying scientific or empirical evidence. In turn, authoritative expressions may use images of scientists in the lab, phrases that reassure the accuracy of science, or other images and phrases that exude a sense of expertise among the members of Congress and related stakeholders addressing climate risks and solutions.

Authoritative credibility emerged in four sub-themes that include (a) declarations of climate risk, (b) discourses of innovation and emissions reduction, (c) the role of conservation and resiliency, and (d) political conflict or unity. As noted in Table 6.1, expressions of authoritative credibility were most frequent relative to other credibility themes I encountered during the data collection process, and this tendency was prevalent for both Democrats (from

whom I collected 153 forms of material) and Republicans (from whom I collected 184 forms of material). Similar to expressions of scientific or empirical credibility, knowledge claims about specific climate risks were more prevalent among Democrats than Republicans, while discourses of innovation and emissions reduction were more prevalent among Republicans than Democrats. Additionally, Republicans seemed more prone to make claims about the role of conservation or enhanced resiliency to reduce climate risks, whereas both Republicans and Democrats were generally consistent in the extent to which they advanced claims involving political conflict or unity.

Of additional note are the channels through which forms of authority were expressed: While all channel types were consistently engaged across the four themes of authority, the use of various channels seemed to occur in relation to the specific type of claim at hand. For example, Democrats seldom advanced discourses of innovation and emissions reduction through social media platforms (from which I collected 6 posts in total) compared to press releases and other website-derived materials (of which I collected 15). Democrats also seemed more prone to advance claims of risk through social media platforms (from which I collected 57 posts) compared to press releases and related materials (of which I collected 11), while Republicans seemed prone to advance claims of risk through press releases and related materials (of which I collected 20) compared to social media posts (of which I collected 8 in total). While simple counts of materials alone provide only partial support for claims of difference across channel types, they do shed light on potential preferences for distribution that I explore further below.

Declarations of risk. Consistent with the expressions of scientific or empirical credibility I discussed above, declarations of risk were more prevalent among Democrats than Republicans, although concentrations of these discussions to certain channels were mixed and distinct across

political boundaries. As noted in Table 6.1, Democrats most frequently advanced declarations of risk through Twitter, whereas Republicans primarily made such claims through press releases and other materials published on official websites. Such volume of risk claims from Republicans seem related to executive branch changes to EPA rules for certain pollutants, President Trump's initiative to withdraw the U.S. from the Paris Climate Agreement (an international agreement to collectively reduce emissions between certain nations), and the advocacy of some Republicans to consider climate risks as those most appropriately addressed as national security threats in the annual National Defense Authorization Act (NDAA).

Through press releases, letters, and legislation, Republicans discussed risks not as uncertain or contingent on science but as objectively given conditions for which actions were needed. Language in these formal and official materials seemed measured and assertive, and expressions of credibility seemed embedded in the formality of the documents and institutions with which they are affiliated. The production of these formal materials involves certain procedures and modes of distribution that not only explicitly affiliate them with individuals and institutions of power, authority, and presumably expertise, but creates an aesthetic of visual significance through which authoritative credibility is performed and constructed. This visual significance is particularly notable in legislation and letters, which use standardized typesetting, fonts, and norms of expressing support from other members (e.g., co-sponsor lists atop legislative texts or multiple signatures on a letter) that are not inherent to social media platforms.

The letter reproduced in Figure 6.5 provides an example of what I discuss as visual significance. While it includes signatures from both Democrats and Republicans across Congress, it was featured on the website of CSC member Rep. Elise Stefanik (R-NY) along with a press release that emphasizes the risks climate change poses to the military and the need to

include related language addressing these issues in the NDAA for fiscal year 2019 (Stefanik, 2018). The letter itself is brief and makes explicit claims of risk without accompanying citations. Rather, credibility seems embedded in the aesthetic of the letter and its explicit relation to various Republican and Democratic members of Congress and the institution of Congress itself. In stately old-English font, the letterhead reads "Congress of the United States, Washington, DC 20512" and support of the letter's co-signers is affirmed by written signatures in double columns that fill six pages beyond the letter text.

Figure 6.5 Authoritative Credibility: Expressions of Authority through a Formal Letter to the President

Congress of the United States
Washington, DC 20515

January 11, 2018

President Donald J. Trump
The White House
1600 Pennsylvania Avenue
Washington, D.C. 20500

Dear Mr. President:

As Members of the House of Representatives with a deep interest in the many dimensions of our national security, we write to express our concern regarding your recent National Security Strategy, which fails to recognize climate change as a threat to the United States.

We have heard from scientists, military leaders, and civilian personnel who believe that climate change is indeed a direct threat to America's national security and to the stability of the world at large. As global temperatures become more volatile, sea levels rise, and landscapes change, our military installations and our communities are increasingly at risk of devastation. It is imperative that the United States addresses this growing geopolitical threat.

Secretary of Defense Mattis has stated that "the effects of a changing climate… will impact our security situation." Congress affirmed that climate change is "a direct threat to the national security of the United States" in the Fiscal Year 2018 National Defense Authorization Act that you signed into law on December 12, 2017. Failing to recognize this threat in your National Security Strategy represents a significant step backwards on this issue and discredits those who deal in scientific fact.

We urge you to reconsider this omission. Thank you for your prompt attention to this matter.

Sincerely,

James R. Langevin
Elise M. Stefanik
Ted Deutch
Adam Smith
Carlos Curbelo
Louise M. Slaughter

1

PRINTED ON RECYCLED PAPER

Paul Tonko
Jimmy Panetta
Emanuel Cleaver
Mark Pocan
Debbie Wasserman Schultz
Keith Ellison
Salud O. Carbajal
Tom O'Halleran
Ruben Gallego
Susan Davis
Ro Khanna
Thomas R. Suozzi
Alan Lowenthal
Colleen Hanabusa
Debbie Dingell
Nanette Diaz Barragán
Donald S. Beyer Jr.
Raja Krishnamoorthi

2

Figure 6.5 (Continued)

Ted W. Lieu
Jackie Speier
Marcy Kaptur
Albio Sires
John Garamendi
David N. Cicilline
David Price
Elizabeth H. Esty
Carol Shea-Porter
Jacky Rosen
Jerry McNerney
Stephanie Murphy
A. Donald McEachin
Ryan A. Costello
Bonnie Watson Coleman
Patrick Meehan
Nydia M. Velázquez
Bill Foster
Steve Cohen
Jim Costa
Derek Kilmer
Jan Schakowsky
Anna G. Eshoo
Eleanor Holmes Norton
Daniel W. Lipinski
Ileana Ros-Lehtinen
Mark DeSaulnier
Darren Soto
Peter Welch
Gregory W. Meeks
Denny Heck
Scott H. Peters
Seth Moulton
Donald M. Payne, Jr.
Brenda L. Lawrence
Lucille Roybal-Allard

3 4

Figure 6.5 (Continued)

Frank A. LoBiondo
Madeleine Z. Bordallo
Barbara Lee
Donald Norcross
Jamie Raskin
Brian Higgins
Pramila Jayapal
Raúl M. Grijalva
Betty McCollum
Eric Swalwell
Brendan F. Boyle
Mimi Walters
John K. Faso
William R. Keating
Joe Courtney
Carolyn B. Maloney
Rick Larsen
Gerald E. Connolly
Charles W. Dent
John Yarmuth
Sean Patrick Maloney
Jared Polis
Jim Cooper
Brian Fitzpatrick
Stephen F. Lynch
Anthony Brown
John K. Delaney
Doris Matsui
Richard M. Nolan
Mike Quigley
Val Butler Demings
Matt Cartwright
Frederica S. Wilson
Jared Huffman
Ed Perlmutter
Dina Titus

5

6

Figure 6.5 (Continued)

Adriano Espaillat

Niki Tsongas

Suzanne Bonamici

Beto O'Rourke

James P. McGovern

Robert C. "Bobby" Scott

Ann McLane Kuster

Dave Reichert

Earl Blumenauer

Ruben J. Kihuen

Cc: Secretary of Defense Jim Mattis

7

The performativity of these characteristics cannot be overstated given their explicit utility to affirm institutional affiliation with and support for the substance of the claims at hand, particularly for viewers of this letter who may be unfamiliar with how these documents are produced on Capitol Hill (e.g., the public or press). As noted in the previous chapters, letters are usually developed by relevant legislative staffer(s) who oversee the issues under consideration. The letter in question—led by Rep. Stefanik (R-NY) and non-CSC or Select Committee member Rep. James Langevin (D-RI)—was likely developed between staffers overseeing environmental/energy and military issues in both offices. While Reps. Stefanik and Langevin likely read the letter for final approval, it is unlikely all other co-signers read or signed the letter themselves. During my professional tenure on Capitol Hill, I was occasionally sent to various member offices to collect signatures for letters similar to the one reproduced in Figure 6.5. I collected hundreds of signatures for upwards of 20 letters, yet, only once did a co-signing member actually sign the page I brought to his or her office (which was only due to coincidental timing). On all other occasions, staffers either forged members' signatures (with impressive and convincing accuracy) or used a pen-holding machine to recreate the member's signature on the page. While this experience provided further support for the importance of staffs in the development of public-facing materials, it also reaffirmed the salience of performative signifiers for which staffers developed skills or used machinery to uphold. Indeed, forging one's signature or acquiring machinery to do so may not seem necessary for individuals outside Congress, but Capitol Hill seems to inhere specific norms for certain public-facing materials (such as letters) that are no longer conducive to members' hectic schedules, but necessary for the continuity of textual performances of authority over time.

A similar example of this visual significance I encountered primarily among Republicans includes risk claims in legislative texts and accompanying press releases that announced their introduction in the House, such as those for H.R. 4058 (in the 116th Congress). The bill—sponsored by CSC Co-Chair Rooney (R-FL) and co-sponsored by CSC member Rep. Daniel Lipinski (D-IL)—proposes a tax on carbon emissions to reduce climate change effects, or more specifically, what the legislative text classifies as "threats" to "global stability and our national economy" (Stemming Warming and Augmenting Pay Act, 2019). Similar to the letter from Rep. Stefanik described above, H.R. 4058 does not provide sources for its claims of climate change risks, although such risks are indeed wide-ranging (i.e., global) and described as "significant." Rather, the bill's aim to tax carbon emissions is based on what "Congress finds" concerning the impacts of emissions on "global stability" and the potential for taxation to diminish this form of a risk multiplier. In turn, the validity of risk claims in this regard seems based on their affiliation with the institution of Congress in addition to the individual members of Congress who sponsored and co-sponsored the legislation (Reps. Rooney and Lipinski).

The affiliation of H.R. 4058 with the institution of Congress and its presumed power, authority, and expertise is not limited to textual substance alone; rather, the visual style of legislative texts further reinforces an aesthetic of authority through which members may advance credible knowledge claims of risk. Figure 6.6 reproduces the first two pages of H.R. 4058, which contain the bill number, title, chamber affiliation, and co-sponsorship list followed by the bill's table of contents and its findings with regard to climate change risks—i.e., issues the bill seeks to address through its proposed tax on carbon emissions. All of these elements serve as signifiers of credibility given their explicit authority with the institution of Congress and the presumed expertise of individuals associated with it. Stripping the "findings" of H.R. 4058 away from their

associated bill text would likely require one to deliberately consider supplemental materials or sources to substantiate such claims, or, some other institution of power or expertise with which to affiliate them. While legislative texts are visually consistent regardless of their substance, they nonetheless offer a predictable structure of credibility signifiers within which members may advance knowledge claims of risk that may be echoed in subsequent forms of public-facing materials such as press releases (as was most frequently the case for Republicans' claims of risk) or social media channels.

Figure 6.6 Authoritative Credibility: Expressing Authority in Legislative Text

I

116TH CONGRESS
1ST SESSION

H. R. 4058

To amend the Internal Revenue Code of 1986 to impose a tax on greenhouse gas emissions, accordingly reduce tax rates on payroll, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JULY 25, 2019

Mr. ROONEY of Florida (for himself and Mr. LIPINSKI) introduced the following bill; which was referred to the Committee on Ways and Means, and in addition to the Committees on Energy and Commerce, and Science, Space, and Technology, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

---

A BILL

To amend the Internal Revenue Code of 1986 to impose a tax on greenhouse gas emissions, accordingly reduce tax rates on payroll, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE; TABLE OF CONTENTS.**

4 (a) SHORT TITLE.—This Act may be cited as the
5 "Stemming Warming and Augmenting Pay Act of 2019"
6 or the "SWAP Act".

7 (b) TABLE OF CONTENTS.—The table of contents for
8 this Act is as follows:

Figure 6.6 (Continued)

1 **SEC. 2. FINDINGS.**

2 The Congress finds the following:

3 (1) Climate change threatens global stability
4 and our national economy.

5 (2) Carbon emissions are a significant contrib-
6 utor to these threats and must be addressed.

7 (3) The United States private sector can face
8 these challenges and be a global leader in tech-
9 nology, innovation, and efficiency.

10 (4) A price on carbon levels the economic play-
11 ing field and spurs adoption of less carbon-intensive
12 practices and technologies.

13 (5) Recycling revenues back to employers and
14 employees will neutralize the potential impacts of a
15 tax.

Compared to congressional letters and legislative texts, press releases seemed to offer less of an aesthetic of visual significance compared to an explicit affiliation of claims with political power and legitimacy. While press releases may inhere similar structures in terms of form and function, the substance and visual styles of such documents are left to the discretion of members and their staff, which became apparent during the data collection process. What remained constant, however, was the explicit affiliation of press releases (and their claims) with the members from whom they originated. This emerged in terms of where press releases were stored (on members' congressional websites, often decorated with their pictures and name) and the substance of the releases themselves. For example, press releases frequently noted members' names in their titles and the documents (e.g., legislation, letter, or resolution, among others) with which they were affiliated, such as the following press release titles from CSC Republicans:

A. "Reps. Gaetz, Peters Introduce Bill to Slow Climate Change, Reduce Super Pollutants" (Gaetz, 2019a).

B. "LANGEVIN, STEFANIK LEAD BIPARTISAN LETTER URGING THE PRESIDENT TO RESTORE CLIMATE CHANGE TO THE NATIONAL SECURITY STRATEGY" (Stefanik, 2018).

C. "Murphy, Collins, Peters, Gaetz Call on EPA to Rescind Methane Proposal" (Gaetz, 2019b).

D. "Fitzpatrick, Huffman, Beyer, 56 Lawmakers Introduce Still-In Paris Resolution" (Fitzpatrick, 2019).

In turn, claims of risk were expressed in these documents as those affiliated with legislative authorities rather than scientists or scientific institutions. Quoted below in corresponding order to the titles above, these press releases stated the following:

A. Today, Rep. Matt Gaetz (FL-01) and Rep. Scott Peters (CA-52) announced the introduction of the bipartisan Super Pollutants Act, which aims to slow climate change by regulating black carbon, hydrofluorocarbons, and methane—some of the most potent greenhouse gases. These short-lived climate pollutants, also called super pollutants, are significantly more potent than carbon dioxide (Gaetz, 2019a).

B. "'Climate change poses serious concerns for our national security and for our political instability around the globe,' said Congresswoman Stefanik" (Stefanik, 2018).

C. U.S. Senator Chris Murphy (D-Conn.), U.S. Senator Susan Collins (R-Maine), U.S. Representative Scott Peters (CA-52), and U.S. Representative Matt Gaetz (FL-1), on Friday wrote in strong opposition to the Environmental Protection Agency's (EPA) proposal to modify the New Source Performance Standards (NSPS), an Obama administration regulation to limit methane emissions from new, reconstructed, and modified sources in the oil and gas sector. Oil and natural gas operations are significant emitters of methane, a greenhouse gas whose effect on climate change is up to thirty-four times greater than that of carbon dioxide (Gaetz, 2019b).

D. "Climate change must be addressed proactively with leaders from both sides of the aisle working to protect our planet," said Congressman Fitzpatrick. "Every nation will be affected by climate change which is why nearly every country agreed to work to reduce carbon emissions" (Fitzpatrick, 2019).

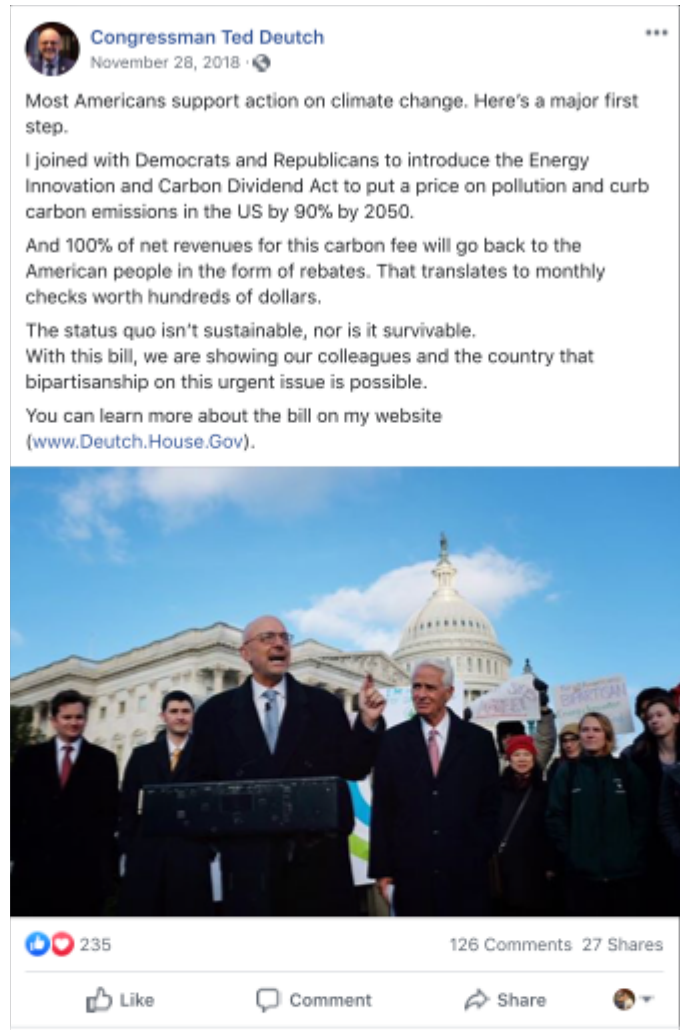
While press releases occasionally contained images of members or general landscapes of the districts they represented, they did not seem to be places in which members sought to create striking visual styles similar to those in bills or congressional letters. Rather, press releases seemed to offer textual performances in which the substance of claims and their stated affiliation with congressional members served as the foci of performance through which credibility was affirmed and constructed.

Democrats' expressions of authoritative credibility occurred primarily on social media channels (Twitter most frequently) and in somewhat stylistic opposition to the legislation, letters, and press releases I encountered among Republicans. While social media channels did not necessarily offer the embedded credibility signifiers that are analogous to congressional letters and legislation, they did seem to afford a wider range of technical capabilities in which knowledge claims and authority could be expressed by use of imagery and video. In turn, authoritative credibility seemed more a feature of Democrats' message substance (in terms of text and visual imagery) and status (as a "verified" social media user/member of Congress) than

the platforms through which they were disseminated. An example of this focus on message substance and user affiliation rather than overt channel signifiers may be found in Figure 6.7, which reproduces two tweets and Facebook posts (three from CSC Chair Deutch and one from Select Committee member Rep. Joe Neguse, D-CO).

Figure 6.7 Authoritative Credibility: Democrats' Consideration for Message Substance and Visual Affiliation

Figure 6.7 (Continued)



The tweets from Reps. Neguse and Deutch visualize a general sense of the authoritative risk claims I encountered among Democrats during the data collection process. Similar to other expressions of credibility, Rep. Neguse's claim of climate change as an "existential threat" is not accompanied by external sources to support the claim at hand, but a solitary image of Rep. Neguse that is adjacent to his name and a blue checkmark that indicates a "verified" Twitter user. Indeed, such a mark is reserved only for most popular social influencers and government officials and is frequently considered a social status symbol of either credibility or popularity. In other words, Reps. Neguse and Deutch benefit from the credibility affiliated with their verified status, and perhaps to a similar degree, their explicit self-presentation as members of Congress.

The tweet from Chair Deutch in Figure 6.7 provides another example of the general visual aesthetic I encountered among authoritative claims of risk. Here, Chair Deutch appears standing next to a meteorologist in a video produced by The Weather Channel, where he notes the potential for severe weather or other "effects of climate change" and the need to "create an emergency plan" for safety during such events. While the meteorologist appearing next to Chair Deutch may or may not be trained in climate science, this visual style seems to provide a sense of validity to Deutch's claims and the need to prepare accordingly. Considering this against Chair Deutch's self-presentation as a member of Congress in his Twitter profile name further contributes to this performance of authority.

Of additional note are the Facebook posts reproduced in Figure 6.7, which are derived from Chair Deutch's Facebook account. While less frequent among the materials I collected, these images provide a general sense of another style I encountered among authoritative performances of climate risk that invoked visuals as a form of performance. For the post published on May 17, 2018, Chair Deutch is shown conducting a CSC-related roundtable

discussion with business stakeholders from across the country along with accompanying text that states, “Today’s climate policies aren’t enough to ensure a safe climate for tomorrow.” For the post published on November 28, 2018, Chair Deutch is visualized delivering what appears to be a press conference in front of the Capitol while flanked by other members of Congress and a small crowd of supporters. The accompanying text states, “Most Americans support action on climate change” and “The status quo isn’t sustainable, nor is it survivable.” In both posts, Chair Deutch is visualized as someone who seems engaged in activities that hold a considerable degree of political and legislative significance towards the end of ameliorating the climate risks at hand. As is the case for other expressions of authoritative credibility, claims are expressed without the support of external sources. Yet, the images in both posts seem to provide a degree of credibility from which the claims of risk within them may be advanced and likely accepted among viewers.

Discourses of innovation and emissions reduction. As noted in Table 6.1, Democrats and Republicans advanced claims about risk in terms of the potential for new or improved technologies to reduce emissions. Contrary to expressions of scientific or empirical credibility discussed above, expressions of authoritative credibility did not involve the inclusion of external scientific, technical, or empirical evidence to support the claims at hand. Rather, claims were advanced as truth statements affiliated with congressional representatives (and/or the institution and processes of Congress) or scientists and scientific institutions. While Republicans published the largest overall amount of material related to innovation or emissions reductions, they also seemed more inclined within these performances to use forms of dramaturgy (imagery in particular) that were generally absent in claims of climate risks. Such forms of imagery included those of scientists in the laboratory (occasionally joined by members of Congress), complex machinery, solar panels, nuclear power plants, and officials discussing energy issues in key

meetings. Additionally, these performances were disseminated through social media channels rather than press releases or other materials stored on official websites. In contrast, Democrats seldom expressed claims about climate issues or risks in terms of technological innovation or emissions reductions, and most of such claims were limited to text-focused press releases, letters, and similar written materials housed on official websites rather than social media platforms. Yet, among the few claims of innovation or emissions reductions Democrats did advance through social media platforms, they did use forms of imagery somewhat similar to that of Republicans to enhance dramaturgical effect (albeit with a visual style that was occasionally distinct).

The social media posts reproduced in Figures 6.8 and 6.9 provide a general sense of what I categorized as authoritative expressions within discourses of innovation and emissions reduction. Each post contains an assertion for either the promise of technology or "America's leadership in cutting emissions" (see Figure 6.8, post published on September 23, 2019) that is accompanied by imagery through which authoritative status is reified or otherwise ephemeral technologies or discourses of "innovation" are materialized in visual form. The posts in Figure 6.8 seem to demonstrate one's credibility status through their active involvement in bureaucratic processes, which are presumably limited to those who have been elected or appointed to such coveted positions. On the other hand, the posts reproduced in Figure 6.9 (specifically on the first two pages) seem to provide visual evidence of the complex machineries through which climate risks may be diminished in the future, which are derived through links to external news stories about comments from notable individuals (such as Bill Gates) or opinion articles of energy commentators. Of additional note is the Instagram post reproduced on the final page of Figure 6.9—a video from the Instagram account of CSC member Rep. Matt Gaetz (R-FL) discussing House Resolution 288 (i.e., the "Green Real Deal," named in response to House Resolution 132,

the “Green New Deal”). The video itself shows multiple clips of natural landscapes with wind turbines and solar panels, in addition to shots of what appear to be scientists and scientific laboratories. Throughout the video, new age music plays while multiple Republicans are heard discussing the value of renewable energy that is “efficient” and “clean.” Similar to the other posts in Figure 6.9, this particular video seemed to materialize frequent discourses of “innovation” and “emissions reduction” into tangible imagery that would have otherwise remained distant or obscure without the use of such dramaturgical tools.

Figure 6.8 Authoritative Credibility: Expressions of Emissions Reductions amid Active Involvement in Bureaucratic Processes

Figure 6.9 Authoritative Credibility: Visualizing the Complex Machinery or Processes through which Climate Risks may be Diminished

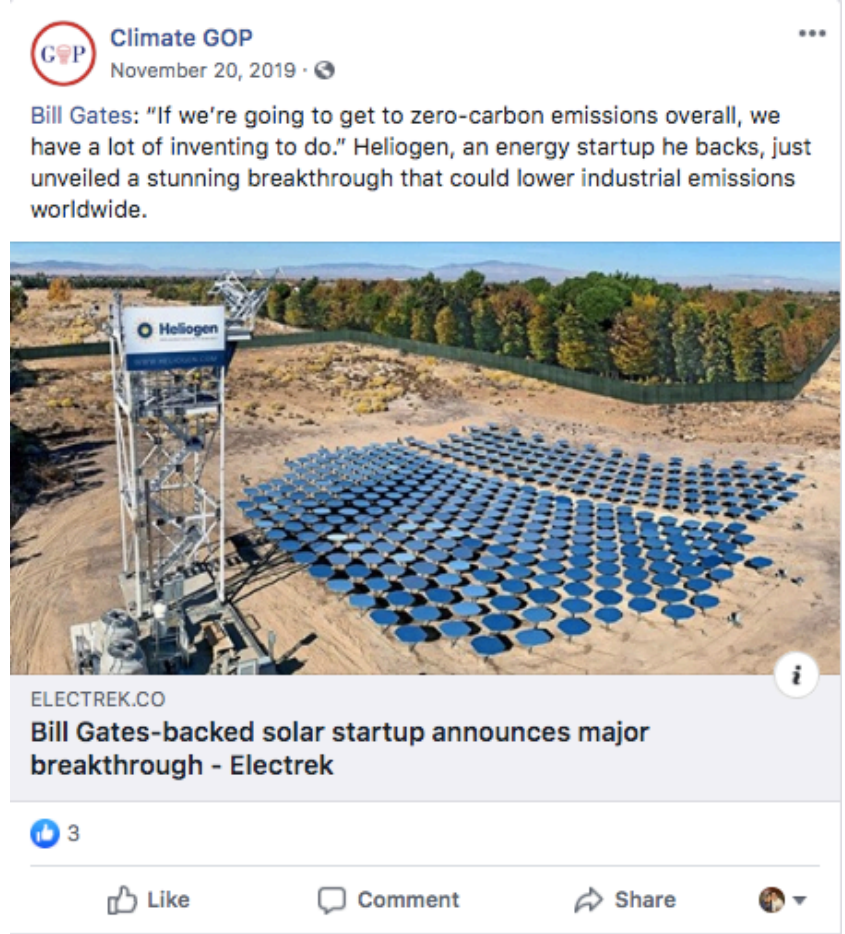
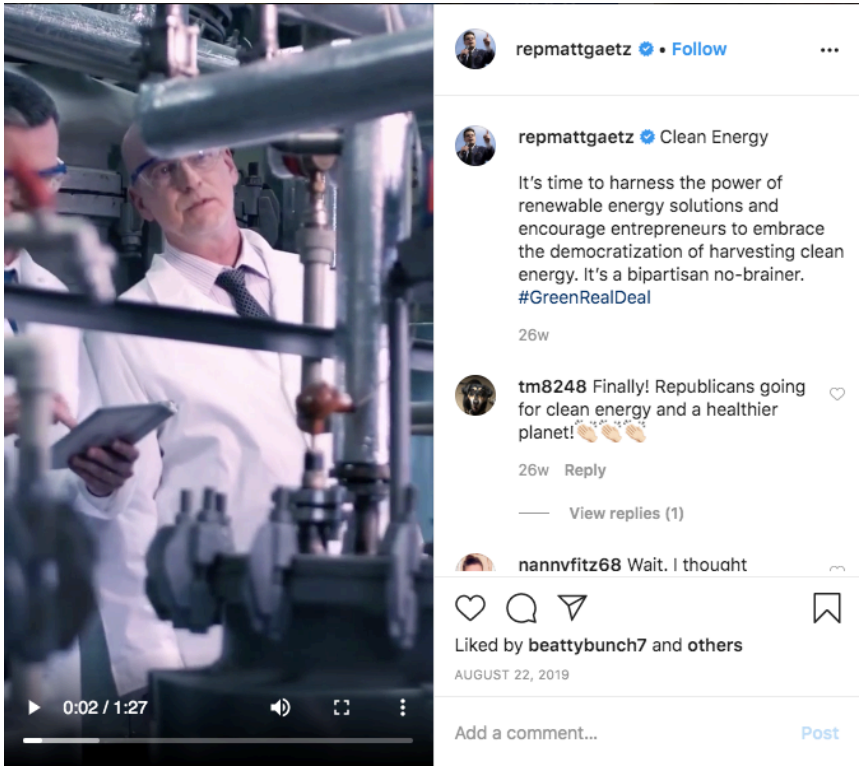
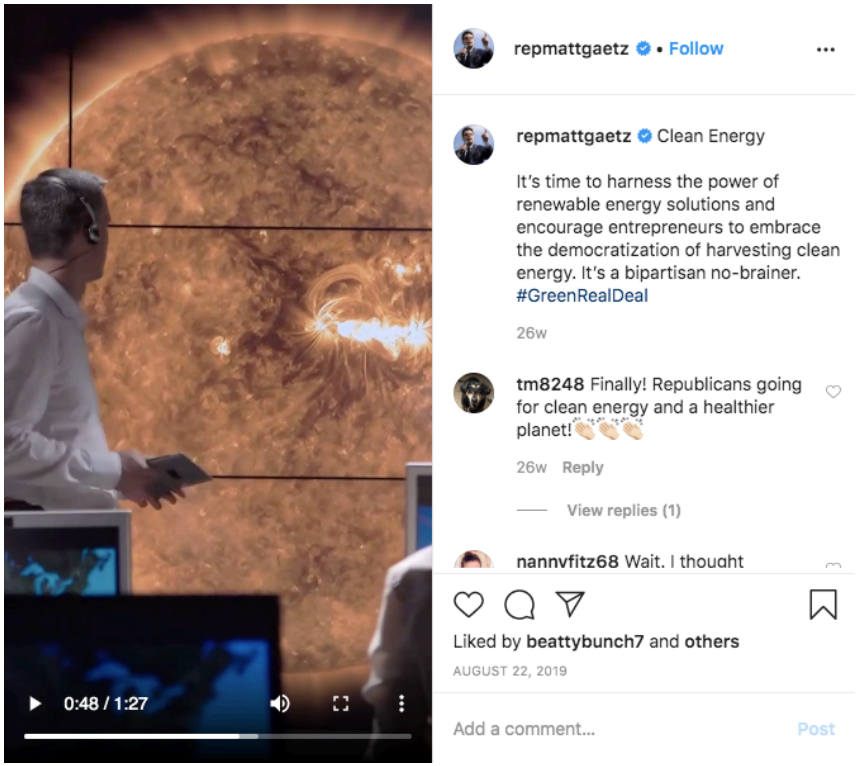


Figure 6.9 (Continued)

Figure 6.9 (Continued)





Expressions of authoritative credibility in press releases and other materials hosted on official websites were largely consistent between Republicans and Democrats. Similar to discourses of risk in the previous section, credibility signifiers consisted of explicit affiliations of truth statements with members of Congress or the institution of Congress itself—particularly through the use of third-person phrasing and frequent quotes of members rather than scientific/technical studies or institutions thereof. Two press releases provide an example of this general performative overlap between Republicans and Democrats—one from CSC member Rep. Tom Reed (R-NY) regarding the introduction of H.R. 5523, the Energy Sector Innovation Credit Act of 2019, and another from Select Committee Chair Castor (D-FL) regarding an emissions reduction plan from leading Democrats on the House Energy and Commerce Committee. Both press releases are rather brief in length, and while Rep. Reed's release does not mention his name in the title, it does quote him at length at the beginning of the document. For example:

> "Our climate is changing. There is no denying this," Rep. Tom Reed said. "We must unleash the greatest asset we have available to prevent this pending crisis—the power of American ingenuity and innovation. This tactic has proven time and time again to solve world problems—and this situation will be no different. By offering a tax incentive for new energy technologies we will increase energy on the grid, ensure unneeded energy is not financially rewarded and thus unnecessarily produced, help cutting-edge technologies break into the market, incentive [*sic*] older sources to innovate and slash global emissions" (Reed, 2020).

On the other hand, Select Committee Chair Castor's press release does identify her explicitly in the title, stating: "REP. CASTOR WELCOMES EFFORT TO CUT CARBON POLLUTION TO NET-ZERO BY 2050" (Select Committee on the Climate Crisis, Majority, 2019d). Yet, her quote was far less extensive compared to that of Rep. Reed but similar in substance to the overarching need to reduce emissions in the future. Situated in a box that seems to resemble a block quotation within the press release itself, Chair Castor says: "A 100 percent clean energy

economy is the central pillar for any serious climate plan and it's a goal we share. This is the kind of climate action we are working to deliver" (Select Committee on the Climate Crisis, Majority, 2019d). The consistency of press release discourses between Republicans and Democrats is not coincidental; indeed, many of the press releases I encountered were from members of the CSC and in regard to bipartisan legislation on which both Democrats and Republicans collaborated. What is notable, however, is that expressions of authoritative credibility seemed to overlap most notably in these press releases rather than the social media channels through which many claims were also made.

The role of conservation and "resiliency." In addition to discussions of technology and emissions reductions, authoritative expressions of credibility also involved claims about the critical role of conservation to combat climate risks and the need to develop "resiliency" in physical infrastructures. These sorts of performances seemed to deviate in tone from those of emissions reductions and technological promise in that they did not advance particular technologies or technological trajectories as the panacea for climate change issues; rather, claims of conservation and resiliency seemed to acknowledge a forthcoming reality of environmental difficulty for which enhanced physical (and perhaps social) structures are needed—albeit without discussions of the specific risks associated with these forthcoming events for which conservation and resiliency are necessary.

As noted in Table 6.1, this theme was exclusive to Republicans and consisted of 15 forms of material across official websites and social media channels. Additionally, most discussions of conservation and resiliency were from Select Committee Ranking Member Graves, whose home state of Louisiana has faced threats of sea-level rise, coastal land loss, and damage from extreme hurricanes. Taking this into consideration seemed to provide additional context to some of

Graves's comments throughout expressions that focused on conservation and resiliency, such as remarks that were published in a press release and Facebook post on November 20, 2019, following a Select Committee hearing titled, "Creating a Climate Resilient America: Reducing Risks and Costs":

> We have to get good at resilient living. This is an area where we should all be working together. We all agree that adaptation management makes sense. We have to move forward in a thoughtful way that uses all the tools in the toolbox (Select Committee on the Climate Crisis, Minority, 2019a).

Ranking Member Graves expressed similar remarks following a hearing held a few weeks later on December 11, 2019, titled, "Creating a Climate Resilient America: Smart Finance for Strong Communities":

> We should all be working on resiliency together. Resiliency is especially important to our coastal communities where nearly 42% of Americans live. Smart resilience policies protect our communities, improve our environment and ecological production, and make economic sense (Select Committee on the Climate Crisis, Minority, 2019c).

The substance of remarks about conservation and resiliency remained consistent across press releases and social media channels, although posts on Facebook and Twitter seemed to be afforded additional performative tools from which to advance claims authoritatively. Chief among these tools was the use of video that often accompanied or supplemented written claims within posts, which provided visual evidence of the formal and official proceedings in which knowledge claims were advanced in addition to the member's role (and status) in the proceedings at hand. While press releases seemed to advance performances of authority by use of associations of claims with members or the institution of Congress, video seemed to provide visual evidence of members' association with Congress and its formalized processes. The materials reproduced in Figure 6.10 provide an example of this performative distinction between press releases and Facebook posts, which feature the same statements quoted above from

November 20, 2019, and December 11, 2019. On the one hand, the press releases featured here seem to clearly associate the claims at hand with Ranking Member Graves and his formal affiliation with the Select Committee as its Ranking Member—both through the titles and leading paragraphs of each press release. On the other hand, the Facebook posts in Figure 6.10 provide far less explicit textual disclosures that affiliate the claims at hand with Ranking Member Graves and the Select Committee. Rather, affiliations with the authority of Congress and the Select Committee are visualized through the inclusion of videos that automatically play Ranking Member Graves's statements at the hearings held on November 20, 2019, and December 11, 2019. In this sense, performances of authority here seem to be distinctions along the lines of *showing* (in video) versus *telling* (through text).

Figure 6.10 Authoritative Credibility: Distinctions in Expressions of Conservation and Resiliency between Press Releases and Facebook Posts (with Video)

GRAVES: "WE HAVE TO GET GOOD AT RESILIENT LIVING. THIS IS AN AREA WHERE WE SHOULD ALL BE WORKING TOGETHER."

Nov 20, 2019 | Press Release

WASHINGTON — House Select Climate Committee Ranking Member Garret Graves (R-La.) made the following statement after today's hearing:

"We have to get good at resilient living. This is an area where we should all be working together. We all agree that adaptation management makes sense. We have to move forward in a thoughtful way that uses all the tools in the toolbox."

###

Climate GOP
November 20, 2019 ·

We have to get good at resilient living. This is an area where we should all be working together. We all agree that adaptation management makes sense. We have to move forward in a thoughtful way that uses all the tools in the toolbox.

Watch Congressman Garret Graves' full opening statement at our hearing on creating a climate resilient America.

4

Like Comment Share

Figure 6.10 (Continued)

GRAVES: "WE SHOULD ALL BE WORKING ON RESILIENCY TOGETHER."

Dec 11, 2019 | Press Release

WASHINGTON — House Select Climate Committee Ranking Member Garret Graves (R-La.) made the following statement after today's hearing:

"We should all be working on resiliency together. Resiliency is especially important to our coastal communities where nearly 42% of all Americans live. Smart resilience policies protect our communities, improve our environment and ecological production, and make economic sense."

###

Political conflict or unity. Political conflict or unity encompasses expressions that emphasize discord or agreement between various entities and individuals involved in the climate policy process. While these expressions occasionally contained claims of climate risk, emissions reductions, technological promise, or claims about climate change in general, they remained primarily focused on the legislative and political processes inherent to the various climate-related discussions occurring on Capitol Hill. In turn, performances of authoritative credibility emerged in the forms of discourses and imagery that emphasized congressional members' status as constituent advocates and insiders involved in the bureaucratic processes of government. While authoritative credibility, in general, involves allusions to members' status as individuals affiliated with the institution of Congress, expressions of conflict or unity seemed to enhance this connection through knowledge claims that are directed towards other long-established government institutions or individuals. In short, conflict or unity involved displays of drama that occurred within (and direct focus on) the government ecosystems of climate policy rather than the studies, scientists, and organizations that produce climate science.

As noted in Table 6.1, expressions of political conflict or unity were rather consistent in volume across channels and parties. As one might suspect given the political climate between 2015 and 2020, I encountered far more expressions of political conflict than unity. And even those of unity seemed somewhat trivial compared to the breadth of conflicts I encountered throughout the 115th and 116th congressional sessions. Overwhelmingly, expressions of unity focused specifically on the CSC and were released when new members joined the organization. When this occurred, Chair Deutch (and occasionally Co-Chair Rooney) tended to release statements that acknowledged the new member(s) along with quotes on their commitment to produce bipartisan legislation addressing climate change issues. For example, a press release

from September 25, 2017, titled, "Climate Solutions Caucus Welcomes Six New Members; Membership Grows to 58" contains the following statements from Chair Deutch and (former) Co-Chair Curbelo:

> "These new Members are joining the Caucus amid a devastating hurricane season, where major storms are gaining strength from the warmer waters in the Caribbean and Gulf of Mexico," said Congressman Deutch. "We are witnessing the serious impacts of climate change right in front of our eyes. More and more Members of Congress believe we need to respond to climate change right now, and I'm thrilled that they turn to the Climate Solutions Caucus as a forum for open and constructive dialogue."
>
> "The real-world implications of sea level rise have been on display for all to see in Texas, Florida and the Caribbean following Hurricanes, Harvey, Irma and Maria," Congressman Curbelo said. "I'm grateful these members are willing to step up and turn their concern into action by joining the Climate Solutions Caucus. This growing bipartisan coalition will be critical to ensuring Congress makes finding solutions to this issue a priority" (Deutch, 2017b).

In subsequent paragraphs, the press release cites statements from Reps. John Larson (D-CT), Nydia Velázquez (D-NY), Stephanie Murphy (D-FL), Jack Bergman (R-MI), and former Rep. Chris Collins (R-NY). Most advanced expressions of unity concerning their membership in the CSC, such as Rep. Larson (D-CT) who said, "I firmly believe that the best solutions are bipartisan ones," or former Rep. Collins (R-NY) who stated, "I am happy to join the bipartisan Climate Solutions Caucus with my fellow New Yorker Nydia Velázquez … I look forward to discussing solutions that truly improve our environment, while balancing the needs of our economic sector" (Deutch, 2017b). These statements and similar releases seemed to convey a sense of political solidarity in the CSC with which claims of climate issues were associated. As noted above, Chair Deutch and former Co-Chair Curbelo were not hesitant to share their thoughts on climate risks as they relate to their own districts and other areas impacted by hurricane events at the time. Yet, amid such claims, CSC members seemed to maintain a

performance of unity from which to advance credible claims about various climate issues and even the legitimacy of the CSC itself (as a bipartisan organization).

Far more common expressions of conflict involved performances of outrage and complaints about those on the other side of the aisle. These expressions emerged most frequently through texts of press releases and social media posts that occasionally contained supplemental imagery. Similar to expressions of unity described above, performances of conflict involved knowledge claims about climate risks that were associated with members' complaints about political or legislative developments. In turn, claims of climate issues (or potential solutions) were advanced as given circumstances for which political "others" were impeding the goal at hand, whether such others were Democrats or Republicans. A notable example of this sort of performative symmetry occurred when President Trump announced the United States' withdrawal from the Paris Climate Agreement in late May of 2017. In response, members affiliated with the Select Committee and CSC were quick to either justify or condemn this move, such as CSC Chair Deutch who released the following Facebook post on May 31, 2017:

> President Trump's unfortunate decision to pull the United States out of the Paris Agreement all but guarantees we cede our leadership on this issue so vital to our future to China, Russia, and Europe. Sadly, it's just the latest move in a string of actions by this President that have damaged our international relationships and weakened our global standing.
>
> This decision has the potential to irreparably harm our earth, dramatically hinder our economic growth, and fundamentally change our way of life.
>
> South Florida is already struggling with the effects of climate change, like worsening weather patterns and rising sea levels. As sunny-day flooding becomes more common, the President responds by sticking his head in the sand in denial of the science and the reality in our own community. Will Mar-a-Lago Country Club need to be underwater for this President to make a responsible decision about climate change?
>
> If President Trump won't listen to the scientists, then he should listen to the business leaders who strongly support the Paris Agreement. They understand that it will promote

> investments and create jobs. By removing the US from the Paris Agreement, the President is putting our country at a competitive disadvantage in the world.
>
> Most importantly, today's decision puts our national security at risk. Even as our military leaders devise strategies to combat the effects of climate change, in our own country and globally, the President's dangerous decision will make their job more difficult and our nation less secure (Deutch, 2017a).

On the following day, CSC Co-Chair Rooney (who, at the time, was not the Co-Chair of the CSC) released the following Facebook post on the Paris Agreement withdrawal:

> Just like the Kyoto Treaty of 1992, as it exists right now, the Paris Climate Accord of 2016 is a bad deal for the United States and should be abrogated, just like President Bush refused to support Kyoto.
>
> This is another bad Obama era agreement by which the United States has undertaken expensive, job-killing actions which are asymmetrical to the vague, non-binding commitments of other nations, including two of the largest polluters, India and China. Incredibly, the accord permits Russia to increase its emissions by up to 50% (Rooney, 2017).

Here, CSC Chair Deutch discusses President Trump's withdrawal from the Paris Agreement as one that weakens the "global standing" of the U.S. and "has the potential to irreparably harm our earth, dramatically hinder our economic growth, and fundamentally change our way of life." For Deutch, Trump "won't listen to the scientists" and the withdrawal creates a "national security risk." In this light, Deutch seems to situate Trump himself as the real risk for which forms of control are necessary. On the other hand, CSC Co-Chair Rooney discusses the Paris Agreement as "a bad deal for the United States" that "should be abrogated" and regarded as "another bad Obama era agreement." In turn, Rooney argues the risk at hand is not with U.S. emissions, but those from India and China who are described as "two of the largest polluters," in addition to Russia, who is seemingly free to "increase its emissions by up to 50%." In turn, Rooney seems to suggest that climate risks are more inherent to Democrats' inclinations to engage in "bad agreements" rather than those from U.S. emissions.

Such performances of outrage about the Paris Climate Agreement were not limited to those around the Trump administration's announcement in late May of 2017. As stipulations of the agreement required the U.S. to remain involved until 2020, Democrats and Republicans revived their arguments in March of 2019, when Select Committee Chair Castor introduced H.R. 9, the Climate Action Now Act, which would have required the U.S. to remain involved in the Paris Agreement. In turn, Select Committee Chair Castor and Ranking Member Graves expressed forms of conflict that were similar in terms of performative outrage but distinct in their use of visual imagery through which authority was reassured. Most notably, Chair Castor's expressions of political conflict were advanced alongside a single image that depicted her behind a lectern with various Democratic party leaders at her side—such as House Speaker Nancy Pelosi (D-CA). This image was accompanied by a relatively substantial amount of text in a press release from the Select Committee and an Instagram post from the Select Committee's account (reproduced in Figures 6.11 and 6.12). On the other hand, Ranking Member Graves was not depicted in any visual capacity; rather, authority was performed through relatively brief textual claims in a press release and Facebook post (reproduced in Figures 6.11 and 6.12) that emphasized Graves's role on the Select Committee and his relationship to Congress at large—similar to other textual performances of authority described above.

Figure 6.11 Authoritative Credibility: Comparing Two Press Releases with Expressions of Political Conflict or Unity

CHAIR KATHY CASTOR INTRODUCES CLIMATE ACTION NOW ACT (H.R. 9) TO ENSURE U.S. MEETS CLIMATE GOALS

Mar 27, 2019 | Press Release

Today **U.S. Rep. Kathy Castor** (FL14), Chair of the Select Committee on the Climate Crisis, continued her career-spanning fight for a clean and healthy environment, clean energy jobs and promoting environmental justice in Tampa Bay and around the country by leading her colleagues in introducing H.R. 9, the Climate Action Now Act. The legislation demands action on the climate crisis by ensuring America honors its Paris Agreement commitments and laying the groundwork for further action.

> "I am proud to be chairing the Select Committee on the Climate Crisis and I am honored to introduce H.R. 9, the Climate Action Now Act," U.S. Rep. Castor said. "It was with America's leadership and engagement that so many nations committed to climate action in the international Paris Agreement. Despite what President Trump has said, America cannot and will not retreat. We will keep our commitments to fight the climate crisis. This is just the start of action by House Democrats in this Congress."

On December 12, 2015, nearly 200 countries, including the United States, China, India and the European Union signed the landmark Paris Agreement to combat climate change and to accelerate and amplify the actions and investments needed for a sustainable low carbon future. On June 1, 2017, President Trump announced his intention to withdraw the United States from the Paris Agreement – making our country the only one to reject the global pact.

The Climate Action Now Act would prohibit any federal funds from being used to take any action to advance the withdrawal of the United States from the Paris Agreement. The legislation would also call on President Trump to develop and make public a plan for how the United States will meet the pollution reduction goals submitted to the world in 2015. He has an obligation to lead on this issue and to help our nation achieve our commitment of an economy-wide reduction in carbon pollution by between 26%-28% below 2005 levels by 2025.

> "We can create millions of good-paying clean energy jobs right now," U.S. Rep. Castor continued. "We can save billions of dollars in energy costs for working people right now. We can finally address decades of environmental injustice right now. And we can respond to the incredible groundswell of activism from young people who are demanding climate action now as well. They are the first generation to grow up in the climate crisis. Now they are demanding the chance to be the generation that solves it."

Figure 6.11 (Continued)

A recent Brookings Institute report (https://www.brookings.edu/research/how-the-geography-of-climate-damage-could-make-the-politics-less-polarizing/) showed that southern metropolitan areas will be hit hardest in the United States by climate change in the form of coastal property damage and higher mortality, with regions in Florida like Tampa representing eight of the 10 most adversely affected large metros. They found that Tampa's economy could contract by 16.8 percent by the end of the century from direct climate change impacts. The effects of climate change can already be felt in Tampa and throughout Florida: rising tidal levels and temperatures, sunny day flooding, disappearing corals and longer mosquito seasons.

> "Speaking as a Floridian who boarded up and fled my home with my family as Hurricane Irma spun its destructive winds and storm surge towards my hometown a year and a half ago, I understand we must act with urgency on the climate crisis," U.S. Rep. Castor concluded. "The Climate Action Now Act will help us carry out our moral obligation to future generations to tackle this crisis now."

Text of the Climate Action Now Act can be found here (https://castor.house.gov/uploadedfiles/castor_010_xml_final.pdf).

Video of U.S. Rep. Castor's comments can be found here (https://www.facebook.com/NancyPelosi/videos/485120185355753).

###

116th Congress

Figure 6.11 (Continued)

GRAVES: "THE POINT OF THE PARIS ACCORD IS TO REDUCE GREENHOUSE GAS EMISSIONS, BUT THE AGREEMENT ALLOWS CHINA TO INCREASE THEIR EMISSIONS BY ANOTHER 50 PERCENT."

Nov 4, 2019 | Press Release

WASHINGTON — House Select Climate Committee Ranking Member Garret Graves (R-La.) made the following statement about the Paris Agreement today:

"The point of the Paris Accord is to reduce greenhouse gas emissions, but the agreement allows China to increase their emissions by another 50 percent. That is not a reduction, it is not fair, and it does not help our global environment. The Paris Accord is a bad deal. Right now, China emits more than the United States, Japan and the European Union (including Britain) combined. At the same time, they spend hundreds of billions of dollars on defense and infrastructure projects around the world. America has led the world in reducing emissions and will continue to lead — not because of Paris, but because of American innovation and entrepreneurship. Global agreements should reflect that reality and actually advance the goals they are designed to achieve."

###

Figure 6.12 Authoritative Credibility: Comparing Two Social Media Posts with Expressions of Political Conflict or Unity

Note. Full text of the post says the following:

> Tomorrow will mark two years since Donald Trump announced his intent to withdraw from the Paris Climate Agreement. In May, the House voted to stop that from happening. Now the Senate needs to act. @USRepKathyCastor, the chair of House Select Committee on the Climate Crisis and the author of the bill the House voted on, said this today: "The United States is still in this agreement and Democrats are doing everything in our power to make sure it stays that way. We cannot hide from the climate crisis and we do not cut and run from our commitments. The American people want us to protect our health and lead the world in creating a clean energy future. We're committed to passing climate policies that work for the people, not corporate polluters who want to make our air dirtier and climate more dangerous. The Senate should act as soon as possible. If Republicans refuse to hold a vote, they should offer a serious alternative for addressing our climate crisis. If they can't offer any solutions, they're not doing their jobs and the American people will see right through them. The climate is not going away and we are going to keep fighting for a cleaner, healthier future for everyone. This was the first major piece of climate legislation to pass the House in 10 years. It won't be the last."

Figure 6.12 (Continued)

The substance of claims from Select Committee Chair Castor and Ranking Member Graves were similar to those of CSC Chair Deutch and Co-Chair Rooney in 2017. In the press release reproduced in Figure 6.11, Chair Castor discusses H.R. 9 as a necessary reaction to the Trump administration's attempt to "retreat" from its agreement to lower emissions over time, and a step to "keep our commitments to fight the climate crisis" to which Trump was apparently opposed. In the Instagram post reproduced in Figure 6.12, Chair Caster expounds further on this point by discussing Trump's decision as one that would decrease overall environmental quality and public health. On the other hand, Ranking Member Graves discusses the Paris Agreement as "a bad deal" that "allows China to increase their emissions by another 50%" (as noted in the press release and Facebook post reproduced in Figures 6.11 and 6.12). Similar to CSC Co-Chair Rooney, Ranking Member Graves seems to suggest concerns and risks should be associated with Democrats' policy preferences rather than impending environmental impacts. Additionally, while Graves's statements are brief and focused on Democrats' preferences for what he claims are "bad deals," they are also the same across platforms—i.e., they contain the same text. This is notably different from the press release and Instagram post from Chair Castor, who seems to engage in relatively unique and lengthy discussions on each platform, and in turn, distinct performances through which outrage is expressed.

Finally, a less frequent but notable form of performative conflict I encountered includes the explicit use of visual imagery on social media and Instagram in particular. This occurred in posts similar to those reproduced in Figure 6.13, where visual style was a form of dramatic emphasis that supplemented (or consisted entirely of) the argument at hand. The post featuring Select Committee Chair Castor is heavily edited and features a stark white background on which "profit" and "people" are highlighted within the all-capitals claim, "THE TRUMP

ADMINISTRATION IS ONCE AGAIN PUTTING PROFIT OVER PEOPLE AT THE EXPENSE OF OUR KIDS AND FAMILIES." Chair Castor herself is also featured in the image, which is devoid of color and contrasted against a blue stripe that seems to convey a sense of seriousness, and of course, authority. In the subsequent posts reproduced in Figure 6.13, CSC member Rep. Matt Gaetz (R-FL) is first shown walking next to reporters with text along the bottom of the image that reads, "MATT GAETZ EXPLAINS 'HIGHLIGHTER GREEN' TIE." While cryptic on its own, the text adjacent to this image clarifies the role of Gaetz's prop towards the end of mocking Democrats' proposed climate change solutions in House Resolution 132—i.e., the Green New Deal: "@repmattgaetz is standing up against Democrats' disastrous $93,000,000,000,000.00 so-called Green New Deal scheme." Indeed, this post was connected to others that covered a press conference Gaetz held to discuss his version of the Green New Deal—the Green Real Deal, or, House Resolution 288. In turn, Gaetz's second post reproduced in Figure 6.13 features him standing behind a lectern with a sign in front of him that reads, "GREEN ~~NEW~~ REAL DEAL." While the adjacent text only reads, "#GreenRealDeal," Gaetz's visual signage and accompanying post collectively encompass a performance of conflict that emphasizes disagreement with Democrats and Gaetz's role to advance counter-solutions in the form of a counter resolution.

Figure 6.13 Authoritative Credibility: Deliberately Visual Expressions of Political Conflict or Unity on Social Media

Figure 6.13 (Continued)

Overall, performances of authority are devoid of specific references to scientific or technical publications from which knowledge claims may be supported. Rather, claims based on authority alone seem to encompass a spectrum of performances that include discourses of risk, innovation, emissions reductions, resiliency, and political conflict or unity, alongside forms of text and visual imagery through which associations to power are emphasized. These associations seem more distinct across channel types than the political affiliation of the performance at hand. For example, expressions of authority in press releases were most often performed through forms of text that emphasized arguments and their associations with members of Congress and the institution of Congress itself. While press releases and other documents hosted on official websites occasionally contained imagery to enhance one's performance, such dramaturgical props were reserved for social media channels. These patterns of performance remained consistent even across themes of authority that were distinct across partisan boundaries.

Emotional Credibility

Emotional credibility involves expressions of claims that focus on some form of imagery or rhetoric from which affect may be evoked in the viewer. While fundamentally interpretive in my analysis here, I considered performances of credibility specifically emotional when they focused on (or were substantiated by) issues of morality or fairness in relation to climate change risks. Rather than substantiate claims by use of scientific/technical evidence or associations with authority, performances of emotional credibility associated claims with the (im)morality or (un)fairness of climate-related issues, risks, potential solutions, and/or impacted populations. Additionally, expressions of emotional credibility in terms of injustices or immoral/unfair impacts were often expressed from the viewpoints of those who were impacted themselves, be they youth activists, individuals involved with social movements, or indigenous populations

affected by new or unforeseen climate change risks. In turn, I discovered three sub-themes that emerged from the materials I encountered containing claims of emotional credibility, which include: (a) social or environmental justice, (b) portrayals of public demonstrations, and (c) evocative imagery.

As noted in Table 6.1, these performances were entirely limited to Democrats and expressed primarily through social media channels. And while emotional credibility was apparently avoided entirely by Republicans, it was also less frequently engaged among Democrats, from whom I collected 54 forms of material across the three sub-themes I identified. Although sparse compared to the themes reviewed above, forms of emotional credibility engaged performances and performative mechanisms that are distinct for this particular theme and worth reviewing below.

Social or environmental justice. Expressions of social or environmental justice encompass claims that highlight potential or realized acute climate change impacts on various populations and environments, particularly economically vulnerable and historically marginalized communities or natural landscapes. Indeed, scholars of social and environmental justice have long addressed unequal (and inequitable) distributions of various externalities to marginalized communities or environments not typically constructed as landscapes of "nature" or "beauty" (for an overview of this and similar perspectives, see Bell & Ashwood, 2016). And at the time of this writing, many activist organizations have emerged to support justice platforms that have become part of the political agenda for many Democrats in Congress. For the materials I encountered here, claims of social or environmental justice highlighted inequities of climate impacts on populations that could have otherwise been avoided or could be avoided in the future. These emerged as reactions to various calls for justice in climate-related hearings, social events,

or documents related to the climate justice cause in addition to stand-alone statements from members of the Select Committee or CSC. As an example of the former, Select Committee Chair Castor released the following statement on July 18, 2019, in response to the Equitable and Just National Climate Platform—a document drafted by environmental organizations to achieve climate equity:

> Solving the climate crisis requires confronting injustice and racism. As we move to a 100% clean energy economy, we need to make sure it works for everyone and that we prioritize improving public health and economic security in frontline communities. These are tough issues, and these diverse advocates across America have put in significant work developing a shared vision for a more just, equitable future for communities of color and working families who deserve quality, family-sustaining jobs. I'm looking forward to meeting with all of them and my colleagues and I are going to keep these principles front and center as we develop our climate plan (Select Committee on the Climate Crisis, Majority, 2019c).

In terms of claims from Select Committee and CSC members, CSC Chair Deutch released the following tweet on September 20, 2019:

> We know the power of young people who refuse to accept the status quo.
> This is their future. And they refuse to accept inaction on climate change.
> We have a responsibility to leave a cleaner and healthier world for them.
> Let's get started.
> #ClimateActionNow (Deutch, 2019b).

Additionally, Select Committee member Rep. Joe Neguse (D-CO) released the following tweet on May 1, 2019, that was subsequently retweeted by the Select Committee: "Combating the climate crisis is a moral imperative that compels us to act to ensure we live in and leave behind a healthier, safer and more sustainable world for our children and grandchildren. #ClimateActionNow" (Neguse, 2019).

While most claims of social or environmental justice were expressed through text, some involved imagery explicitly designed for the claim at hand. An example of such imagery is reproduced in Figure 6.14, which contains two social media posts from the Select Committee

(one from Facebook and another from Twitter). The first post (published on April 3, 2019) features a witness who testified at the Select Committee's first hearing held on April 4, 2019—Aji Piper, the plaintiff in the climate lawsuit *Juliana v. United States*. Pictured against a large body of water, Aji is accompanied by text in the image that alludes to the lawsuit for which he was a plaintiff until 2016: "I ASK THAT THE COMMITTEE TAKE SERIOUSLY THE CRISIS THAT WILL DETERMINE THE SURVIVAL OF FUTURE GENERATIONS." Towards the end of this statement, the text increases in size, so as to emphasize the terms "survival of future generations." The post below Aji's consists of one the Select Committee retweeted from the account of Jerome Foster II, a youth climate activist. While the tweet is rather concise, Jerome invokes emojis to express an intertwined relationship between climate action and climate justice, using a recycling symbol and earth globes along with a weight scale and megaphone. While emojis were infrequent across the materials I encountered during the data collection process, I found these salient and visually performative (however small they were) towards the end of expressing a claim of social and environmental justice.

Figure 6.14 Emotional Credibility: Visualizing Expressions of Social or Environmental Justice

Portrayals of public demonstrations. Portrayals of public demonstrations involve references to (or visualizations of) specific social events held to advance climate-related causes. Most references or visualizations of social gatherings such as protests, marches, or strikes occurred on social media through the Select Committee's Twitter account in the form of retweeting climate activists. These posts were highly focused on the visual images of activism and the multiple forms of demonstration whose participants often used signs to convey images of meaning or explicit claims of climate change risks.

An example of the posts I encountered may be found in Figure 6.15, which contains four retweets and one original tweet from the majority side of the Select Committee. Indeed, these posts (and the others I encountered) are highly focused on the imagery of activist events and how the meaning of collective action signals public support for climate-related policy, or at the very least, acknowledgment of (or outrage about) climate change risks. For example, the two tweets reproduced on the first page of Figure 6.15 depict climate strikes among high school students in Washington DC and Kampala, Uganda—an approach first explored by youth climate activist Greta Thunberg. The tweets are not those from the Select Committee itself (except for one), but retweeted from its account and subsequently displayed alongside its other original posts. While this may seem arbitrary at first glance, it seemed to suggest a form of endorsement of and support for the individuals who tweeted the images and the meanings associated with the images themselves (including claims expressed by activists within them). Rather than advance claims as a government organization, member of Congress, or someone citing scientific or technical evidence, the Select Committee's retweets of activists and activist events seem to allow these individuals to speak with their own voice and without a filter or formal event through which claims may be advanced and perhaps distilled (such as a hearing or press conference). In this

light, these imageries and the way they are disseminated seem to serve as both evidence for public action and the Select Committee's support for such actions (and claims associated with them).

Figure 6.15 Emotional Credibility: Portrayals of Public Demonstrations

Figure 6.15 (Continued)

Select Committee on the Climate Crisis Retweeted

Zero Hour @ThisIsZeroHour · Oct 14, 2019

Repeat after us: INDIGENOUS PEOPLES ARE ONE THE FRONTLINES OF CLIMATE CHANGE. INDIGENOUS PEOPLES ARE ON THE FRONTLINES OF CLIMATE CHANGE. INDIGENOUS PEOPLES ARE ON THE FRONTLINES OF CLIMATE CHANGE.

Guardians of the Forest and 3 others

7 180 532

Show this thread

Select Committee on the Climate Crisis @Clim... · Sep 13, 2019

An entire generation is growing up in the #climatecrisis. Today we stand with youth climate strikers as they demand #ClimateActionNow ‼ #FridaysForFuture

2 10 28

Each image reproduced in the tweets of Figure 6.15 contains various claims of climate risks or calls to action to avoid particular chances of harm. The first retweet on the first page of Figure 6.15 depicts high school students striking with one student holding a sign that shows the earth on fire and the words "ACT NOW" painted at the bottom in capitalized black letters. The second retweet on the first page of Figure 6.15 (published on February 7, 2020) also depicts high school students striking for climate action, but in the capital of Uganda, Kampala. Students line up and hold signs that read "END PLASTIC POLLUTION," "YOUTH STRIKE FOR CLIMATE," and "CLIMATE CHANGE KILLS!" among others. The first retweet on the second page of Figure 6.15 depicts a series of strikes that addressed climate risks and the rights and vulnerabilities of indigenous populations. Notably, the tweet (originally published by the environmental and social justice non-profit, Zero Hour) states, "INDIGENOUS PEOPLES ARE ON THE FRONTLINES OF CLIMATE CHANGE." In turn, images in the collage depict a strike held in Washington DC (left) during September of 2019, where protesters held a sign that reads, "FOREST REBELLION NOW = FORESTS FOR FUTURE." In the upper right corner of the collage, individuals are depicted atop Mauna Kea in Hawaii to protest the planned installation of a telescope during the summer of 2019, with a sign that reads, "ROAD CLOSED DUE TO DESECRATION." Finally, the image on the lower right corner of the collage depicts youth climate activist Tokata Iron Eyes speaking at an unidentified event, who was first known for participating in protests against the Dakota Access oil pipeline in 2016. The final tweet reproduced in Figure 6.15 is from the Select Committee itself and depicts a youth climate strike held in Washington DC in September of 2019 with signs that read "YOUTH FOR CLIMATE ACTION NOW" and "SAVE THE ICE CAPS." While these images were produced by individuals not part of the Select Committee membership (or presumably its staff), they were

posted on the Select Committee's Twitter account as retweets, and in turn, reproduced as claims with which the Select Committee was affiliated and likely in agreement.

Evocative imagery. Performances of emotional credibility are not without uses of dramaturgical devices or imagery towards the end of eliciting responses in the viewer. Indeed, the metaphor of the stage itself implies that certain actions and statements are necessarily dramatized to do so. In this light, I encountered a small but notable collection of social media posts across the Select Committee's Facebook and Twitter accounts that I sense could evoke some form of emotional reaction from those who view them. These posts were particularly striking in the imagery used to depict the impacts of climate change and they included original and recycled content that was collectively aggregated on the Select Committee's social media channels.

Figure 6.16 Emotional Credibility: Evocative Imagery

Figure 6.16 (Continued)

The three posts reproduced in Figure 6.16 encompass what I categorized as evocative imagery. At first glance, these posts convey images of a child wearing a breathing mask, a beached sea turtle with a rope tied around its neck, and an emaciated polar bear. Yet, these images also reference linked material that provides additional substance to the images at hand. The first post visualizing a child references a story from CNN about the effects of pollution on communities of color in Port Arthur, Texas; the second post featuring a beached sea turtle references an article from *The New York Times* about a United Nations report on biodiversity loss; and the third post of an emaciated polar bear references a story from CNN about a United Nations report on biodiversity preservation. Claims accompanying these images are also somewhat limited, or at least reliant on the implicit meanings associated with them. While the first post in Figure 6.16 discusses the linked CNN story as one that is "important" and about climate justice, the second is far less explicit—where the poster states, "We must #ActOnClimate." And the Select Committee's post with the polar bear discusses biodiversity loss as phenomena "made worse by the #ClimateCrisis" and a claim that would otherwise go unnoticed without its accompanying image.

Overall, emotional credibility involves expressions of knowledge claims that deviate notably from performances of science, empiricism, or authority. Rather than invoke forms of data, evidence, or institutional/individual status to substantiate claims of climate risk, emotional credibility affords uses of dramatic devices in the effort to elicit affect about the issues at hand, and in turn, the (im)morality or (un)fairness of them. As noted above, visual imagery is especially important in expressions of emotional credibility, particularly with references to public demonstrations in support of climate initiatives and dramatic demonstrations of potential or realized impacts from climate-related events (such as those of evocative imagery). On the

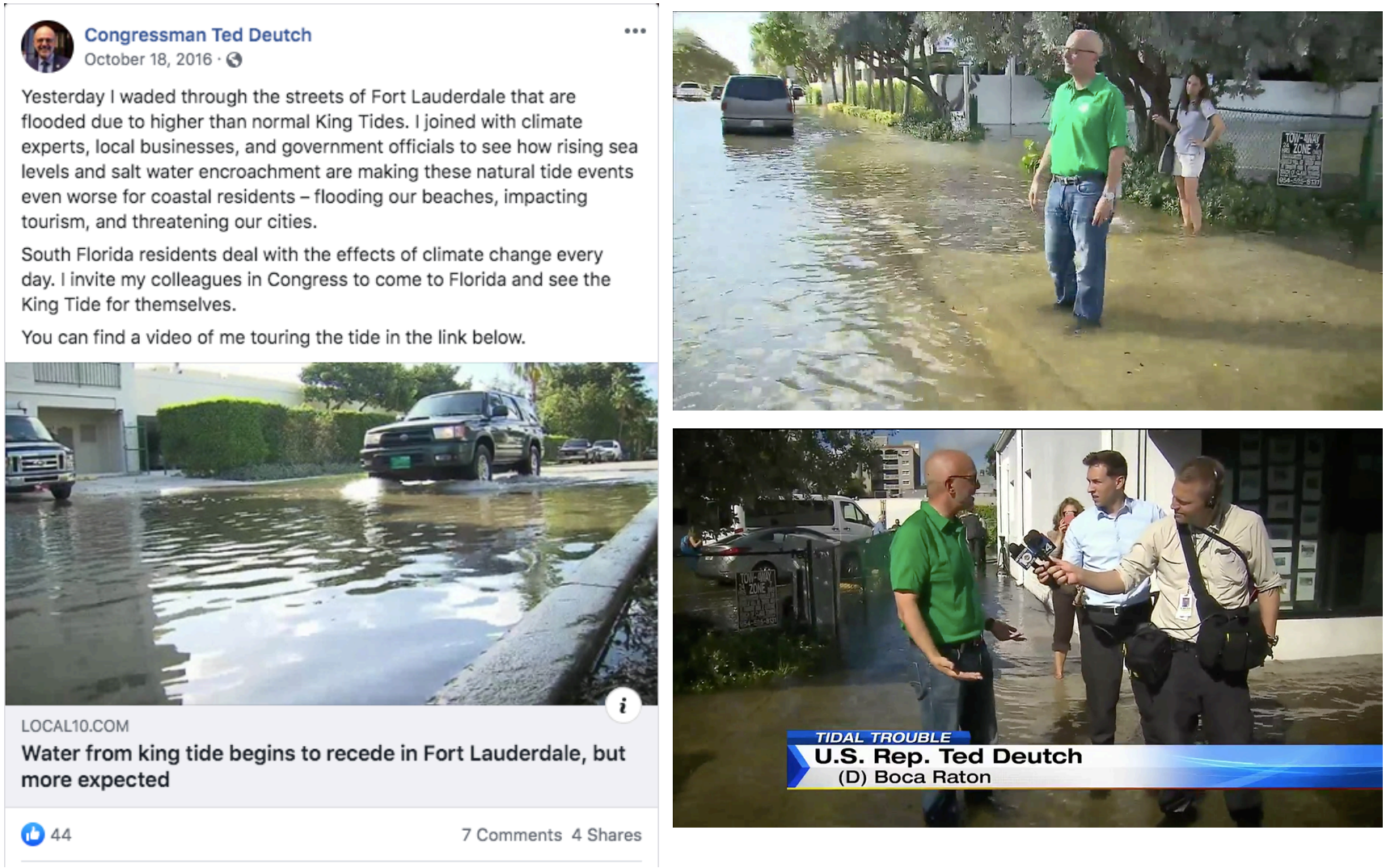
other hand, written expressions of emotional credibility are also notable forms of performance, particularly with regard to discourses of social or environmental justice that encompass claims of inequitable distributions of externalities across vulnerable and underserved populations. While both written and visual forms of performance emerged within documents hosted on official websites and social media platforms, I found performances of emotional credibility most conducive to the affordances social media platforms may offer and the audience(s) to whom such posts may be exposed. No doubt, press releases, dear colleague letters, and other documents have their appropriate place and audience in the policy process, but claims involving forms of emotional credibility seem most appropriate on social media platforms, where affordances on them provide dynamic options to post text with imagery and video, and where audiences encompass a wide range of ages and interests who may be engaged with climate activism and/or the broader policy process.

Lived Experience Credibility

Lived experience credibility encompasses expressions of claims that are substantiated by references to (or visualizations of) personal experiences with climate risks or impacts. Such personal experiences may encompass those of the member, their constituents, or other individuals from the public at large. Similar to expressions of emotional credibility, expressions of lived experience credibility were almost entirely limited to Democrats, from whom I collected 33 forms of public-facing materials compared to three from Republicans. These forms of performance were also centered primarily around social media posts that involved both textual descriptions and visual depictions of climate issues in members' states and other regions of the U.S.

As Select Committee Chair Castor and CSC Chair Deutch both represent districts in southern Florida, it may not be surprising that expressions of lived experiences involved those of climate issues somewhat unique to that area, such as hurricanes, high tide flooding, and infrastructure preparations for sea-level rise in general. Most notable among these expressions were those across social media platforms, which occasionally contained visual depictions of members' climate experiences with potential or realized phenomena in the field. Figure 6.17 reproduces two examples towards this end—one from CSC Chair Deutch and another from Select Committee Chair Castor. The first page of Figure 6.17 (left) features a Facebook post from Deutch's account that claims a personal experience with annual high tide flooding (i.e., so-called king tides) in his district in Fort Lauderdale. Deutch reports having "waded through the streets" along with "climate experts, local businesses, and government officials to see how rising sea levels and salt water encroachment are making these natural tide events even worse for coastal residents—flooding our beaches, impacting tourism, and threatening our cities." Attached to the post is a link to a local news report of Deutch's experience in the field, and an image in Deutch's Facebook post that shows a flooded street and a slightly submerged passing vehicle. Intrigued, I viewed Deutch's attached video from the local news in Fort Lauderdale and obtained two screenshots that explicitly visualized Deutch wading through the king tide waters and another of Deutch speaking to reporters while undergoing this experience. In the clip (visualized in the bottom right image on the first page of Figure 6.17), Deutch provides his real-time experiences with the high tides by describing the height of the water and his concern for such phenomena in general: "Just standing in here I'm passed the ankle on my way up to the calf and it's still rising." One of the reporters (middle) asks, "So this is a big concern?" To which Deutch replies, "This is a huge concern."

Figure 6.17 Lived Experience Credibility: Expressions from the CSC and Select Committee Chairs



Note. The two images on the right are screenshots taken from the video attached to CSC Chair Deutch's Facebook post (left).

Figure 6.17 (Continued)

The second page of Figure 6.17 features two Twitter posts from Select Committee Chair Castor that were retweeted by the committee's official account. The post from November 7, 2019 (left) shows Castor and Rep. Debbie Mucarsel-Powell (D-FL) (right) talking to Chris Bergh (left), an official with the Nature Conservancy (a non-profit) who oversees programs in the Florida Keys. Castor notes her experience speaking to Bergh about sea-level rise and his reports that climate change has "accelerated … from 1 [inch] every 100 years to 10 [inches] in the same time period." In the image, Bergh gestures with his hand to indicate this height increase, which is almost equal to the height of all three individuals featured in the image. Additionally, the post from November 8, 2019 (right) shows Castor standing with Rep. Donna Shalala (D-FL) and others next to a sea wall that is being raised to combat flood risks in southern Florida—with one half of the wall several feet shorter than the revised height that was under construction at the time Caster visited. Seeing this necessary structural change in person is accompanied by commentary from Castor in the tweet's text, stating, "We're finding solutions to the #ClimateCrisis together."

While social media channels seemed to afford members the ability to perform claims accompanied by visual imagery or video, press releases seemed to offer more of a diverse overview of commentary from various members affiliated with the CSC, of whom some discussed their personal experiences with climate-related phenomena. As one may recall, CSC Chair Deutch often published press releases when members joined the organization. These documents not only announced the CSC's expanding membership along with comments from Chair Deutch, but they often included comments from the new members themselves. One of such press releases published on September 25, 2017, included a quote from (at the time) new

member Rep. Nydia Velázquez (D-NY), who recounted her personal experience with an extreme weather event in previous years concerning her motivation to join the CSC:

> As a New Yorker, I was there five years ago when Superstorm Sandy devastated our City. Now, this year, an unprecedented set of hurricanes have hit Houston, Florida, Puerto Rico and the U.S. Virgin Islands. … I believe climate change will present mounting challenges in the years ahead. The Climate Solutions Caucus is a bipartisan effort to address these issues by both curbing climate change and helping localities invest in resources they need to withstand future weather disasters. I'm proud to join this effort (Deutch, 2017b).

Similarly, another press release from Chair Deutch (published on January 9, 2018) included a statement from former member Rep. Mark Sanford (R-SC) who commented on his observations of declining environmental health in South Carolina:

> For over 30 years, I have seen the ever-so-gradual effects of rising sea levels at our farm on the South Carolina coast. … I've watched once-thriving pine trees die in that fragile zone between uplands and salt marshes. To me, the idea that we should be good stewards of what we've been given simply makes sense, and I look forward to working with the Caucus towards economically-viable options to conserve our natural resources (Deutch, 2018).

Beyond announcements of new CSC members, one press release contained a personal anecdote from Select Committee Chair Castor that is worth noting here. Published on March 27, 2019, in regard to H.R. 9 (the bill to retain U.S. involvement in the Paris Climate Agreement), Castor recounts one personal experience she had with an extreme weather event in southern Florida:

> Speaking as a Floridian who boarded up and fled my home with my family as Hurricane Irma spun its destructive winds and storm surge towards my hometown a year and a half ago, I understand we must act with urgency on the climate crisis. … The Climate Action Now Act [H.R. 9] will help us carry out our moral obligation to future generations to tackle this crisis now (Select Committee on the Climate Crisis, Majority, 2019a).

Considered together, performances of lived experience credibility seemed to provide a sense of one's subjective experience with risk or climate phenomena unique to members' districts. This not only provided grounds to recount personal experiences *per se*, but to use those experiences as forms of evidence to convey expertise and build trustworthiness with one's

constituency or the broader public. Just like the previous themes reviewed above, lived experience credibility involved uses of channel affordances to enhance one's performance, such as the attachment of imagery and video to document experiences as they happened in the field. As demonstrated in Figure 6.16 and apparent across the other materials I encountered, these affordances seemed related to somewhat documentary-style accounts of experiences as they happened in real-time, in the field. On the other hand, press releases were limited to text and seemed to be places in which members recounted personal experiences with (or stories about) climate-related phenomena. While materials with these expressions were limited, their substance seemed to suggest a distinction along the lines of where such expressions were performed. In turn, social media seems to offer a range of options in which expressions of lived experiences might be captured and disseminated as one might experience them in the field, whereas press releases or similarly text-based materials might offer focus on written accounts through which personal narratives could be recalled.

Relational Credibility

Relational credibility involves expressions of claims where members seem to interact directly with their constituents or viewers. These forms of expression were almost entirely centered on social media platforms where members seemed to engage interpersonally with the audience through images of otherwise backstage meetings, or, videos of members speaking directly to the audience. Social media posts were accompanied by captions that described the backstage event on display or provided additional information about the interaction at hand. Notably, these forms of interaction did not seem to patronize or lecture the viewer; rather, they seemed to bring the viewer into members' inner chambers and make them part of their team. From this standpoint, claims of risk were expressed as *de facto* stances of the office and the team

with which the viewer was a member. As noted in Table 6.1, relational credibility seemed most prevalent across materials from Democrats, and specifically, posts from Facebook, Instagram, or Twitter. These platforms seemed to provide affordances well-suited for expressions of relational credibility given their capability to accommodate various forms of visual performance that emphasized members' interactions with the audience.

Some of the most notable performances of relational credibility I encountered were those from CSC Chair Deutch, whose engagements with viewers involved videos, selfies, and images where Deutch interacted with the audience directly, sometimes even while meetings were in progress. Figure 6.18 reproduces five social media posts from the accounts of CSC Chair Deutch—four from Instagram and one from Twitter. Throughout these expressions, Deutch is visually depicted interacting with notable figures (such as actors and athletes) or the audience in backstage spaces (such as Deutch's office) that are not usually depicted in formal proceedings or materials. Two posts reproduced on the first page of Figure 6.18 provide an example of this form of insider perspective. In one post, Deutch meets with actor Bradley Whiteford about climate-related issues, and in the second post, Deutch shows the audience a Halloween pumpkin that is carved in a manner to depict the landscapes and wildlife of southern Florida. Both posts visualize Deutch in the spaces of his congressional office that are otherwise private and reserved for processes that generally remain concealed from view. In this case, however, Deutch uses these sorts of inner sanctums to engage the audience in a relational manner with which claims of climate risk are associated. For example, the text of the first post in Figure 6.18 states,

> You trust him as President Bartlet's advisor [in the television show, *The West Wing*]. So you should trust Bradley Whiteford when he calls for urgent action on climate change. Intensifying natural disasters, rising sea levels, worsening droughts—climate change affects local communities across the US.

Additionally, in the second post referring to the Halloween pumpkin, Deutch states the design "was chosen to highlight the beauty of south Florida's coastline which is being increasingly impacted by threat [*sic*] of climate change." Deutch further states, "Rising sea levels threaten nature and our communities. We must remain committed to finding solutions."

Figure 6.18 Relational Credibility: Expressions from the CSC Chair

Figure 6.18 (Continued)

Note. The full text of the post above states the following:
In South Florida, we pride ourselves on our beautiful natural parks and ecosystems. Yet it is also being threatened by rising sea levels and pollution. Almost ten years ago, the Supreme Court voted to allow unlimited spending in our elections. Since then, the toxic influence of big money in our elections has touched every issue we face as a nation, including blocking action on climate change. When we prioritize private interests over people, our democracy is compromised. It's time to get big money out of politics & put voters back in charge of Washington so we can address the issues that matter to South Florida, like tackling climate change!

Figure 6.18 (Continued)

The following three posts on the second and third pages of Figure 6.18 provide additional examples of CSC Chair Deutch expressing claims of climate risk in forms of relational interactions with the audience. In the first post on the second page of Figure 6.18, Deutch holds an Olympic medal and looks at the camera while seated with a large group of athletes (and other members of the CSC not visualized here) to discuss "how climate change is harming outdoor recreation, public lands, and tourism nationwide." Below this post, Dutch stands in front of a beach in his district and speaks directly to the audience in a video about how the natural landscapes behind him are "being threatened by rising sea levels and pollution." And in the final post reproduced in Figure 6.18, Deutch takes a selfie image with celebrity science communicator Bill Nye and states, "Well here's a guy who knows that climate change is real. Thanks @BillNye for reminding us that science matters and coal isn't clean!"

Performances of relational credibility were not entirely limited to CSC Chair Deutch. Figure 6.19 reproduces two social media posts from Select Committee Chair Castor (first page) in addition to one press release and social media post from Republicans affiliated with the CSC (second page). The two tweets on the first page of Figure 6.19 were retweeted by the Select Committee's official account and feature Chair Castor engaging the audience of the posts as viewers on the inside. The tweet published on November 7, 2019 (left) features Castor traveling with Rep. Mucarsel-Powell and a staff member to an area in southern Florida (in the Florida Keys) that has experienced impacts from climate change (and will continue to in the coming decades). As noted in the previous social media posts with Rep. Mucarsel-Powell, Castor seemed to express forms of lived experience credibility when she visited the places where climate impacts have occurred and will continue to do so in the future. Here, on the other hand, Mucarsel-Powell and Castor seem to engage the audience as another passenger in the vehicle as

they travel to see “what ground zero for climate change looks like.” Not only does Mucarsel-Powell visualize the audience’s insider perspective through the use of a selfie with the Chair, but she seems to confide in the audience the need to see areas of future impacts, and in turn, the necessity for “real solutions” to deter the severity of such impacts.

Figure 6.19 Relational Credibility: Expressions from the Select Committee Chair and Two CSC Republicans

Select Committee on the Climate Crisis Retweeted

Rep. Debbie Mucarsel-Powell @RepDMP · Nov 7, 2019

On the road to Key Largo to show @USRepKCastor, chair of @ClimateCrisis Committee, what ground zero for climate change looks like. We need real solutions! #ClimateActionNow

7 43 114

Show this thread

Select Committee on the Climate Crisis Retweeted

US Rep Kathy Castor
@USRepKCastor

This is what it looks like when Congress listens to a generation of young people who are growing up in the #ClimateCrisis. Thank you @GretaThunberg, @Jamie_Margolin & @vict_barrett!

Figure 6.19 (Continued)

Rep. Zeldin Meets with Citizens Climate Lobby

June 11, 2019 | Press Release

WASHINGTON - On Tuesday, June 11, 2019, Congressman Lee Zeldin (R, NY-1), member of the Bipartisan Climate Solutions Caucus, met several constituent members of the Citizens Climate Lobby (CCL) from Miller Place, Stony Brook and Holtsville who travelled to Washington, D.C. During the meeting, they discussed the caucus' efforts and how Congress can preserve our environment for generations to come.

Rep. Brian Fitzpatrick @RepBrianFitz · Feb 13

Thank you to @CleanAirMoms_PA for stopping by the office. **Climate change** is one of the most important issues facing our country, and I will continue to work with my colleagues towards sustainable solutions.

15 2 24

Adjacent to this tweet in Figure 6.19 is one of Chair Castor presiding over a joint hearing between the Select Committee and the House Foreign Affairs Committee on September 18, 2019. The hearing room is full given the list of relatively high-profile youth activists who testified that day (described further in the next section). What makes this tweet especially performative is the visual angle of the image that accompanies Castor's tweet. As an audience, we are situated behind Castor's right shoulder and face a large audience who attended that day (including myself)—a rare perspective indeed for the public and even many members of Congress who never hold committee leadership positions. We can vaguely see Castor's materials as they are laid out behind the front edge of the dais, and in the tweet's text, Castor discusses this situation with the audience with a form of reflexivity: "This is what it looks like when Congress listens to a generation of young people who are growing up in the #ClimateCrisis." With this statement, the audience seems situated as an apprentice in whom the Chair confides about the events depicted in the tweet.

The two tweets on the second page of Figure 6.19 depict some of the otherwise elusive performances of relational credibility I encountered among Republicans. These posts seemed considerably less explicit in their claims of climate risk compared to those of Democrats, and relational expressions with the audience remained one step removed from some of the interpersonal interactions I examined above. The two forms of material reproduced on the second page of Figure 6.19 encompass a press release (left) from CSC member Rep. Lee Zeldin (R-NY) and a tweet from CSC member Rep. Brian Fitzpatrick (R-PA). While I suspect Republicans do engage expressions of relational credibility for various other issues addressed in Congress, expressions related to climate change here seemed rather sterile compared to those from Democrats. For both forms of material, the audience seems removed from the inner thoughts and

workings of the CSC members at hand; we are not part of their team as we were for the posts considered above, and the language within these posts seems less involved with the member directly. Nonetheless, both forms of material do visualize the inner chambers of Zeldin and Fitzpatrick, and in turn, we are brought in to the inner sanctum of policymaking but to a limited extent. The text accompanying the press release (left) on the second page of Figure 6.19 provides an example of this form of retained distance: Language in the release remains phrased in the third person and climate issues are addressed in terms of "how Congress can preserve our environment for generations to come." Fitzpatrick's twitter post (right) is somewhat less distant in its language and visuals, but the audience seems to remain as outsiders along with the individuals with whom he met. Nonetheless, Fitzpatrick addresses the audience directly and states climate change "is one of the most important issues facing our country."

Performances of relational credibility encompassed interactions with the audience with which claims of climate risk were associated. This form of performance was unique compared to others I examined above given its involvement of the audience where members occasionally revealed the places, spaces, thoughts, and perspectives that otherwise remain hidden from view. In turn, performances of relational credibility did not rely on forms of persuasion by use of evidence, authority, or even emotion, but involvement of the viewer in these processes from which they are normally excluded. Considering the characteristics of these performances that may involve the occasional selfie or confession, it may not be surprising that forms of relational credibility were concentrated on social media platforms that afford numerous options for these forms of expression. Considering also the connectivity these platforms afford to other individuals involved in the climate discussion (such as activists or other members of Congress) provides a

compelling and sensible case for the concentration of relational performances to social media channels.

Comparing Two Select Committee Hearings

The themes of performance detailed in Table 6.1 and throughout this chapter provide an overview of expressions I encountered primarily through materials hosted on official websites and social media channels. To disregard additional circumstances in which performances may occur, however, would provide an incomplete assessment of the forms of expression I have attempted to describe. As noted in Chapter 3 and Table 3.2, I attended seven Select Committee hearings throughout the data collection process to examine phenomena otherwise peripheral to formal records or video recordings. I sought to consider the performative characteristics of the settings in which hearings took place, the reactions and interactions of staffers in the background, the forms of interaction among members as proceedings took place, and reactions from the audiences who attended these hearings. Among my experiences, I found two hearings particularly salient for comparison against each other in order to contrast patterns of performance I encountered during the data collection process. These include one hearing held on September 18, 2019, and another held the week after on September 26, 2019. While concurrent in their scheduling, these two Select Committee hearings could not have been more distinct in their substance and style. On the one hand, the September 18 hearing was held jointly with members of the House Foreign Affairs Committee and involved youth climate activists who told personal stories about and experiences with climate change issues. On the other hand, the September 26 hearing (hosted solely by the Select Committee) featured energy experts who spent considerable time describing how renewable technologies could be developed and deployed in the coming years. The settings and audiences for both of these hearings were also distinct, which provided

further contrasting places of theater in which various forms of credibility expressions emerged. In the following section, I describe my personal experiences with these two settings and notable performances I encountered in each. Through this brief comparative analysis, I seek not to provide an exhaustive overview of performances one may encounter at climate-related hearings in general, but a comparison of two distinct and contrasting settings in which the aforementioned forms of credibility emerged.

Two distinct settings. While expressions of credibility are not necessarily inherent to the places and spaces in which performances occur, the settings of formal proceedings do contribute to the overarching sense of theater in which claims are expressed. This sense of theater was rather distinct between the hearings held on September 18 and September 26, in part due to the witnesses who testified and the audiences who came to see them. The hearing on September 18 featured youth climate activist Greta Thunberg and two others who gained recognition in the press for their involvement in climate-related disputes (i.e., with witnesses Jamie Margolin and Vic Barrett in particular), in addition to one self-proclaimed conservative conservationist who founded an organization that promotes the use of commercially viable renewable energy technologies (Benji Backer). Recognizing this, I arrived at the hearing room thirty minutes early only to find the space completely full along with approximately 50 members of the press who surrounded Thunberg and others set to testify that day. I eventually found one open seat in the back row. Many members of the audience were supporters of Thunberg, Margolin, and Barrett, which became apparent throughout the proceedings when various audience members hissed and moaned at remarks from some Republican members and comments from Ranking Member Graves in particular, who called the hearing a “charade” while questioning Thunberg. Additionally, the audience was heterogeneous in its makeup and the apparent groups they

represented. I encountered individuals dressed in what seemed to be traditional Native American garb and various others who required the use of a translator (for a language I could not recognize) who stood at the back of the room. Although this was a joint hearing between the Select Committee and the House Foreign Affairs Committee, more than a dozen staffers for the majority and minority sides of each committee lined the back row behind the dais and sides of the hearing room. In all, the scene was striking in the attention devoted to the witnesses and the personal accounts they had to offer. There seemed to be a sense of excitement and tenseness in the air that I had not encountered at any other hearings related to climate change or other topics. After the hearing concluded, senior Select Committee staffers escorted Thunberg into the hearing room's adjacent office chambers and eventually out into the hallway where the audience had migrated but certainly not left. The press, too, remained and surrounded Thunberg as she exited the hearing room office and the building with her associates.

The hearing on September 26 featured consultants and experts involved in the renewable energy sector, including Brad Crabtree (Vice President of carbon management at the Great Plains Institute), David Gardiner (Principal and President at David Gardner and Associates), Cate Hight (Principal of industry and heavy transport at the Rocky Mountain Institute), and Jeremy Gregory (Executive Director at the MIT Concrete Sustainability Hub). The hearing was held in the Capitol Visitor Center—an unusual location relative to other hearings that are typically held in one of the House office buildings. This location was somewhat more difficult to access given the extra security precautions taken for visitors inside the Capitol. As a member of the public, I was required to register and wear a visitor's badge to access the hearing room in a "restricted" area that is usually closed to the public. I arrived at a space that was somber, quiet, and fittingly even somewhat dim. I saw no members of the press and counted approximately 10 members of the

audience—of whom around five seemed to know and converse with the witnesses after the hearing concluded. The mood throughout the meeting remained subdued and focused on the substance of technologies with which the witnesses were intimately familiar. While substantive, the meeting was definitely not exciting. Yet, the very discussions I found dull were those focused on the technologies from which forms of innovation might emerge that could reduce emissions or diminish the severity of climate impacts in the future. Nonetheless, discussions were predictably cordial, focused on the topic at hand, and contained little more than members' performances of previous knowledge about the technologies under discussion. In terms of dramaturgy, the stage and scene were diametrically opposed to those which I encountered just one week prior. After the hearing concluded, Select Committee members, and the few members of the audience, disbursed rather quickly. No one seemed apt to stay longer than necessary, for the few who even attended.

While both hearings were quite distinct in their style and substance, they both exuded a sense of formality with which credibility seemed associated. The mere location of both hearings also contributed to this form of credibility and the surrounding infrastructure that collectively encompasses Capitol Hill at large, such as the security presence, the physical décor of structures, and the self-presentation of the individuals who work and meet within them. In a tangible sense, these very aesthetic attributes embody what I would consider a pronounced form of authoritative credibility, where the very essence of the place itself and the spaces in which meetings are held could contribute to the expressions of credibility with which knowledge claims are associated. This is not to discount other forms of credibility expressions that could emerge within claims, but to think of such claims delivered in the spaces on Capitol Hill as based in the physical stage that provides an *a priori* form of authoritative expression.

Opening statements. Despite the aesthetic differences I encountered between these two settings, both hearings offered threads of consistency through which claims of risk were advanced and credibility was performed. Take, for example, the ritual of opening statements delivered by the Select Committee Chair and Ranking Member, which seemed to serve dual purposes: On the one hand, these forms of expression acted as symbolic gestures to the order of formal proceedings. On the other hand, they provided the Chair and Ranking member opportunities to advance claims of risk or express forms of credibility.[19] Given the brevity of these statements, however, expressions of credibility were not necessarily explicit beyond the inherent tone of authority that seemed to encompass the spaces of Capitol Hill and the procedures governing these formal meetings. In turn, opening statements served more as dramaturgical prologues that offered previews of discourses that would emerge throughout the hearing when members and witnesses engaged in question-and-answer exchanges. For the September 18 hearing, these prologues encompassed themes of social and policy action from Chair Castor, in addition to themes of emissions reductions, technological promise, and political conflict from Ranking Member Graves. For the September 26 hearing, themes included promises of technology and claims of climate risk from Chair Castor, and claims of emissions reductions and technological promise from Ranking Member Graves.

Across both hearings, the opening statements from Chair Castor seemed to focus on the emergence of public demonstrations around climate change risks and the potential human harm such risks pose for the future. On the other hand, the opening statements from Ranking Member Graves focused on emissions reductions in the United States and the issues of policies to

[19] While the September 18 hearing was held jointly between the Select Committee and the House Foreign Affairs Committee, I focus on the opening statements of the Chair and Ranking Member of the Select Committee specifically. Below, I consider comments and themes that emerged from discussions of all members in attendance at the September 18 hearing.

constrain domestic oil production amid increases in emissions from other countries—China in particular. During the September 18 hearing, Chair Castor discussed the emergence of climate-related public demonstrations, particularly among youth, as having "grabbed the attention of the world … due to the hard work of many students in this room and many young people all across the planet" (Voices leading the next generation on the global climate crisis, 2019, p. 4). A few days later during the September 26 hearing, Chair Castor referred again to public demonstrations at the beginning of her address, stating:

> I would like to start off by just acknowledging that it has been a very busy week for climate action. Kicking things off last Friday, young people and adults across the world united for the Global Climate Strike. And here in Washington, DC, and in the communities we represent back home, we were humbled to witness our own American student activists lead the March for Climate Action (Solving the climate crisis: Reducing industrial emissions through U.S. innovation, 2019, p. 1).

During the September 18 hearing, Ranking Member Graves emphasized his focus on emissions reductions in the U.S. and increases in emissions elsewhere, stating,

> [T]he United States … is the country that has led the world in greenhouse gas reductions. As stated we have reduced greenhouse gases more than the next 12 countries combined. … Right now, as was stated, for every one ton of carbon emissions we produce in the United States, China has increased by four tons, more than offsetting all the reductions that we have had in the United States (Voices leading the next generation on the global climate crisis, 2019, p. 6).

Similarly, during the September 26 hearing, Graves stated:

> Madam Chair, as we look back over the last several years in the United States and the emissions reduction profile that we have been able to experience in the United States, it has resulted in, in some cases, in emissions increases by other countries. … I have mentioned numerous times in this committee, and I am going to say it every single time: For every one ton of emissions we have had in the United States, China has increased their emissions by four tons. This is not a global win. It is not (Solving the climate crisis: Reducing industrial emissions through U.S. innovation, 2019, p. 4).

Indeed, the thematic consistencies among these statements between hearings should not be overlooked. While opening statements from the Chair and Ranking Member were unique in their

substance and relevant to the hearing topic at hand, they also seemed to indicate more general forms of expression with which Castor and Graves sought to be affiliated. For the example above, this seemed to include forms of social or environmental justice for Chair Castor and technological promise and/or emissions reductions for Ranking Member Graves. As I discuss further below, these themes (and others noted above) seemed to percolate at points throughout each hearing during the question-and-answer periods between committee members and witnesses.

Question-and-answer exchanges. Like opening statements, question-and-answer discussions provide opportunities for dual uses to occur and various meanings to emerge. On the one hand, committee members could use this time to ask witnesses substantive questions about the topic under consideration. On the other hand, committee members could phrase knowledge claims as questions to (un)suspecting witnesses or advance claims without the intent of eliciting any responses at all. The former form of questioning seemed most frequently invoked during the hearing held on September 26 concerning renewable energy technologies. And the latter form of questioning seemed most prevalent during the hearing held on September 18 that featured youth climate activists and a broad array of congressional members from the Select Committee and Foreign Affairs Committee. This may not necessarily be surprising given the inherent technical complexity associated with renewable technologies and the political tensions members could have ascribed (more or less) to youth climate activists. Additionally, distinctions in the uses of question-and-answer periods seemed to be associated with the themes that emerged throughout these discussions. Substantive questioning that occurred on September 26 seemed associated with broader themes of technological promise and emissions reductions; whereas questioning on September 18 encompassed themes of social or environmental justice and political conflict or

unity. One notable example of political conflict or unity I encountered was an observational statement made by Ranking Member Graves after the witnesses stated their testimonies during the September 18 hearing (featuring youth climate activists). Here, Graves addresses points of (dis)agreement with each of the witnesses, and particularly Greta Thunberg, from which he calls the hearing (and some policy proposals from Democrats) a charade:

> … Ms. Thunberg, you said let's unite behind the science. Could not agree with you more. Let's unite behind the science. And I think we actually need more science, not less. Mr. Backer, you said we need to stop this partisan fighting and actually work together to yield solutions that make sense. So let me say it again. You have folks that proposed this Green New Deal, yet when it is brought up for a vote, nobody votes for it. No one. You have efforts like last week to stop energy production, yet you have letters going out saying, hey, we want you to produce more oil in Middle Eastern countries and other nations that do not share American values and that have dirtier energy, that have higher emissions than in the United States. This whole thing is a charade. When you actually look at the science, Ms. Thunberg, when you look at the facts, the facts are it was not Waxman-Markey legislation here that was designed to require emissions reduction that yielded the United States leading the world in emissions reduction. It was actually folks doing the right thing, stepping in and actually reducing emissions through innovation, through energy efficiency, through conservation, to where we are leading the world. … (Voices leading the next generation on the global climate crisis, 2019, pp. 53-54).

Here, Ranking Member Graves references a letter he discussed during his opening statement that advocates for increased oil production from members of the Organization of Petroleum Exporting Countries (OPEC), which was signed by Democratic leaders in the House and Senate and was included in the hearing record at the request of the Ranking Member (see Voices leading the next generation on the global climate crisis, 2019, pp. 8-9). Graves uses this letter to essentially claim contradictions in the actions of the very party Thunberg and other activists sought to affect for new climate-related policies. And while the Ranking Member does indeed stress the idea of emissions reductions towards the end of this statement, I found it most aligned with what I would consider to be political conflict rather than discourses of emissions reductions.

Explicit discourses of emissions reductions during the question-and-answer period of the September 18 hearing seemed somewhat more benign than the statement reviewed above. One notable example towards this end was another interaction between Ranking Member Graves and Greta Thunberg, which involved rhetorical questions from Graves and use of metaphor to demonstrate concern for pollution from other countries, followed by claims of broad emissions reduction in the United States:

> Ranking Member Graves:
> Ms. Thunberg, let me ask you a question. If you were sailing across the ocean and picking up trash along the way, and every one piece of trash that you pick up there is a boat right next to you dumping out five pieces, how would that make you feel?
>
> Thunberg:
> First of all, we are going so fast, we would not be able to pick up any trash.
>
> Ranking Member Graves:
> All right. Well, if you were a slow sailor like me, how would that make you feel?
>
> Thunberg:
> Well, first of all, if you use that logic, then I am also dumping a lot of trash in the ocean. And then I would stop dumping my trash in the ocean and tell the other boat to stop dumping their trash in the ocean as well.
>
> Ranking Member Graves:
> And that is the important point here. I think that what we need to be doing is we need to be focusing on the countries that are dumping trash in the ocean. Of course, that is a metaphor. The fact that China is—here we are talking about reducing emissions, yet China, under the Paris Accords, are going to be increasing their emissions by nearly 50 percent, 5 gigatons annually. So while in the United States we need to continue investing in innovative solutions and exploring clean energy technologies, it makes no sense for us to be doing it if we are simply watching for increases in China (Voices leading the next generation on the global climate crisis, 2019, p. 54).

In this interaction, Ranking Member Graves recites his oft-mentioned figures regarding the comparative emissions profiles between the United States and China. He also engages Thunberg using a simplified metaphor of dumping trash in the ocean to draw equivalence to the

geopolitical context of global emissions profiles. In turn, Graves's argument is clear, and his performance is situated in the theme that encompasses such discourses of emissions reductions.

Themes of social or environmental justice were also salient throughout the September 18 hearing, which may not be surprising given the topic at hand and the witnesses who testified. Two interactions are notable in this regard: One involves an exchange between the witnesses and Chair Castor, while another involves an interaction between the witnesses and Foreign Affairs Committee member Rep. Bill Keating (D-MA) (who, I should note, is Chair of the subcommittee on Europe, Eurasia, and the Environment, which hosted the joint hearing on September 18). The interaction involving Chair Castor included a question she posed to the witnesses regarding their reactions to the emissions profile of the U.S. compared to other countries across the globe—seemingly in reaction to the frequent arguments of relative emissions reductions offered by Ranking Member Graves. In part, she stated:

> … [D]espite recent emissions reductions, the United States is currently the second highest emitting country in the world annually. And although we rank No. 2 now, the United States is responsible for the most carbon pollution accumulated in the atmosphere. Some people say that the United States should not dramatically reduce our emissions because China and other countries are not doing enough. I would like to have your view on that and have each of the witnesses comment on that briefly (Voices leading the next generation on the global climate crisis, 2019, p. 55).

While witnesses Benji Backer and Vic Barrett essentially agreed with the Chair and the need to reduce emissions in the U.S., activist Jamie Margolin responded in the form of a question to all committee members by asking if they could feel confident in the future they had taken all possible actions to reduce emissions and the impending issues caused by them. Specifically, Margolin stated:

> I have a question. When your children ask you, "Did you do absolutely everything in your power to stop the climate crisis?"… can you really look them in the eye and say, "No, sorry, I could not do anything because that country over there did not do anything, so if they are not going to do it, then I am not"? That is shameful, and that is cowardly,

> and there is no excuse to not take action, to not improve as much as we can in the United States. And how can we call ourselves the city on a hill or be an example for the world if we are going to be [a] coward and hide behind waiting for other people, saying that, "I am not going to do this because they did not"? I want you to think about this is all about being able to look your children in the eye and say, "I did absolutely everything I could for you. I know that we are up against a lot of pressure. I know that the time is running out, but, honey," however you call your kids, "I did everything I could" (Voices leading the next generation on the global climate crisis, 2019, pp. 55-56).

By invoking a scenario where members interact with their family (and specifically, their children) at a future point in time, Margolin seems to suggest the possibility of social injustice for future generations should actions or policies to reduce emissions fail to be implemented. This expression of injustice became even more apparent during an interaction between Margolin and subcommittee Chair Keating, who asked the witnesses to indicate the types of fear and anxiety they felt as a result of current or future climate change impacts (which, as Keating noted, was expressed in the witnesses' testimonies). In response, Margolin reported experiences with anxiety and stress due to "grow[ing] up in a world full of 'ifs'" and "looming uncertainty" that collectively resulted in "a weird form of nihilism" (Voices leading the next generation on the global climate crisis, 2019, p. 52). Most striking were Margolin's comments on the seeming injustice of contributors to climate issues, who Margolin described in rather visual terms:

> But right now, it is, some members of government and some corporations are actively pointing a gun to children's futures and actively making it worse, actively going out of their way to support corporations and poison us and destroy our future (Voices leading the next generation on the global climate crisis, 2019, pp. 52-53).

Themes of technological promise and emissions reductions during the September 26 hearing were notably distinct from the discourses of conflict and justice that emerged on September 18. As noted earlier, lines of questioning were often specific to various renewable energy technologies that included occasional performances of technical speak through which some committee members seemed to display their knowledge of complex systems during

question-and-answer discussions. One example in particular includes a discussion between Rep. Casten and witness David Gardiner, where Casten inquired about the "marginal fuel use" of two distinct power generation systems (i.e., combined heat and power, waste heat to power). In the question, Casten recalls his experience as a consultant with related technologies through which he also seems to demonstrate his existing technical knowledge of the issue at hand:

> You [to Gardiner] talked about combining heat and power versus waste heat to power. In the old days we called them bottoming and topping cycles. Terms change, it is the same idea. When you build a waste heat to power project on the top of an industrial smoke stack or elsewhere, what is the marginal fuel use? (Solving the climate crisis: Reducing industrial emissions through U.S. innovation, 2019, p. 50)

While this question in isolation here may seem more or less technical depending on the background of the reader, it seemed more technical than not considering the context of the hearing and the audience for which it was held (i.e., Select Committee members and the public). Themes more closely related to those of technological promise or emissions reductions (similar to those I encountered in public-facing materials) were also quite salient throughout the meeting. When relevant, some members seemed to discuss renewable energy initiatives in their district and the promise of such programs to reduce emissions or capture carbon in the years ahead. For example, Rep. Bonamici (D-OR) mentioned efforts of the industrial sector to "decarbonize" production processes by using cross-laminated timber to build structures instead of commonly used materials such as steel or concrete:

> Cross-laminated timber [CLT], when harvested using sustainable forest practices, can sequester and store massive amounts of carbon dioxide. First Tech Federal Credit Union in Hillsboro, Oregon, recently built one of the largest CLT structures in the country. There are still questions about the lifecycle assessments of CLT, but the material raises the possibility of storing massive amounts of carbon in buildings for decades, perhaps in perpetuity (Solving the climate crisis: Reducing industrial emissions through U.S. innovation, 2019, p. 42).

Rep. Armstrong (R-ND) discussed an initiative to reduce the emissions of coal power plants in his district that has received nearly $10 million in funding from the Department of Energy. He further described the technology as innovative, necessary and effective for reducing carbon output, followed by a question for witness Brad Crabtree on the market viability for deployment in the future: "While these initiatives show that carbon capture utilization and storage is technically viable, how do we make these technologies economically and commercially viable?" (Solving the climate crisis: Reducing industrial emissions through U.S. innovation, 2019, p. 55). Finally, Rep. Neguse (D-CO) mentioned an emerging company in his district that was "engaged in some really cutting-edge technology" that had "developed a sterling engine that converts waste heat to electricity to create emission-free power" (Solving the climate crisis: Reducing industrial emissions through U.S. innovation, 2019, p. 53).

Overall, the two hearings I have compared here provide insight into the range of performances and forms of expressions that could emerge in these settings. While the hearings on September 18 and September 26 were close in time, they involved witnesses and topics that diverged in their substance and forms of performance. On the one hand, the hearing on September 18 seemed to encompass some of the themes of emotional credibility, conflict, and emissions reductions that were similar to themes of credibility expressions that I encountered in public-facing materials. On the other hand, the hearing from September 26 involved discussions of energy technologies that were, at times, relatively technical given the context of the discussion in addition to focus on the promise of technologies to reduce emissions in the future. Stories of members' districts and the technology initiatives within them seemed to provide compelling evidence on the promise of technology to further reduce emissions, similar to many of the discourses of technological promise I encountered in the public-facing materials examined

earlier in this chapter. While the two hearings compared here only provide a small snapshot of the myriad performances that occurred throughout the 115th and 116th Congresses, they seem to reinforce the prevalence of themes I encountered across the various forms of materials I considered above.

Chapter Summary

In this chapter, I examined how members of the Select Committee and CSC expressed credibility or expertise in materials containing claims of climate change risk between the 115th and 116th congressional sessions. I took an ethnographic approach to the analysis of public-facing materials across social media platforms, websites, and the documents hosted on such websites—interpreting these materials as visual or textual spaces and performative extensions of members affiliated with the Select Committee and CSC. I combined this analysis with an ethnographic comparison of two distinct Select Committee hearings I attended during the fall of 2019 in order to compare and contrast forms of performance against the themes I encountered in public-facing materials. As summarized in Table 6.2, I discovered five major themes of credibility performance through my analysis of public-facing materials hosted on official websites (and social media accounts) affiliated with the Select Committee and CSC. These themes were not entirely consistent across forms of material and partisan boundaries. For example, Democrats seemed more inclined to express credibility in claims of risk that were accompanied by scientific or technical forms of evidence (that were often visual in presentation) and distributed through social media channels, whereas Republicans seemed more inclined to express credibility in terms of authoritative claims about emerging renewable energy technologies or trends of domestic emissions reductions through various channels (not just social media). In turn, the themes of credibility expressions I discovered throughout the data collection

process and discussed in this chapter seem to suggest some overarching patterns of performance that may be demarcated along partisan boundaries. To note, Democrats seem more willing to engage in discussions of risk in general, whereas Republicans seem prone to discuss climate issues in terms of technological developments (to ameliorate climate risk) or the role of community resiliency to withstand extreme weather events. Additionally, Democrats seem more willing than Republicans to engage dynamic forms of performance that encompass (a) imagery that could evoke emotional responses from the audience, (b) accounts of personal experiences with climate phenomena in places of past/present/future risks, and (c) engagements with the audience that are styled as interpersonal interactions. While the reason for this performative discrepancy is not entirely clear, I suspect it is due to the professional norms with which members are affiliated. In other words, the acceptability of certain performative styles may be a function of one's partisan affiliation.

Table 6.2 Summary of Findings for Expressions of Credibility in Knowledge Claims of Risk: Research Question Five

Research Question	Summary of Findings

RQ5: How do Select Committee and CSC members express credibility and expertise in messages that contain knowledge claims about climate change risks, and do such expressions diverge across channels and partisan boundaries?	• Expressions of credibility in knowledge claims of risk emerged in five major themes across materials hosted on official websites (such as letters and press releases) in addition to social media channels (i.e., Instagram, Facebook, and Twitter) affiliated with the Select Committee and CSC. Major themes and sub-themes consist of the following:
	  o **Scientific or empirical credibility**: Encompasses the explicit use of evidence to support claims about climate change risk or the emergence of technologies to reduce chances of harm. Expressions encompassed three sub-themes that include (a) claims of climate risk, (b) claims of emissions reductions, and (c) claims of technological promise to reduce climate risks and other issues.
	  ▪ **Channels**: Democrats' expressions of scientific or empirical credibility were mostly concentrated on social media platforms, particularly Facebook and Twitter. The few materials from Republicans were mostly concentrated on Twitter.
	  ▪ **Partisan boundaries**: Most frequently occurred among materials from Democrats compared to those from Republicans. Additionally, expressions from Democrats focused entirely on claims of climate risk concerning scientific or empirical evidence; whereas the few materials from Republicans under this theme focused on claims of emissions reductions or the promise of technologies to diminish climate-related issues.
	  o **Authoritative credibility**: Includes claims that rely on the presumed legitimacy of scientific or legislative institutions and the individuals within them. Rather than cite scientific or technical reports to support claims of risk or emissions reductions, authoritative expressions use dramatic devices to either reinforce the presumed legitimacy of the institution/individual at hand, or, to advance claims of truth without accompanying scientific or empirical evidence. Expressions of authoritative credibility involved four sub-themes that include (a) declarations of risk, (b) discourses of innovation and emissions reduction, (c) the role of conservation and resiliency, and (d) political conflict or unity.
	  ▪ **Channels**: All channel types were consistently engaged across the four themes of authority. Yet, Republicans were slightly more inclined to advance authoritative claims of risk through materials hosted on official websites (such as articles, press releases, op-eds, or newsletters), while Democrats were more inclined to advance such claims through social media platforms.
	  ▪ **Partisan boundaries**: Frequently occurred among both Republicans and Democrats, although Republicans seemed more inclined to engage in discourses of innovation and emissions reductions, while Democrats seemed more likely to advance authoritative claims of climate risk.

Table 6.2 (Continued)

Research Question	Summary of Findings
RQ5: How do Select Committee and CSC members express credibility and expertise in messages that contain knowledge claims about climate change risks, and do such expressions diverge across channels and partisan boundaries?	○ **Emotional Credibility**: Involves expressions of claims that focus on some form of imagery or rhetoric from which affect may be evoked in the viewer. Rather than substantiate claims by use of scientific/technical evidence or associations with authority, performances of emotional credibility associated claims with the (im)morality or (un)fairness of climate-related issues, risks, potential solutions, and/or impacted populations. Expressions of emotional credibility emerged as three sub-themes that include (a) social or environmental justice, (b) portrayals of public demonstrations, and (c) evocative imagery. ▪ **Channels**: Expressions were concentrated primarily on Twitter. ▪ **Partisan boundaries**: Expressions were entirely limited to Democrats—i.e., I encountered no public-facing materials from Republicans that seemed to contain this theme. ○ **Lived experience credibility**: Encompasses expressions of claims that are substantiated by references to (or visualizations of) personal experiences with climate risks or impacts. Such personal experiences encompassed those of the member, their constituents, or other individuals from the public at large. ▪ **Channels**: Centered primarily around social media posts (especially Twitter) that involved both textual descriptions and visual depictions of climate issues in members' states and other regions of the U.S. ▪ **Partisan boundaries**: Almost entirely limited to Democrats. ○ **Relational credibility**: Involves expressions of claims where members seem to interact directly with their constituents or viewers. ▪ **Channels**: This theme was most prevalent in posts on Facebook, Instagram, or Twitter. Social media platforms seemed to provide affordances well-suited for expressions that involved interpersonal interactions with the audience (such as the use of video and imagery). ▪ **Partisan boundaries**: Most prevalent among Democrats. • In addition to my analysis of public-facing materials, I compared two hearings I attended during the data collection process—one held on September 18 that featured youth climate activists, and another on September 26 that examined renewable energy technologies with expert witnesses. The September 18 hearing seemed to encompass some of the themes of emotional credibility, conflict, and emissions reductions that were similar to themes of credibility expressions that I encountered in public-facing materials. On the other hand, the hearing from September 26 involved discussions of energy technologies that were, at times, relatively technical given the context of the discussion in addition to focus on the promise of technologies to reduce emissions in the future. Stories of members' districts and the technology initiatives within them seemed to provide compelling evidence on the promise of technology to further reduce emissions, similar to many of the discourses of technological promise I encountered in the public-facing materials examined earlier in this chapter.

CHAPTER 7

PATTERNS OF LEARNING ACROSS DEMOCRATS AND REPUBLICANS

Processes of perception, negotiation, and performance of credibility within claims of climate risk do not occur in isolation from each other on Capitol Hill. Rather, they are collectively enmeshed in a particular place of learning that involves both the consumption and production of knowledge claims about climate change risks. While the preceding chapters have offered some insight into the strategies and efforts by which information is collected, produced, and performed, they have not considered these findings collectively in terms of the parameters of learning they may indicate for the cultural context of Capitol Hill, or, whether such parameters of learning might be more or less distinct across the tacit professional norms (i.e., partisan affiliation in particular) that seem to guide the decisions of many with whom I spoke. In other words, one may ask based on the preceding analyses: what might these phenomena say about patterns of learning on Capitol Hill, and might they be distinct across partisan boundaries?

As indicated in the title of this dissertation, one of my chief concerns is the extent to which the cultural context of Capitol Hill inheres certain modes of behavior and knowledge-making that may constitute a civic epistemology—particularly one that may transcend (or is embedded within) the tacit professional norms of partisan adherence that seem related to the substance of knowledge claims and performances of credibility. This diverges slightly from previous case studies of knowledge-making that have generally examined patterns of learning across nations following unique disaster events (Jasanoff, 2005, 2011), to one that considers a specific site of learning between two distinct partisan belief systems. To do this, I draw specifically from Jasanoff's (2005) comparison of learning across disparate national contexts and the general dimensions of civic epistemology that arise in each case. For Jasanoff (2005), these

include processes by which (a) accountability is ensured, (b) objectivity is established, (c) parameters of expertise are constituted, and (d) knowledge is publicly demonstrated (and, in turn, legitimized). Given my focus on patterns of learning at the sub-national level within the institution of Congress, I seek not to question Jasanoff's (2005) dimensions of civic epistemology or alter the constructs of her framework; rather, I apply Jasanoff's (2005) framework to the data I have collected and examined in the preceding chapters in order to assess the extent of learning (in)consistencies between Democrats and Republicans affiliated with the Select Committee and CSC. Taking this approach provides an organizing framework from which to discuss the concept of civic epistemology that may otherwise seem esoteric or operationally obscure, and most importantly, it provides a baseline of learning patterns that have emerged at national levels from which this sub-national test across partisan lines may be considered.

In the discussion that follows, I group processes of perception, negotiation, and performance into the four dimensions of civic epistemology noted above and discuss similarities or differences of patterns along partisan boundaries. In turn, I find considerable overlap between Democrats and Republicans concerning the processes by which information source credibility is assessed and negotiated. On the other hand, I find considerable points of distinction in the processes and performances through which knowledge claims of climate risk are demonstrated and legitimized for the public. In this light, similarities and differences in patterns of learning seem most clearly demarcated along the lines of public visibility rather than partisan affiliation. Thus, differences in patterns of learning seem most salient when such processes are open to public view, and conversely, most similar when concealed behind closed doors. Given the political weight associated with public performances and members' viability in office, I consider

this distinction far more deliberate than coincidental, and at the very least, evidence of a broader culture of knowledge-making on Capitol Hill that transcends partisan affiliations.

Research Question Six:
Points of Similarity and Difference in the Processes by which Democratic and Republican Select Committee and CSC Staffers/Members Assess Information Sources, Negotiate Knowledge Claims, and Express Credibility in Knowledge Claims of Climate Change Risk

The dimensions of civic epistemology I engage throughout this analysis are derived primarily from Jasanoff's (2005) comparison of three national-level forms of knowledge-making across tragic events that occurred in India, Britain, and the United States. These events include the Bhopal gas leak disaster of 1984, the spread of bovine spongiform encephalopathy (BSE, commonly known as "mad cow" disease) in the 1990s (Britain), and the terrorist attacks of September 11, 2001, on the World Trade Center towers in New York City. For each case, the governments, publics, and other parties involved used mechanisms of collective learning to form understandings of these complex events that involved failures at the individual and collective levels. While each nation seemed to exude distinct processes of sense-making—such as the use of a judicial inquiry in Britain compared to a bipartisan commission in the United States—these processes were similar in their functions across contexts. That is, the sense-making parties involved in each case developed processes to ensure (a) the application of *accountability* for responsible individuals/organizations, (b) the sense of *objectivity* through procedures of sense-making, (c) the parameters in which certain individuals/organizations could be viewed as *experts*, and (d) the *demonstration* of knowledge from which to legitimize findings.

Jasanoff's (2005) case study of sense-making across India, Britain, and the U.S. did not necessarily advance strict parameters for the dimensions identified above. Rather, each case presented notably unique circumstances from which epistemological dimensions served more as a thread of functional similarity between contexts. Examples of these similarities in Jasanoff's

(2005) case study are detailed in Table 7.1, which summarize (and often quote directly) Jasanoff's (2005) justifications for each dimension across India, Britain and the U.S.[20] Based off Jasanoff's (2005) analysis and the summaries displayed in Table 7.1, I applied the gist of each dimension to the data I discussed throughout the preceding chapters in order to understand the parameters of sense-making on Capitol Hill and possible differences across political boundaries. While this was indeed an interpretive exercise, I found Jasanoff's (2005) dimensions both exhaustive and appropriate for the data at hand. Below, I discuss each dimension in terms of its application to Capitol Hill through my interviews with staffers, observations of the research site, or analysis of credibility expressions in public-facing materials. A summary of this discussion may be found at the conclusion of this chapter.

[20] Jasanoff (2005) produced a similar table in her case study of sense-making across India, Britain, and the United States; however, I found it lacking the context needed to reproduce it here without additional explanation. In turn, Table 7.1 is similar in form to that from Jasanoff (2005), although here I provide additional context and concise explanations to illustrate the gist of each dimension.

Table 7.1 Dimensions of Civic Epistemology as Discussed in Jasanoff (2005)

	India Bhopal gas leak of 1984	Britain Spread of BSE in the 90s	United States September 11 attacks
Accountability	Government officials and victims "were sceptical about each other's approaches to fact-finding and this mutual suspicion never resolved itself" (p. 228).	Authorities developed an "uncontested version of the facts" that nonetheless held some departments responsible and exonerated others (p. 228).	Accountability for the 9/11 Commission "was more a matter of following the appropriate analytic routines so as to ascertain objective facts" (p. 228).
Objectivity	Various actors "claimed primacy" of their accounts of the incident—the official account was from the standpoint of government (p. 229)	Authorities constructed an uncontroversial official account of BSE transmission that reflected a shared "communal vision" between the public, scientists, and government (p. 229).	The 9/11 Commission, similar to Britain, "forged a common position, but did so by sticking close to a dry reconstruction of the events and carefully excluding areas of possible partisan contention" (p. 229).
Expertise	No one could arrive at a "common understanding" of what occurred or to whom or what should be assigned blame: "Expertise remained irretrievably tied to the parties' institutional positions; valid knowledge, then … was an extension of politics" (p. 230).	Expertise was "acquired through experience, with the expert's standing deriving not only from superior technical abilities but also from a proven record of public service" (p. 230).	Expertise was restricted to the 9/11 Commission as a body of authority from which to cultivate a "preventative imagination" for similar events in the future (p. 230).
Forms of public demonstration (to legitimize particular epistemologies)	Formal legal procedures.	Reliance on studies to discuss BSE transmission.	Reliance on the 9/11 Commission that documented breakdowns in social and technological order.

Note. All quotes in the table are from Jasanoff (2005). Additionally, I recognize that Jasanoff (2005) created a similar table in the work I cite here; however, this table is meant to provide additional context and expound on the dimensions of civic epistemology that are not entirely addressed in the table in Jasanoff's (2005) work.

Accountability

On Capitol Hill, accountability in the sense-making process seems to manifest among legislative staffers who are involved in the interpretation and production of knowledge claims about climate change risks. On the one hand, these staffers in particular are embedded in office hierarchies that place considerable responsibility on their expertise to determine the credibility and relevance of information sources. On the other hand, legislative staffers are embedded in social relations with individuals who work within and outside of the confines of their office and Capitol Hill *writ large* who may serve as information sources, *or*, recipients of otherwise inside knowledge. The former arrangement is based on structural considerations of office organization that places expendable individuals in positions as legislative specialists, while the latter arrangement involves exchange-based relationships that function off mutual trust in the parties involved. While both forms of interaction are fundamentally different, they each pose particular responsibilities and expectations that involve forms of accountability in the knowledge-making process.

Structural considerations. As noted earlier in Chapter 3—and specifically Tables 3.1 and 3.2—staff hierarchies of the Select Committee and CSC are heterogeneous in terms of their organizational complexions and staff sizes; however, they are consistent in terms of the presence of legislative staffers who focus on specific portfolios that cover climate-related issues. In other words, regardless of the particular types of positions in an office or the number of staffers at hand, each office I considered in this study contained at least one staffer who focused on issues related to the environment or climate change. This structural feature of congressional and committee offices was consistent for both Democrats and Republicans and poses implications for

the degrees of accountability associated with the materials legislative staffers are expected to produce.

Legislative specialists who focus on environmental issues are often the only individuals who decide the credibility of sources and the information to be used from them. Yet, legislative staffers are generally situated as subordinate to chiefs of staff (and other senior positions) who are not involved in the nuance of climate-related issues but can hire or dismiss as they see fit. In turn, this ease of potential expendability amid issue expertise places considerable amounts of accountability on legislative staffers. Since they are generally the only individuals who determine the veracity of sources or claims, they too are the singular individuals who become responsible for any politically unfavorable issues or inaccuracies that may arise from the materials or claims they help produce (or singularly produce themselves). Not only are these structural considerations and expectations entirely consistent across Democratic and Republican staffs, but they seem to produce considerable levels of accountability with which legislative staffers must work. Indeed, these structural considerations may seem otherwise arbitrary at first glance when it comes to patterns of learning on Capitol Hill, but they do create an environment in which primary knowledge-makers (i.e., legislative staffers) are expected to perform and are held accountable for the sources they select and the claims they produce.

Specialist networks. While legislative staffers are accountable for the veracity of sources and claims they help produce, they too are responsible for maintaining the channels of information from which understandings of complex issues may emerge. As noted in Chapters 4 and 5, staffers are situated in an environment that provides little time to become deeply familiar with issues that are often complex and nuanced. In turn, they frequently rely on sources they consider trustworthy and reliable in order to provide clarification about the issues at hand. These

sources may include written reports from established organizations (such as CRS) but often involve sources that afford interpersonal interactions such as other legislative staffers (within or outside of one's office), key stakeholders, or expert lobbyists.

The collection of specialists with whom staffers may consult encompasses one's specialist network. Indeed, participation in one's network is based entirely on the discretion of the specialists at hand, and from what I observed, this discretion seems closely tied to the value of information received from the network. In other words, specialist networks comprise of exchange-based relationships in which all participants seem to expect some form of return on their investment of time. For congressional staffers within and across offices—and indeed across political parties—specialist networks seem to emerge through collaboration on legislation, letters, or other public-facing materials. Through these interactions, staffers seem to both provide and receive information in the collaborative process, which occurs repeatedly throughout the collaboration and sets a baseline for potential information exchanges in the future. For interactions between congressional staffers and external sources (such as key stakeholder groups, NGOs, or expert lobbyists), specialist networks also seem to emerge through the collaborative process, but the dynamics of information exchange seem somewhat different than interactions between congressional staffers. First, external sources (i.e., expert lobbyists in particular) hold considerable levels of familiarity with complex issues that staffers generally do not have. This seems to impose an imbalance on the seemingly high value of lobbyists' deep expertise compared to staffers' relatively naïve understandings of the same complex issues. Second, to reciprocate some form of value in interactions between staffers and expert lobbyists, staffers seem inclined to provide insight in the form of insider knowledge that expert lobbyists do not have. The value of such knowledge should not be underestimated: Indeed, knowledge of

forthcoming policy developments unknown to the public could provide lobbyists the ability to provide invaluable advice to their clients, or at the very least, provide additional time to develop strategic plans to cope with forthcoming legislation. In turn, specialist networks may vary in their complexion, but they serve as sites of information exchange, learning, and collaboration between staffers on Capitol Hill and external experts beyond the halls of Congress.

Despite differences in network complexions and types of exchanges between staffers or external sources, these relationships seem based on the assumption that the information exchanged is efficacious in its application to one's goal or its reflection of developments on Capitol Hill. In other words, specialist networks are sites of learning and information exchange as much as they are sites in which trust is built through such interactions. While legislative staffers may rely on others to help interpret complex issues and develop knowledge claims about them, the networks in which these understandings emerge are not as concrete as the structural networks of congressional offices in which legislative staffers are situated. One could recall the staffer I cited in Chapter 4 who kept a "shit list" of other staffers (i.e., potential participants in this staffer's specialist network) who allegedly provided slightly misleading information that would have resulted in politically compromising circumstances (which in this case involved co-sponsoring a bill based on misleading information) (p. 123). In this instance, the perception of misleading information that resulted from these exchanges (and the subsequent "shit list" that emerged to keep track of these individuals) seemed to dissolve any sense of trustworthiness on which future interactions may have occurred, and in turn, full participation of these individuals in the staffer's specialist network.

The necessary sense of trust emplaced in the efficacy of information exchanged and produced in specialist network interactions makes legislative staffers primarily accountable for

the individuals they choose to enroll in or displace from their own specialist networks. Contrary to the structural forms of accountability within congressional offices that are largely attributed to rigid hierarchies, heterogeneous job functions, and homogeneous partisan affiliations, specialist networks ascribe accountability to legislative staffers through the necessary senses of trust and efficacy they must instill in participants to maintain stability of the network and flows of valuable information. In other words, legislative staffers are solely accountable for the networks they build and maintain, and in turn, the value of materials they develop in their own congressional offices.

Objectivity

Capitol Hill seems to inhere two primary mechanisms through which objectivity is established in the sense-making process. The first involves the use of an independent organization in the legislative branch dedicated entirely towards the development of "objective" or value-free research reports (i.e., the Congressional Research Service), while the second involves norms of behavior by which staffers seek to understand the political parameters of scientific, technical or complex issues, in addition to developing senses for underlying political motivations within the information materials/individuals they consult. Staffers' efforts to understand the political parameters in which scientific/technical issues might be discussed seem attributed primarily to the professional expectations of legislative specialists in congressional offices. On the other hand, staffers' efforts to detect underlying political motivations or arguments within the materials or individuals they consult seem attributed to a culture of skepticism and ennui that associates all forms of information with some sort of "angle." While the CRS and staffers' individual actions are structurally distinct, they comprise of two salient groups through which objectivity is a tacit goal in the sense-making process.

Institutional mechanisms. The construction of objectivity on Capitol Hill is not entirely limited to the decisions of legislative staffers. Rather, this process is embedded in the operating ethos of the Congressional Research Service and their explicit aim to produce reports independent of any underlying partisan tensions affiliated with the topic at hand. On the official web page of the CRS (which is hosted on the Library of Congress's website), the organization's assurance of objectivity is detailed under an "about" tab that lists (among other things) the overarching values of the CRS. On issues of potential bias, the page states:

> We maintain an outstanding reputation for objective and nonpartisan analysis. Our experts are vigilant in evaluating issues without bias. A multi-layered review process also helps ensure that CRS products present issues and analysis in a manner that is fair, considered and reliable (Congressional Research Service, 2020).

The webpage further expounds on issues of potential bias that could emerge during the research process and steps analysts take to essentially prove their adherence to the CRS's ethos of objectivity:

> Analysts demonstrate rigorous research methodologies, free of built-in bias. They present, explain and justify any critical assumptions; investigate and recheck data anomalies; use primary resources whenever available; double-check all statements of fact; and document and vet all sources. This assures Members, as they engage in debate, that the analysis they rely on is as accurate as it is current (Congressional Research Service, 2020).

As noted in previous chapters, CRS is explicitly affiliated with Congress as the research arm of the legislative branch. In turn, it is mandated by law to produce reports that are indeed "free" from bias. While the organizational ethos and legal mandate to produce objective reports may result in thorough analyses, these goals also serve as forms of reassurance through which staffers may ascribe credibility to CRS's products, or at the very least, demonstrate the efforts of Congress to sanction formal sense-making processes to an official organization in the legislative branch. Considered together, the CRS and the legal infrastructure that guides its knowledge-

making processes are explicit in their aim to construct understandings under the guise of objectivity.

Professional expectations. Legislative staffers are expected to form robust understandings of complex issues within constrained periods of time. By "robust," I mean understandings that are scientific/technical, legislative, or rhetorical/political. First, environmental issues—such as those related to renewable energy technologies—may involve complex technical developments or scientific findings that must be interpreted and considered in the policymaking process. Second, other environmental issues may not necessarily require interpretations of complex technologies as much as they require thorough understandings of complex environmental law (such as that under the National Environmental Policy Act or NEPA). Third, environmental issues and proposals must be understood within the context of broader rhetorical or political parameters in which discourses and debates have occurred in the past or will likely occur in the future. In turn, legislative staffers seem engaged more as scientific/social investigators during the sense-making process from which broad or "objective" core understandings may emerge.

In effect, legislative specialists are expected to serve as scientific/social investigators. In turn, they seem inclined to consult myriad sources to develop understandings of issues. As noted in Chapter 4, patterns of tendencies throughout this sense-making process were considerably similar for Democratic and Republican staffers. First, staffers in general sought to consult sources they considered long-established or familiar (i.e., credible) to gain clarification on issues of science, legislation, or the political parameters in which discourses had occurred (or could occur in the future). Second, both Democratic and Republican staffers expressed their preference to consult credible but politically-affiliated sources on both sides of the aisle to assess how

rhetorics of issues translated across the political spectrum. For understandings of rhetoric and politics specifically, staffers seem particularly interested in sources that could offer insight into what the "other side" argues about issues. Not only could this provide insight for one's boss, but also familiarize staffers with the types of language others use to describe the issue at hand. One could recall the staffer I cited in Chapter 4 who noted their preference to consult politically-affiliated sources to sense the most appropriate language to discuss issues with staffers who worked in "far left" or "far right" offices (p. 133). In turn, just as legislative staffers seem uniformly obligated to develop objective understandings of various climate issues, they too seem engaged in overlapping processes by which they construct such senses of objectivity.

Processes of understanding various types of issues towards the end of fulfilling professional obligations involve the use of sources staffers generally consider credible. Most notable in this process are the forms of distinct credibility staffers seem to ascribe to sources of scientific, technical, or legislative complexity compared to sources from which political and rhetorical parameters may be derived. On the one hand, staffers generally seem to ascribe credibility to sources they consider established and familiar. On the other hand, staffers also tend to consult sources they consider "biased" to assess the rhetorical or political parameters of various climate-related issues. In turn, staffers seem to engage a sort of cognitive flexibility concerning the types of credibility they associate with information sources. While politically-affiliated sources may produce "biased" reports about climate-related issues, they also seem to serve as reliable indicators of political discourses around those issues. This was not an area I explicitly discussed with staffers throughout the data collection process, but one topic that emerged through my analysis of the data and during one conversation with a CSC staffer (p. 136). Similar to the processes noted above, this flexible interpretation of credibility and its

application to sources both scientific and political seems consistent among Democratic and Republican staffers, and more generally, a form of sense-making associated with legislative staffers' professional expectations to produce broad "objective" accounts of the issues at hand.

Inherent skepticism. Legislative staffers are situated in environments that seem to foster a broad culture of skepticism towards the veracity of information sources and the extent of "truth" they may offer about issues. For all the legislative staffers I spoke to on Capitol Hill, sources of information—and the claims that come from them—cannot be separated from the underlying interests that may (in)directly affect their work. Much like concerns of funding influences in the fields of science, congressional staffers seem perpetually critical of the influences associated with the information they receive or collect, particularly from non-scientific institutions, or for some, the executive branch. As noted in Chapter 4, some staffers expressed pronounced levels of skepticism towards reports from the executive branch and the broader publication processes that were suspected of blocking the release of reports that would have been politically unfavorable for the Trump administration. On the other hand, some staffers were particularly skeptical of scientific reports on the current and future effects of climate change. While these were staffers affiliated with the Democratic and Republican parties in respective order, they (and others I spoke to) expressed similar concerns about underlying bias and broader applications of skepticism to the forms of information they encountered. This did not diminish staffers' trust in sources they considered established and familiar, but it did act as an interpretive layer through which information was considered.

Trust in sources and the perceived credibility of them seem to be the primary conduits through which information flows on Capitol Hill. Yet, legislative staffers remain situated as scientific/social researchers from which robust understandings must be developed about complex

issues within constrained periods of time. Given the innumerable sources staffers have at their disposal—in addition to the constituency and key stakeholders who may frequently seek to advance claims or discuss ongoing issues—it is reasonable to expect staffers' application of skepticism to the sources they encounter. Most notably, however, is the consistency of this skepticism across Democratic and Republican staffers on Capitol Hill, and in turn, the general tendency of legislative specialists to consider notions of objectivity in such an explicitly political environment. While forms of public demonstration and expressions of public-facing knowledge claims seem "filtered" through or associated with distinct partisan belief systems (as I discuss below), the underlying processes that contribute to these expressions seem to involve forms of sense-making that are fundamentally systematic and apolitical. In this light, staffers' expressions of inherent skepticism and their reception of all materials with "a grain of salt" is but one artifact from a larger culture of understanding through which senses of objectivity are established.

Expertise

Expertise on Capitol Hill seems to involve three forms of process by which individuals act as (or become) expert legislative staffers: The first involves organizational designations that formalize staffers' positions as those involving specialization and focus on climate-related issue portfolios. The second involves the process of source credibility judgments by legislative staffers and the interactions in which staffers engage certain sources that extend well beyond efficient assessments of written materials. And the third form of process involves the act of nesting during negotiations of knowledge claims in which information from the source at hand becomes separated from questions and assessments of source credibility. Considered together, these otherwise distinct attributes and actions seem to collectively encompass the process through which expertise is constituted on Capitol Hill.

My focus here on staffer designations and processes does not discount the credibility staffers may ascribe to reports from the CRS, nor does it ignore the formal legal structures that uphold the CRS as the official research organization of the legislative branch. Rather, CRS is one source (albeit a highly credible one) involved in staffers' sense-making processes and even peripheral to the organizational designations that formalize individuals as legislative staffers (and specialists). In this light, CRS is not necessarily involved in the individual and social processes by which expertise is constituted during the sense-making process aside from its role as a credible source from which staffers may draw.

Specialist designations. Legislative staffers are the designated specialists for the particular issue areas they oversee in each office. While the specific job titles of these specialists seem to vary somewhat across offices and organizations, the affordances associated with the specialist designation imbue legislative staffers with considerable power over the sense-making process. This includes almost autonomous oversight of the sources one selects and the individuals with whom these staffers choose to meet. In turn, the specialist designation seems to make legislative staffers the point-persons from which knowledge claim substance is developed internally and disseminated in public-facing materials. This became especially apparent in Chapter 4 during my discussion of the relationship between credibility judgments and message types for Research Question 4 (p. 154). Here, legislative and non-legislative staffers discussed the central role of legislative specialists in the development of message substance for public-facing materials. For example, one Democratic legislative staffer noted their work with a communications colleague whose messages were "filtered through" the legislative specialist, while one Republican communications staffer noted their workflow that involved frequent check-ins with their legislative specialist colleague to ensure their understandings were aligned.

In both of these discussions, staffers seemed to emphasize the (constructed or realized) importance of the legislative specialist designation and the forms of organizational continuity and professional confidence this seemed to instill in the specialists themselves or the others working with them.

This sort of cultural importance associated with the legislative specialist designation did not only emerge during my discussions with staffers. Rather, this feature of the study context became the core reason why I shifted my sampling focus towards legislative specialists during the latter half of the data collection process. As noted in Chapter 3, my initial intentions in terms of sampling for this project included all congressional staffers—be they staff assistants, press assistants, communications directors, or chiefs of staff, in addition to the legislative assistants who ultimately became the primary focus of this work. At that time, I assumed nearly all staffers in any congressional office would have at least some involvement in developing the substance of claims that would fill the pages of public-facing documents or advise members for their debates on the House floor. This assumption was primarily informed by my previous professional experience on Capitol Hill, which occurred in a leadership office that employed various legislative specialists who frequently discussed issues with other non-legislative staffers (perhaps due, in part, to the reasonably large open-concept office that allowed almost everyone to work in the same room). Indeed, even I—a lowly policy fellow—was brought in to a few of these discussions and meetings that ultimately advised the member or culminated in semi-public documents that were circulated across other congressional offices. Yet, when I began discussing this project with acquaintances in the field and even non-legislative staffers who agreed to participate in this work, I came to find, unexpectedly, significant (and in many cases, total) responsibility for the substance of materials focused on legislative staffers who were donned as

the experts over environmental issues. While, of course, formal training and credentials were elusive among many of the specialists with whom I met, their formal designation seemed to serve as a catalyst through which others could ascribe confidence in the sense-making process.

Source credibility judgments. Expertise is not limited to the mere use of specialist designations. It also includes staffers' responsibility to render source credibility judgments or cultivate senses of source credibility through interpersonal interactions with key stakeholders and expert lobbyists. The burden of this responsibility was especially apparent in my discussions with staffers about the attributes of credible sources in Chapter 4. Here, patterns of perception emerged across Democrats and Republicans in terms of the attributes they considered to be indicators of credibility, and in turn, sources worth listening to. Additionally, patterns of behavior were also similar across partisan lines in terms of the interpersonal interactions through which staffers cultivated senses of credibility with otherwise unknown sources. Through these processes, legislative specialists not only tended to report overlapping characteristics that indicated source credibility (i.e., familiarity and a sense of being long-established in particular) but similar behaviors with external sources and specialist networks through which credibility discussions also occurred. This not only provided insight about the processes of credibility judgments but revealed the fundamental behavioral overlaps that seem to remain consistent across partisan lines.

The power and ability of legislative specialists to determine the credibility of sources do not require them to remain critical of all sources they encounter during the sense-making process. Indeed, just as legislative staffers are expected to engage in processes to determine source credibility, they too are expected to adhere to the broader parameters of credibility judgments that may be an inherent feature of one's office policy and the relationships their

member holds with lobbyists, stakeholders, constituents, or even friends. This became especially apparent in Chapter 4, where some staffers reported explicit aversions to certain sources at the request of their superiors or collaborations with external sources who comprised of the "usual groups" that have worked with the member over extended periods of time (p. 128). In these circumstances, legislative staffers seemed to forgo their power over the credibility assessment process in lieu of the existing preferences and relationships that were inherent to the office environment. Not only did this seem to provide perspective to the select circumstances in which legislative staffers have little say in determining source credibility, but emphasize the considerable degrees of authority these staffers hold in the majority of circumstances where office policies or extant relationships are not involved.

Source credibility judgments as processes through which expertise is constituted also involve interpersonal meetings that I believe deserve additional thought. Just as legislative specialists are the designated experts who determine the credibility of scripted sources, they too are the individuals who generally determine the extent of interpersonal interactions they hold with a given source. As noted in Chapter 4, interpersonal interactions seem to afford otherwise unknown sources the ability to build credibility with staffers through repeated interactions that may require complex cognitive processing and preclude staffers' reliance on efficient credibility judgments (i.e., heuristic processing). While interpersonal interactions may relate to complex forms of processing through which lesser-known sources might build credibility, legislative staffers retain the power over their schedules to hold or avoid these meetings as they see fit. In other words, legislative staffers seem to retain considerable power over the types of sources to which they are exposed. Of course, this may be partly due to the scarcity of available time on Capitol Hill and in light of inevitable exceptions where colleagues (or superiors) might request

the specialist to take meetings with certain individuals or groups. Yet, specialists' degree of control over their time and exposure to sources both scripted and unscripted not only illuminates the potential difficulty of reaching a particular legislative staffer, but the considerable levels of expertise these arrangements may ascribe to these individuals.

Nesting and involvement in the negotiation process. The final form of process by which expertise is constituted on Capitol Hill involves credibility nesting and staffers' concurrent involvement in specialist networks to determine source credibility and the substance of knowledge claims. This process is especially notable given its involvement of individual-level judgments and social negotiations that provide a bridge between socio-psychological and sociological levels of phenomena (as I discuss further in the next chapter). Nesting and involvement in specialist networks seem to occur simultaneously but they are also interrelated during the general negotiation process. First, as noted in Chapter 5, nesting involves the point(s) at which questions of source credibility become subordinate in their priority to the information substance from the source at hand. In what seems to resemble an order of sequence, credibility judgments precede concerns for (and primary focus on) the information substance (assuming the source at hand is deemed sufficiently credible). In effect, information from the credible source seems to become nested within negotiations of knowledge claims that are independent of credibility questions. In other words, legislative staffers act as the credibility gatekeepers who determine which sources are credible and worth taking information from and focusing on as knowledge claims are developed independently or negotiated with others.

Credibility nesting seems partly a function of organizational structures and the cultural norms of interacting that are indeed related to these structures. As noted earlier in this chapter, legislative staffers are situated in rigid hierarchies that inhere distinct professional

expectations—including the determination of source credibility (among others). While they seem to act as scientific/social researchers when they investigate issues, legislative staffers are also provided considerable degrees of autonomy in their work. Yet, this autonomy is not without its accompanying responsibility, which seems to include the expectation to serve as the credibility gatekeeper for one's congressional office. On the one hand, this responsibility is produced through the formal social structures that define specific job functions on Capitol Hill. On the other hand, it may also be related to the broader norms of interaction that seem related to the hierarchies of organization in which staffers learn to operate. While not fully discussed in Chapter 3, part of my discovery of legislative staffers as the primary individuals involved in the development of knowledge claims included various recommendations I received during interviews in the early stages of this project. Non-legislative staffers (such as those working in communications or as chiefs of staff) tended to suggest I speak to the legislative staffer in their office when I asked about specific attributes of credible sources or processes involved in developing the substance of public-facing materials. While I am confident these non-legislative staffers could have provided their own insight on these matters, their recommendations seemed more related to a culture of tacit organization and designated specializations than merely the result of inexperience with specific sense-making processes. In turn, possessing the specialist designation seemed to provide a form of organizational permission for these staffers to share their experiences with me as much as it ensconced legislative staffers squarely in the position as chief sense-maker in their respective congressional offices.

While credibility nesting involves individual-level judgments, these judgments often occur in relation to the social processes from which knowledge claims are developed and negotiated. Depending on the circumstance at hand, these negotiations may occur between other

legislative specialists within or outside of one's own congressional office, and focus on the substance of claims (rather than the credibility of their respective sources) towards the end of fulfilling specific political or policy goals. These circumstances, while collective efforts, seem to reify the constructed expertise of the specialist designation. Indeed, others involved in the negotiation process may question the credibility of sources supporting the substance of their work, but limitations in time and sensibilities towards strategic goals seem to make this occurrence unlikely relative to other pertinent concerns. As one staffer noted in Chapter 5, credibility judgments may simply fall "into the background" in favor of questions about information sufficiency or legislative/political strategy (p. 161). In turn, nesting and negotiating seem to calcify organizational norms and divisions of labor as much as they constitute designations of expertise in the sense-making process.

Forms of Public Demonstration

Forms of public demonstration encompass the procedures or processes by which epistemologies are legitimized. For the context of Capitol Hill, these procedures or processes seem to include (a) the use of hearings as formal rituals of sense-making, (b) distinct physical sites of knowledge-making, and (c) textual or visual performances of knowledge claims through mediated channels. Sense-making procedures and the claims that come from them are only as potent as the legitimacy they are ascribed. Not only does this enhance the veracity of claims that emerge from members of Congress, but validates the internal backstage processes by which staffers develop them. Indeed, forms of public demonstration and the legitimization of epistemologies hold considerable weight on Capitol Hill given the legislative authority associated with this sense-making environment through which laws may be developed and passed. In turn, the legitimization of epistemologies may co-construct knowledge and social

order in very literal and proximal ways through legislation on the one hand (and members of the public it affects) and organizational validity on the other hand (in terms of the roles staffers serve in sense-making procedures).[21] Thus, the procedures and processes of public demonstrations, while possibly arbitrary at first glance, serve to create the conceptual foundations on which sense-making occurs and subsequent forms of social order may be developed.

The use of hearings as formal rituals of sense-making. Congressional hearings may be thought of as sites of learning and expression through which sense-making procedures are legitimized on Capitol Hill. Contrary to the processes by which staffers investigate and negotiate sources and knowledge claims within the private spaces of congressional offices or nearby coffee shops, hearings thrust committee members and witnesses into the literal spotlights, cameras, and official records that document all discussions and claims within them. These sense-making events seem to become rituals through their consistent and predictable application of rules for interaction that restrict time allotted for witness testimonies and question-and-answer periods between members and witnesses. Despite the topic at hand, Robert's Rules of Order remain in place and investigations of issues seem to be executed (and indeed performed) with senses of authority and credibility that translate to broader knowledge-making processes of Capitol Hill *writ large*.

While hearings pose opportunities for members to explore questions about niche topics or gain insight on the lived experiences of notable individuals, they also provide a public-facing platform on which premeditated statements or knowledge claims may be advanced within the structured times allotted for opening statements from committee leaders or during question-and-answer discussions between witnesses and members. Such advancements of claims seem more

[21] For further readings on the concept of co-production, see the edited volumes by Hilgartner, Miller, and Hagendijk (2015) and Jasanoff and Kim (2015).

an artifact of normative behavior rather than opportunistic uses of time. Indeed, the highly visible formats of public congressional hearings may only encourage this behavior, as question-and-answer discussions may serve more like events that pose political and credibility risks than those in which extemporaneous (and, in turn, potentially uninformed) questions may be raised and subsequently used by the public or press to criticize members' understandings of issues or even their ways of thinking about them. To underscore this point, one might recall my discussion with a staffer affiliated with the Select Committee who noted that "closed-door" (i.e., private) roundtable discussions between climate experts or stakeholders and committee members allowed members to "ask dumb questions away from the cameras" (p. 54). While this observation was anecdotal and something I did not specifically probe further throughout the data collection process, it does seem to offer reasonable support for the notion that hearings are more spaces of prepared (and performative) forms of sense-making than venues of discovery. Indeed, even after my discussions with minority and majority Select Committee staffers, I was not able to gain entrée into the closed-door roundtable meetings where, presumably, "dumb questions" were raised and processes of learning likely occurred.

An additional example of hearings as premeditated and performative forms of demonstrative learning may be derived from the thematic overlap of statements between hearings among Chair Castor and Ranking Member Graves. As noted in Chapter 6, both members seemed to express similar discursive themes in their opening statements and in questions to witnesses despite considerably distinct topics of focus that involved youth climate activists on the one hand and formally trained energy experts on the other hand. In part, Chair Castor seemed to consistently mention climate-related public demonstrations and the emergence of climate change risks and impacts now and in the future; Ranking Member Graves consistently discussed trends

of emissions reductions in the U.S. and the risks of policies to reduce domestic oil production. While these were only two hearings held sequentially within a timeframe of only a few weeks, I found these themes (and this general tendency of thematic overlaps across disparate topics) an appropriate analog to processes I encountered across the Select Committee's several other hearings.

The rigid structure of interactions within hearings and the apparent tendency of these venues to serve as performative forms of learning seem to create a tacit barrier between frontstage (i.e., publicly-visible) and backstage (i.e., concealed, private) sense-making processes. As noted in Chapters 4 and 5, procedures of learning within concealed spaces involve individual and social processes that focus the burden of knowledge production on legislative specialists (and their specialist networks) through which information is collected and produced for the staffer's boss (i.e., the member). It is within these private (or quasi-private) spaces that legislative specialists may engage in the messiness of sense-making procedures that involve asking "dumb questions" to gain baseline understandings of the issues at hand. No doubt, public visibility of these processes would pose considerable issues around the credibility of essentially all staffers, members, and capabilities of Congress to interpret information about complex issues (as has occurred for leaks from other sense-making institutions such as those noted in Hilgartner, 2000). Yet, Congress without hearings would likely raise significant questions about due process, the constitutionality of laws, and the overall ability of Congress to develop sufficiently informed legislation. In turn, these symbolic and performative functions of hearings—and the public-private boundaries they emphasize—also reinforce the divisions of labor between public and private knowledge producers. On the one hand, legislative specialists serve as the primary sense-makers behind closed doors; whereas in public-facing forums (hearings in particular),

members become the primary knowledge producers by which procedures of sense-making are performed for the public. Thus, hearings seem to not necessarily serve as venues of discovery as much as they serve as places in which the discoveries of legislative specialists are advanced from committee members. It is from this perspective that hearings shift from sense-making events to events that ritualize sense-making procedures.

Distinct physical sites of knowledge-making. The physical sites of congressional offices in and around Capitol Hill cannot be separated from the sense-making procedures that occur within them and the forms of legitimizing demonstration to which they seemingly contribute. While not necessarily new construction, congressional office buildings seem to convey a sort of intellectual and national weightiness that may only be captured in spaces affiliated with previous events of some personal or social significance. For structures on the Hill, this significance seems to emerge through some of the physical characteristics or quirks associated with these buildings, such as the marble stairs in the House office buildings and throughout parts of the Capitol that are noticeably indented from decades of heavy foot traffic; portraits of former committee chairs in the stately committee rooms in which hearings (and other events) are held; and the noticeably long hallways that are sometimes reverent and other times raucous in which one may find various members of Congress in addition to lobbyists, staffers, constituents or celebrities traversing between offices or meetings. Less visible but equally notable quirks could include the tunnels that connect office buildings to the Capitol; the hidden compartment beneath the House majority Whip's office that contains well-wishes from previous staffers inscribed on the wall; or the notorious and nearly impossible-to-find two remaining marble bathtubs in the basement of the Capitol that used to comprise of the wash facilities for members of the House and Senate—accompanied by a one-page historical description taped to

the wall beside the tubs for those lucky enough to find them. Indeed, various spaces of the Capitol and its affiliated office buildings seem to hold traces of history at essentially all levels of access for both insiders and outsiders alike. Even those who view the façades of these buildings may garner the sense (of course with some prior knowledge) that these structures were not constructed to house arbitrary activities, but to engage in processes of political authority with which decisions of national and international significance are associated.

Of course, not everyone who works on and visits Capitol Hill may engender their experiences in senses of authority (or general significance) aroused from the distinct physical quirks, noticeable façades, or stately interiors of the structures at this site; however, there is little doubt the Capitol and its associated office buildings were constructed without the explicit intention of conveying some sort of social significance that is inevitably associated with lawmaking at the national level. Indeed, efforts to reproduce this significance emerged in a considerable number of public-facing materials I encountered from both Democrats and Republicans that visualized the Capitol as a backdrop for press briefings or announcements of some kind (similar to the press release from CSC Chair Deutch reproduced in Figure 6.7, p. 219). These materials seemed to visualize the Capitol as a way to associate members' knowledge claims with the authoritative significance of the Capitol structure itself (and the institution it represents), rather than citing scientific or technical reports to support the claims at hand. Similarly, I found myself experiencing vastly different senses of authoritative significance associated with the Select Committee hearings I attended in person compared to those I viewed online. In-person attendance physically exposed me to the rich social milieus that are otherwise excluded from video broadcasts, such as staffers' interactions and reactions during these events, experience of the spaces in which hearings were held, and of course my own participation in

these events as a member of the audience. Through these physical exposures, I became engulfed in the sites of performance and interpreted knowledge claims of risk alongside the environments and social milieus in which they were expressed.

Between members' expressions of authority in public-facing materials that visualized spaces in and around the Capitol—in addition to my own experiences of the sites I visited throughout the data collection process—it seems reasonable to suggest that the structures of Capitol Hill serve as an additional form of public demonstration by which epistemologies are legitimized. What is notable about the physical sites of Capitol Hill in this process are the dual forms of demonstration that may legitimize sense-making procedures for both staffers and the public concurrently. On the one hand, staffers hold access to spaces in and around the Capitol that restrict public access but may nonetheless contain traces of history that reinforce the social significance of the space at hand or the importance of the work conducted in Congress. On the other hand, spaces in and around the Capitol that are open to the public—especially the Capitol Visitor Center—contain explicit traces of history curated specifically to demonstrate the significance of Congress over time and its legitimacy as a site in which knowledge and laws are constructed. In turn, the senses of authority these private and public spaces seem to convey are not exclusive to distinct political parties, but the institution in which members and staffers affiliated with both parties produce knowledge and legislation either together or separately.

Textual or visual performances through mediated channels. An additional form of demonstration I encountered by which knowledge claims were legitimized seemed to occur in public-facing materials that were distributed through various types of channels. As noted in Chapter 6 (and specifically, Table 6.1), these materials contained knowledge claims of climate-related risk and expressions of credibility to substantiate such claims that overlapped and

deviated across channels and partisan boundaries. For example, Democrats seemed more willing to discuss climate change risks explicitly and support arguments about current and future impacts with textual or visual depictions of scientific/technical data or authoritative institutions. On the other hand, Republicans seemed far more likely than Democrats to address climate risks indirectly through claims about trends in emissions reductions (in the U.S.) or improvements in energy technologies to reduce fossil fuel use, and support such claims through textual or visual associations with authoritative institutions or individuals. Further, Democrats seemed to express a wider thematic range of credibility expressions across social media channels and were more prone in general to advance climate-related risk claims and expressions of credibility thereof. Simply put, expressions of credibility in knowledge claims of risk deviated notably across partisan lines.

Distinctions of credibility expressions between Democrats and Republicans should not be interpreted as coincidence or forms of un-strategic partisan platitudes. Similar to hearings as ritualized performances of public-facing knowledge production, expressions of credibility in knowledge claims of risk serve as public performances through which textual and visual forms of understanding are substantiated—albeit with consideration for ideological tensions that seem inevitably associated with Democratic and Republican positions. In turn, public-facing materials seem to serve as sites in which performances of sense-making become filtered through lenses of professional tensions that encompass the general norms of expression affiliated with each political party. While expressions of knowledge claims may provide forms of information that are the result of careful consideration during the backstage processes of investigation and negotiation, they may also provide insight into the strategic forms of expression with which members of each political party seek to be affiliated. This is particularly notable given the

overlapping patterns of sense-making I encountered among Democratic and Republican staffers in Chapters 4 and 5, whose patterns of perception, negotiation, and even their relationships with environmental considerations (such as credibility judgments with limited time and bandwidth) were essentially indistinguishable along partisan lines. Contrarily, performances of sense-making and expressions of credibility to substantiate forms of knowledge production in public-facing materials seemed to deviate considerably (in terms of discursive themes) across partisan lines, as noted in Chapter 6. In turn, political and discursive strategy seems to become salient when sense-making procedures become visible for public inspection and consumption.

Finally, like hearings, expressions of credibility and knowledge claims of risk in public-facing materials demarcate sense-making procedures between concealed specialist staffers and publicly-visible members of Congress. Yet, the difference between these two forums of sense-making performance seems to arise in the affordances inherent in written or digital materials that can accommodate a dynamic range of textual and visual expressions over considerable amounts of time. Indeed, hearings provide opportunities for (seemingly) extemporaneous interactions between members and witnesses, but the use of visual and textual materials outside the normative form of interpersonal interaction in this context requires the member's request for inclusion of such material(s) in the official hearing record, which is published anywhere from several weeks to months after the hearing concludes. On the other hand, materials hosted on websites and social media posts provide a temporal closeness between members and the public that allows the immediate publication of claims and expressions of credibility in textual or visual forms (even video). As noted in Chapter 6, discursive themes and the presence of such themes differed across partisan lines and channel types, but of course, both sides of the aisle seemed apt to engage social media platforms to express knowledge claims of risk in general. Nonetheless,

Democrats seemed to express a slightly wider range of credibility themes on social media platforms in particular that used visual forms of interpersonal interaction to build rapport with the audience (i.e., relational credibility), imagery of personal experiences with climate impacts to substantiate risk claims (i.e., lived experience credibility), and the use of imagery I found especially striking towards the end of potentially eliciting emotional reactions from the audiences who viewed them (i.e., emotional credibility). Thus, efforts to legitimize epistemologies through textual and visual performances of claims and credibility were qualitatively diverse in their thematic patterns across partisan lines and their styles of presentation on social media platforms.

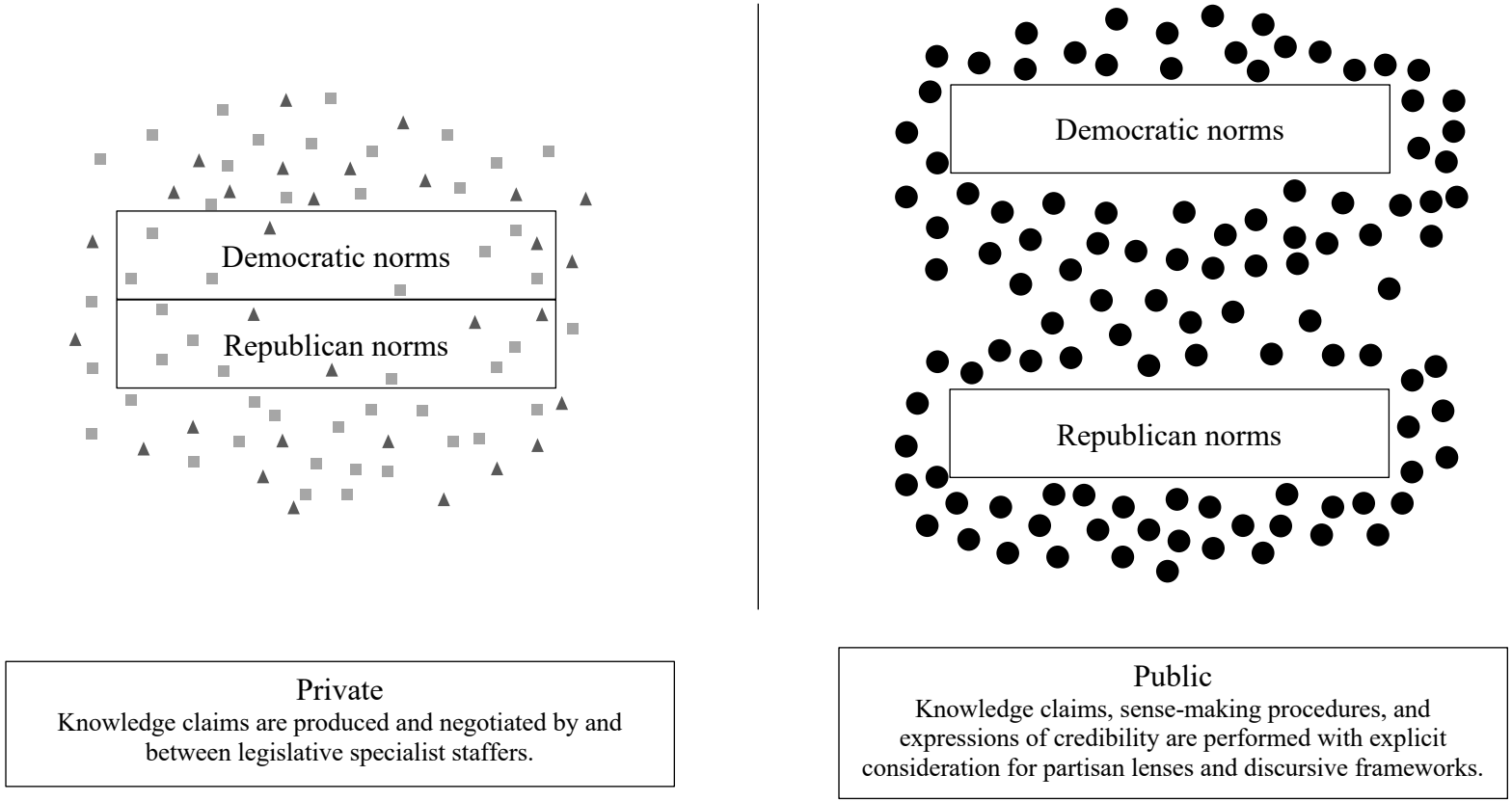
Chapter Conclusion and Summary

In this chapter, I drew from Jasanoff's (2005) dimensions of civic epistemology to categorize patterns of sense-making in terms of objectivity, expertise, and forms of public demonstration by which understandings are legitimized. In turn, I found considerable similarities in the processes by which legislative specialists affiliated with both parties assess source credibility in the search for information and negotiate the substance of risk claims for various forms of public-facing materials. These overlaps—summarized further in Table 7.2—seemed to occur in the sense-making procedures by which accountability was ensured, objectivity was established, and how expertise was legitimized. On the other hand, I found various points of difference along partisan lines for themes of credibility expressions in public-facing materials (and rituals) by which epistemologies were legitimized. These points of thematic difference were exclusive to materials and events in which forms of sense-making were performed for the public, contrary to the overlapping and almost indistinguishable sense-making procedures that occurred in concealed spaces. In turn, differences in public-facing credibility expressions and knowledge claims of risk may be thought of more as performances shaped with consideration for the tacit

professional norms that encompass members' affiliations with their respective political parties rather than evidence for discrepancies in learning procedures across Democrats and Republicans. Thus, taking public expressions as performances of sense-making procedures rather than engagements of them seems to indicate that patterns of learning are most appropriately demarcated in terms of their public visibility rather than their partisan affiliation.

Distinctions of sense-making procedures by their public visibility rather than their partisan affiliations offer a perspective from which to contemplate a distinct culture of learning on Capitol Hill. This perspective is visualized in its conceptual form in Figure 7.1. Just as concealed processes of knowledge production involve overlapping procedures by which information sources are assessed and claims are negotiated, such processes also inevitably consider the partisan frameworks in which knowledge claims and forms of credibility are expressed. Of course, the substance of claims and forms of credibility may diverge qualitatively to adhere to the discursive parameters of one's political party (or even the strategic goal at hand), but the overarching procedures that culminate in such performances—and even the process of partisan performance itself—do not diverge in form or function. In other words, the substance of partisan claims may at times seem thematically symmetrical, but the processes that lead to them are functionally the same. In turn, patterns of learning on Capitol Hill seem to operate within a culture of learning that is concerned primarily with procedures of learning on the one hand (behind closed doors) and performances of sense-making procedures on the other hand (in public view). The artifacts, spaces, dramatic devices, channels, and substance of expressions may diverge across Democrats and Republicans, but this seems more equivalent to distinct choices in the aesthetics of metaphorical set designs that are exhibited in the same theater and on the same stage.

Figure 7.1 Conceptual Representation of Sense-Making Procedures on Capitol Hill in relation to Political Affiliation and Public Visibility



Note. Squares and triangles indicate Republican and Democratic staffers during concealed sense-making processes in relation to the partisan norms with which each staffer is affiliated. While partisan norms exist during private processes of knowledge production, they are not necessarily relevant as specialist staffers are expected to serve as scientific/social investigators. On the other hand, circles indicate members of Congress during public performances of claims, credibility, and sense-making procedures (such as hearings). In public view, partisan norms become salient discursive lenses through which various forms of performance occur. Nonetheless, the circles are somewhat scattered to represent possibilities for deviations from political norms to occur.

Table 7.2 Summary of Findings for Patterns of Learning Across Democrats and Republicans: Research Question Six

Research Question	Summary of Findings

RQ6: To what extent are the processes by which Select Committee or CSC staffers/members assess information sources, negotiate knowledge claims, and express such claims of climate change risks in messages consistent across Democrats and Republicans?	• Patterns of learning are examined through the framework of Jasanoff's (2005) dimensions of civic epistemology, which includes processes by which (a) accountability is ensured, (b) objectivity is established, (c) parameters of expertise are constituted, and (d) knowledge is publicly demonstrated (and, in turn, legitimized). Summaries of data considered for each dimension are summarized below:
	  ○ **Accountability** (is ensured by)
	  ▪ Structural considerations
	  • Legislative specialists who focus on environmental issues are often the only individuals who decide the credibility of sources and the information to be used from them.
	  • Yet, legislative staffers are generally situated as subordinate to chiefs of staff (and other senior positions) who are not involved in the nuance of climate-related issues but can hire or dismiss as they see fit.
	  • As expendable specialists, legislative staffers are responsible for the materials they curate and any politically unfavorable issues or inaccuracies that may arise from the materials or claims they help produce (or singularly produce themselves).
	  • These processes were essentially the same across Democrats and Republicans.
	  ▪ Specialist networks
	  • While legislative staffers are accountable for the veracity of sources and claims they help produce, they too are responsible for maintaining the channels of information from which understandings of complex issues may emerge (i.e., their specialist networks).
	  • Participation of sources in staffers' specialist networks is based entirely on the discretion of the specialist staffer at hand. This discretion seems closely tied to the value of information received from the network. In other words, specialist networks comprise of exchange-based relationships in which all participants seem to expect some form of return on their investment of time. For example, lobbyists may provide expert guidance on complex legislation while staffers may provide information about concealed developments on Capitol Hill.
	  • Specialist networks are sites of learning and information exchange as much as they are sites in which trust is built through such interactions.
	  • The necessary sense of trust emplaced in the efficacy of information exchanged and produced in specialist network interactions makes legislative staffers primarily accountable for the individuals they choose to enroll in or displace from their own specialist networks.
	  • The form and function of specialist networks were indistinguishable across Democrats and Republicans.

Table 7.2 (Continued)

Research Question	Summary of Findings
RQ6: To what extent are the processes by which Select Committee or CSC staffers/members assess information sources, negotiate knowledge claims, and express such claims of climate change risks in messages consistent across Democrats and Republicans?	○ **Objectivity** (is established by or through) ▪ Institutional mechanisms • The construction of objectivity on Capitol Hill is not entirely limited to the decisions of legislative staffers. Rather, this process is embedded in the operating ethos of the Congressional Research Service and their explicit aim to produce reports independent of any underlying partisan tensions affiliated with the topic at hand. • CRS is explicitly affiliated with Congress as the research arm of the legislative branch. In turn, it is mandated by law to produce reports that are indeed "free" from bias. • Mandated objectivity of CRS also serves as a form of reassurance through which staffers may ascribe credibility to CRS's products, or at the very least, demonstrate the efforts of Congress to sanction formal sense-making processes to an official organization in the legislative branch. ▪ Professional expectations • Legislative staffers are expected to form robust understandings of complex issues within constrained periods of time (i.e., understandings about the scientific/technical, legislative, and political sides of the issue at hand). • To understand the range of an issue, legislative specialists are expected to serve as scientific/social investigators during the sense-making process. In turn, they will consult scientific/technical sources and those explicitly affiliated with partisan stances. • On the one hand, staffers generally seem to ascribe credibility to sources they consider established and familiar. On the other hand, staffers also tend to consult sources they consider "biased" to assess the rhetorical or political parameters of various climate-related issues. In turn, staffers seem to engage a sort of cognitive flexibility with regard to the types of credibility they associate with information sources. ▪ Inherent skepticism • Legislative staffers are situated in environments that seem to foster a broader culture of skepticism towards the veracity of information sources and the extent of "truth" they may offer about issues. Sources of information—and the claims that come from them—cannot be separated from the underlying interests with which they are associated. • Skepticism does not necessarily diminish staffers' trust in sources they consider established and familiar, but it does act as an interpretive layer through which information is considered. • Skepticism is consistent among Democrats and Republicans, which is particularly notable given staffers' efforts to examine the parameters of discourse (i.e., efforts that are explicitly apolitical) in an environment with tacit political norms.

Table 7.2 (Continued)

Research Question	Summary of Findings
RQ6: To what extent are the processes by which Select Committee or CSC staffers/members assess information sources, negotiate knowledge claims, and express such claims of climate change risks in messages consistent across Democrats and Republicans?	○ **Expertise** (is constituted by or consists of) ▪ Specialist designations • Legislative staffers are the designated specialists for the particular issue areas they oversee in each office. While the specific job titles of these specialists seem to vary somewhat across offices and organizations, the affordances associated with the specialist designation imbue legislative staffers with considerable power over the sense-making process. • The specialist designation seems to make legislative staffers the point-persons from which knowledge claim substance is developed internally and disseminated in public-facing materials. • These processes were consistent between Democrats and Republicans. ▪ Source credibility judgments • Expertise is not limited to the mere use of specialist designations. It also includes staffers' responsibility to render source credibility judgments or cultivate senses of source credibility through interpersonal interactions with key stakeholders and expert lobbyists. • Legislative specialists, while independent assessors of credibility, are also expected to adhere to *a priori* credibility judgments with whom colleagues may have existing relationships or seek to avoid altogether. • While interpersonal interactions may relate to complex forms of processing through which lesser-known sources might build credibility, legislative staffers retain the power over their schedules to hold or avoid these meetings as they see fit. In other words, legislative staffers seem to retain considerable power over the types of sources to which they are exposed. • These processes were consistent between Democrats and Republicans. ▪ Nesting and involvement in the negotiation process • Nesting involves the point(s) at which questions of source credibility become subordinate in their priority to the information substance from the source at hand. In what seems to resemble an order of sequence, credibility judgments precede concerns for (and primary focus on) the information substance (assuming the source at hand is deemed sufficiently credible). In effect, information from the credible source seems to become nested within negotiations of knowledge claims that are independent of credibility questions. In other words, legislative staffers act as the credibility gatekeepers who determine which sources are credible and worth taking information from and focusing on as knowledge claims are developed independently or negotiated with others.

Table 7.2 (Continued)

Research Question	Summary of Findings
RQ6: To what extent are the processes by which Select Committee or CSC staffers/members assess information sources, negotiate knowledge claims, and express such claims of climate change risks in messages consistent across Democrats and Republicans?	○ **Expertise** (continued) (is constituted by or consists of) ▪ Nesting and involvement in the negotiation process (continued) • Credibility nesting seems partly a function of organizational structures and the cultural norms of interacting that are indeed related to these structures. For example, recommendations of non-legislative staffers to speak to legislative specialists seemed more related to a culture of tacit organization and designated specializations than merely the result of inexperience with specific sense-making processes. In turn, possessing the specialist designation seemed to provide a form of organizational permission for these staffers to share their experiences with me as much as it ensconced legislative staffers squarely in the position as chief sense-maker in their respective congressional offices. • Nesting and negotiating seem to calcify organizational norms and divisions of labor as much as they constitute designations of expertise in the sense-making process. • Nesting processes were entirely consistent between Democrats and Republicans. ○ **Forms of public demonstration** (i.e., epistemologies are legitimized by or through) ▪ The use of hearings as formal rituals of sense-making • Congressional hearings may be thought of as sites of learning and expression through which sense-making procedures are legitimized on Capitol Hill. Contrary to internal staff processes of knowledge production, hearings thrust committee members and witnesses into the literal spotlights, cameras, and official records that document all discussions and claims within them. • Given the political and credibility risks associated with the public visibility of hearings, these events seem to serve more as venues in which knowledge production is executed as a public performance rather than a process through which information is aggregated (as it is among legislative specialists behind closed doors). • The rigid structure of interactions within hearings and the apparent tendency of these venues to serve as performative forms of learning seem to create a tacit barrier between frontstage (i.e., publicly-visible) and backstage (i.e., concealed, private) sense-making processes. Behind closed doors, legislative specialists may engage in the messiness of sense-making procedures that involve asking "dumb questions" to gain baseline understandings of the issues at hand—efforts that would pose credibility risks for the institution of Congress if exposed to the public.

Table 7.2 (Continued)

Research Question	Summary of Findings
RQ6: To what extent are the processes by which Select Committee or CSC staffers/members assess information sources, negotiate knowledge claims, and express such claims of climate change risks in messages consistent across Democrats and Republicans?	○ **Forms of public demonstration** (continued) (i.e., epistemologies are legitimized by or through) ▪ The use of hearings as formal rituals of sense-making (continued) • The symbolic and performative functions of hearings—and the public-private boundaries they emphasize—reinforce the divisions of labor between public and private knowledge producers. On the one hand, legislative specialists serve as the primary sense-makers behind closed doors; whereas in public-facing forums (hearings in particular), members become the primary knowledge producers by which procedures of sense-making are performed for the public. • Hearings seem to not necessarily serve as venues of discovery as much as they serve as places in which the discoveries of legislative specialists are advanced from committee members. It is from this perspective that hearings shift from sense-making events to events that ritualize sense-making procedures. ▪ Distinct physical sites of knowledge-making • The physical sites of congressional offices in and around Capitol Hill cannot be separated from the sense-making procedures that occur within them and the forms of legitimizing demonstration to which they seemingly contribute. • The structures on Capitol Hill (both hidden and publicly visible) seem to convey a sort of intellectual and national weightiness that may only be captured in spaces affiliated with previous events of some personal or social significance. These events of significance are centered around processes of political authority with which decisions of national and international significance are associated. • This sense of significance emerged in various expressions of authority I encountered in public-facing materials that often visualized the façade of the Capitol. • Similarly, I found myself experiencing vastly different senses of authoritative significance associated with the Select Committee hearings I attended in person compared to those I viewed online. • It seems reasonable to suggest that the structures of Capitol Hill serve as an additional form of public demonstration by which epistemologies are legitimized for both internal staffers and the public: Staffers hold access to spaces in and around the Capitol that restrict public access but may nonetheless contain traces of history that reinforce the social significance of the space at hand or the importance of the work conducted in Congress. On the other hand, spaces in and around the Capitol that are open to the public—especially the Capitol Visitor Center—contain explicit traces of history curated specifically to demonstrate the significance of Congress over time and its legitimacy as a site in which knowledge and laws are constructed.

Table 7.2 (Continued)

Research Question	Summary of Findings
RQ6: To what extent are the processes by which Select Committee or CSC staffers/members assess information sources, negotiate knowledge claims, and express such claims of climate change risks in messages consistent across Democrats and Republicans?	○ **Forms of public demonstration** (continued) (i.e., epistemologies are legitimized by or through) ▪ Distinct physical sites of knowledge-making (continued) • The senses of authority these private and public spaces seem to convey are not exclusive to distinct political parties, but the institution in which members and staffers affiliated with both parties produce knowledge and legislation either together or separately. ▪ Textual or visual performances through mediated channels • Public-facing materials (from the Select Committee and members of the CSC) contained knowledge claims of climate-related risk and expressions of credibility to substantiate such claims that overlapped and deviated across channels and partisan boundaries. • Distinctions of credibility expressions between Democrats and Republicans should not be interpreted as coincidence or forms of un-strategic partisan platitudes. Similar to hearings as ritualized performances of public-facing knowledge production, expressions of credibility in knowledge claims of risk serve as public performances through which textual and visual forms of understanding are substantiated—albeit with consideration for ideological tensions that seem inevitably associated with Democratic and Republican positions. In turn, public-facing materials seem to serve as sites in which performances of sense-making become filtered through lenses of professional tensions that encompass the general norms of expression affiliated with each political party. • Like hearings, expressions of credibility and knowledge claims of risk in public-facing materials demarcate sense-making procedures between concealed specialist staffers and publicly-visible members of Congress. Yet, the difference between hearings and public-facing materials seems to arise in the affordances inherent in written or digital materials that can accommodate a dynamic range of textual and visual expressions over considerable amounts of time. • Overall, patterns of learning expressed considerable overlap for the sense-making procedures by which accountability was ensured, objectivity was established, and how expertise was legitimized. On the other hand, various points of difference emerged along partisan lines for themes of credibility expressions in public-facing materials (and rituals) by which epistemologies were legitimized. • Taking public expressions as performances of sense-making procedures rather than engagements of them seems to indicate that patterns of learning are most appropriately demarcated in terms of their public visibility rather than their partisan affiliation. • Distinctions of sense-making procedures by their public visibility rather than their partisan affiliation offers a perspective from which to contemplate a distinct culture of learning on Capitol Hill. Just as concealed processes of knowledge production involve overlapping procedures by which information sources are assessed and claims are negotiated, such processes also inevitably consider the partisan frameworks in which knowledge claims and forms of credibility are expressed.

CHAPTER 8

CONCLUSIONS

Throughout this dissertation, I have attempted to examine the individual and social processes by which climate risk information is interpreted, constructed, and performed in public-facing materials and rituals of sense-making. I have centered these processes around two general aims of inquiry: The first includes the characteristics that comprise of credible sources, the salience of these characteristics during negotiation processes, and the patterns of credibility expressions in public-facing forums. The second includes the extent to which patterns of perception, negotiation, and public expressions of claims and forms of credibility comprise of a broader culture of sense-making on Capitol Hill—a civic epistemology—that transcends tacit professional norms (i.e., partisan belief systems). By taking this approach, I have sought to compile sufficient evidence to explore the relationship(s) between socio-psychological and sociological approaches to risk, specifically through the analysis of source credibility perceptions on the one hand and the resilience of explicit source credibility questions as risk claims are constructed on the other hand. Towards this end, I also sought to collect sufficient evidence to shed light on the (in)stability of risk definitions as they are collected and compiled from information sources and (re)shaped as knowledge claims are developed—either by individual staffers (usually legislative specialists) or between staffers within/outside one's office, in addition to external collaborators such as expert lobbyists or stakeholders. By considering these patterns of phenomena to examine the relationship between socio-psychological and sociological approaches to risk, I seek not to develop a unifying theory to "connect" these two approaches, but to consider the points of assumption about risk that may have calcified the boundaries between these two areas of research. In turn, I aim for this work to challenge the normative

boundaries that have come to define socio-psychological and sociological studies of risk and the assumptions about risk with which each approach seems to operate.

In the discussion that follows, I briefly review the results from previous chapters in relation to the existing research about the phenomena at hand. I then consider how the results of this work, when considered collectively, relate to assumptions about risk that are unique to socio-psychological and sociological studies of risk. In turn, I offer a processual approach towards the analysis of risk perception and construction that is specific to the context of Capitol Hill, but an approach that could be applied to other contexts where risk information is both perceived and (re)constructed. Additionally, while the results of this work may offer some theoretical or paradigmatic insight, I also offer key points for those seeking to influence Congress. While I do not anticipate a wide audience for this work, I also find it more possible than not that some readers might seek to use the findings noted here to assist their advocacy efforts. Given this apparent inevitability, I specify the key points that will be most helpful for issue advocates on Capitol Hill. In the latter portions of this discussion, I detail the strengths and limitations of this study in addition to recommendations for future research and my general concluding thoughts.

General Discussion

The results of this work provide insight relevant to the role of credibility toward forming assessments of risk, the forms of credibility that may emerge in policy contexts, and the role of information channels and characteristics in staffers' development of risk assessments. Additionally, this work sheds light on the point(s) at which risk assessments become contributions to social negotiations in which public-facing knowledge claims are expressed from members of Congress (in addition to how these expressions manifest in public-facing materials). While the results of this work cannot be entirely separated from the context in which they were

found (Yin, 2009), they do contribute to emerging conversations about the relationship(s) between factions of risk communication research perspectives that have historically been entrenched in distinct disciplinary traditions—particularly between approaches I discuss broadly as socio-psychological on the one hand and sociological on the other hand.

Perceptions of Information Sources

As noted in Chapter 4, staffers are situated in time-restricted environments that inhere expectations of efficient and exhaustive work outputs to assess both the gist of issue complexity and the political parameters in which such issues have (or likely will be) discussed in public-facing materials and sense-making rituals. In turn, staffers seem inclined to consult sources they feel are credible—i.e., familiar, established, vetted by others in one's specialist network, and/or a source with which one's office frequently works or receives information (i.e., a source whose credibility is embedded in office policy). In turn, it follows that staffers seem less inclined to think systematically about source credibility for sources they already consider credible. While I derive this argument from interview data, staffers' reports of credibility characteristics seem to support existing research on the positive relationship between perceived source credibility and heuristic processing, particularly in terms of the findings from Trumbo and McComas (2003). What is distinct, however, is the difference of credibility characteristics noted in staffers' accounts compared to those in Meyer's (1988) credibility index that have been used in previous studies (e.g., McComas & Trumbo, 2001; Trumbo & McComas, 2003). On the one hand, Meyer's (1988) five-item credibility index assesses the extent to which a source is perceived as fair, unbiased, "tells the whole story," is accurate, and trustworthy (p. 574). On the other hand, credibility among staffers on Capitol Hill involves the extent to which a source is perceived as familiar (e.g., recognizable to the staffer at hand or seen as cited by others on the Hill) and

established in relation to one's needed *form* of information. Indeed, staffers' information searches do not limit their selection of sources to those they might consider fair or unbiased; rather, staffers on both sides of the aisle seem to frequently search for information from politically-affiliated sources that contain explicitly biased interpretations of scientific or technical issues in order to understand the partisan language associated with the issue at hand. While perceived as politically biased, staffers seem to ascribe credibility characteristics (i.e., familiar and established) to these sources to assess political discourse parameters just as they would consult certain familiar and established sources associated with science (such as NAS) to understand scientific or technical issues. Thus, while credibility in the general sense seems related to heuristic processing among staffers, the tenets of credibility in this context seem fundamentally different from those previously used in communication research.

Distinctions in credibility characteristics in this study compared to those of Meyer's (1988) credibility index seem due to the contextual environment of Capitol Hill and the expectations of information collection that seem unique to congressional staffers. While potentially specific to this environment, these findings raise questions about the varied qualities of credibility across other organizational environments, especially those in which risk information is both perceived and produced by the actors at hand. It is key to note that Meyer's (1988) index was originally developed to understand declining newspaper subscriptions during the 1970s and 1980s, and originally measured "believability" and "community affiliation"—i.e., perceived "concern about the community's well-being," "watches out after your interests," "patriotic," and "concerned mainly about the public interest" (p. 571). This was partly an extension of a 12-item credibility scale developed by Gaziano and McGrath (1986) that was later combined by West (1994) to produce the five-item index that is often used today. In other words,

the context in which Meyer's (1988) credibility index was developed seems specific to *public* perceptions of source credibility that are not necessarily relevant to the characteristics of credible sources among staffers on Capitol Hill, or perhaps even other environments whose actors operate outside the normative framework of "the public" to which Meyer's (1988) scale seems directed. In turn, studies of credibility in relation to forms of processing or other variables should consider the context in which certain indices are used and whether the values within them align with those of the study context and its actors. For the context of Capitol Hill and congressional staffers (specifically legislative specialists), credibility is not necessarily related to impressions of being "unbiased" or telling "the whole story" as Meyer (1988) would suggest. Rather, established sources with explicit political bias seem to provide staffers a sense of the political parameters in which issues are discussed. In turn, it is the factual inaccuracy (but political accuracy) that seems to signal credibility to congressional staffers—with impressions of being established and familiar as the constants between both Democrats and Republicans.

Source Characteristics and Contextual Cues

Also noted in Chapter 4 is the role of information source characteristics in staffers' assessments of source credibility and risk issues. Given the time constraints and professional expectations to produce insightful work outputs, staffers seem inclined to rely on contextual cues when confronted with formal (i.e., scripted or written) sources, be they official or unofficial. Contextual cues include any indicators within the document or materials at hand that may be associated with an individual or institution about which the staffer holds an existing credibility judgment. In turn, staffers seem less inclined to rely on contextual cues to assess source credibility and risk information with informal (i.e., unscripted) sources as these forms of information are transmitted through interpersonal interactions that afford legislative specialists

opportunities to probe claims, ask questions, and engage in extemporaneous discussion through which focus on the source's information substance may occur. These interpersonal interactions seem to also afford informal sources the ability to "build" credibility with staffers over time through repeated exposures (i.e., constructing a sense of familiarity) and consistency in their claims (to ease staffers' cognitive burden associated with work outputs). In turn, staffers' apparent reliance on contextual cues to assess the credibility and claims of formal (scripted) materials compared to informal (unscripted) sources seems to suggest staffers' tendencies for heuristic processing when confronted with formal materials and systematic processing when confronted with informal sources.

While specific to the context of Capitol Hill, these findings support previous analyses on the role of distinct information source characteristics in the transmission of risk information and the development of risk perceptions. Just as individuals may serve to translate esoteric health messages in relatable terms (Agadjanian & Menjívar, 2008), motivate pro-health behaviors through interpersonal interactions (Ford & Kaphingst, 2009; Howze et al., 1992), or raise awareness of health risks as informal risk communicators (Rickard, 2011), so too might external sources on Capitol Hill (such as expert lobbyists or key stakeholders) use interpersonal interactions to serve as communicators of complex climate risk-related information or as forms of repeated exposure through which familiarity is enhanced and credibility is built (if not necessarily associated with a source in the first place).

Somewhat more exploratory in this work is the relationship between source characteristics and staffers' tendencies to rely on certain cues (i.e., contextual cues) that indicate whether the source at hand is affiliated with an individual or institution they consider credible *a priori*. While I argue that staffers seem more reliant on these contextual cues (and, in turn,

heuristic processing) when confronted with formal (scripted) sources compared to informal (unscripted) sources, I did not fully explore additional potential motivators of this behavior beyond the environmental circumstances that limit the available time and "bandwidth" staffers have at their disposal to explore the veracity of otherwise unknown sources. The context in which these processes occur seems rather unique to Capitol Hill, but I imagine somewhat similar circumstances might emerge in other organizational contexts where the use of heuristics might be further explored and with explicit consideration for the variety of motivating variables at hand.

An additional contribution of this work towards the literature on source characteristics in risk communication includes the role of informal sources towards the end of facilitating collaborative interactions or exchange-based relationships. Studies on the role of distinct communication sources—such as informal risk communicators (Rickard, 2011) or forms of interpersonal interactions that distill otherwise esoteric messages (Agadjanian & Menjívar, 2008) among others (Bühler & Kohler, 2003; Doria et al., 2006; Ford & Kaphingst, 2009; Hine, 2014; Linnan & Ferguson, 2007: McComas et al., 2010)—seem focused on the unidirectional relationships between communicators on the one hand and receivers of risk information on the other hand. As noted in Chapter 4, interactions between staffers and external sources may often result in collaborative relationships towards the development of legislation or other public-facing materials. Yet, these interactions are not necessarily unidirectional as staffers may reciprocate their receipt of specialized knowledge by providing insider knowledge about forthcoming policy developments, which could in turn provide lobbyists lead time to adjust strategies that benefit client interests. In turn, informal (unscripted) exchanges allow collaborative and exchange-based relationships to emerge in the receipt of specialized risk knowledge on the one hand and staffers'

ability to provide insider knowledge on the other hand. At the very least, this raises questions about the extent to which unidirectional interactions may affect risk perceptions and whether these processes occur in other risk sense-making organizations.

Social Negotiations of Knowledge Claims

As noted in Chapter 5, legislative staffers are situated as the key specialists in their offices who oversee climate-related issues and legislative developments. In turn, they retain considerable degrees of autonomy over source credibility judgments and trust from colleagues to ensure those judgments are appropriate and accurate. Once source credibility is determined—either through meetings over time, the use of contextual cues, or the function of one's office policy—information from the source becomes the primary focus in order to satisfy the goals or strategies at hand. Thus, source credibility seems to become nested within negotiations of knowledge claims, and in turn, negotiations come to focus primarily on the structure (e.g., framing) of public-facing materials and claims that are informed by the credible source(s) at hand.

While some public-facing materials do not require collaboration with others (especially when the political stakes are low), those that do may involve staffers' specialist networks that comprise of staffers or sources within and outside of one's office. Political or legislative strategy is paramount in negotiation processes, and in turn, questions of source credibility (if raised) seem to remain the primary responsibility of the legislative specialist who made the initial credibility judgment(s). This apparent consistency in the division of labor seems to not only reinforce the rigidity of office hierarchies but suggest that credibility nesting may be a form of impression resilience for sources that legislative specialists find credible and subsequently use to inform negotiation processes.

Credibility nesting is a particularly notable finding in this work given that it sheds light on the relationship between information source perceptions and processes of social negotiation in which public-facing materials or claims are developed. On the one hand, credibility nesting seems to emphasize the importance of office hierarchies in backstage processes, and on the other hand, it represents the point at which risk information is subject to potential (re)framings or shifts in definition—i.e., the destabilization of risk definitions. In other words, as source credibility becomes nested in social negotiations, risk definitions from the source at hand become subject to shifts in meaning to satisfy political or legislative goals.

The potential for risk definitions to become unstable within social negotiations may inform approaches to risk that examine both individual (cognitive) and social processes. As noted in Chapter 2, the most notable and widely used model for this approach is the social amplification of risk framework (SARF), which posits that forms of interaction with individuals and the media serve to amplify and distill understandings of risk (e.g., Kasperson et al., 1988; Lewis & Tyshenko, 2009; McComas et al., 2010). Yet, the SARF framework is most appropriately applied to audiences of non-experts who are situated outside of institutions that hold the necessary status or power to destabilize risk definitions (Hilgartner, 1992; Rip, 1988). In turn, SARF is more a model of effects that considers risk interpretations in relation to individuals' interpretations of risk from "amplification stations" rather than a framework that also contemplates how sense-making individuals or institutions might reshape risk definitions. While the ability to reshape and disseminate risk definitions may be limited to a select number of sense-making institutions or individuals (such as Congress and its members), the potential for destabilizing processes to occur in relation to any risk topic or event should not be overlooked, particularly when the issue at hand (such as climate change) highlights problems that raise just as

many political and economic questions as they do scientific or technical ones. With this in mind, I do not necessarily intend to advocate for a fundamental reshaping or expansion of the SARF framework, but to use the findings in this work to illustrate how previously overlooked contexts could raise new questions about risk communication that account for both the perception *and* production of risk messages.

Expressions of Credibility in Public-Facing Materials and Rituals of Sense-Making

Chapter 6 detailed expressions of credibility in knowledge claims of risk in addition to my comparison of two distinct Select Committee hearings. Contrary to the processes I observed in Chapters 4 and 5, public-facing materials seemed to contain expressions of credibility and knowledge claims that explicitly accounted for the partisan affiliation of the member or organization at hand (e.g., the majority or minority side of the Select Committee). For example, Democrats affiliated with the Select Committee, CSC, or the majority side of the Select Committee in general seemed more prone to express claims as those informed by science or empirical evidence. On the other hand, Republicans seemed to discuss climate risk in terms of emissions reductions in the U.S. or emergent energy technologies to decrease oil consumption—expressions that were justified by textual or visual affiliations of those claims with the institutional authority of Congress. Additionally, Democrats affiliated with the Select Committee and CSC seemed more willing to engage diverse channels—such as Instagram and Twitter—with which to express forms of credibility that relied on visual representations of members' personal experiences with climate phenomena, climate-related social movements, or members' interpersonal interactions with the audience through imagery of closed-door meetings or otherwise concealed perspectives.

My analysis of two hearings that covered distinct topics and witnesses revealed discursive themes similar to those I encountered in public-facing materials. The first hearing featured youth activists as witnesses who described their personal experiences with climate change as both a realized and existential threat. Democratic members seemed to focus on witnesses' experiences of these threats and future impacts of climate change, while Republican members seemed to emphasize trends of emissions reductions in the U.S. and the economic risks of implementing Democratic climate policies. The second hearing focused on renewable energy technologies and featured expert witnesses who held formal credentials related to the development and implementation of such technologies. While Democratic and Republican committee leaders did express some claims in their opening statements that were thematically similar to those in the previous hearing, discussions with witnesses focused on the technical complexities of renewable energy technologies and even performances of technical speak through which members expressed their knowledge of complex systems.

Expressions of credibility in public-facing materials and events are most notable in relation to the backstage concealed processes that result in those expressions. As I discuss in Chapter 7, legislative specialists seem to act as scientific/social investigators who seek to form robust understandings of technical issues in order to prescribe appropriate legislative and/or rhetorical responses that adhere to political norms. While the actions of Democratic and Republican legislative specialists are essentially indistinguishable during the investigative process, public expressions of claims those processes inform may be demarcated along partisan lines (Figure 7.1). Considering the emergence of public-facing partisan themes on the one hand and overlapping concealed sense-making procedures on the other hand suggests a culture of learning that may be specific to Capitol Hill. This builds on emerging literature in the domain of

civic epistemology that has identified cultural patterns of learning at national (Jasanoff, 2005) and subnational (Kreiss, 2017; Tironi et al., 2013) levels. Considering the potential for civic epistemologies within specific institutions or sites of sense-making could enhance the granularity with which patterns of learning are examined before, during, and after specific risk events or threats for which sense-making procedures are initiated.

Towards a Processual Understanding of Risk Communication on Capitol Hill

In this dissertation, I have examined how patterns of information source perceptions relate to social negotiations involved in the construction of climate-related knowledge claims about risk. I have also focused on the role(s) of credibility throughout this process as it relates to (a) information source perceptions of risk information, (b) social negotiations that inevitably involve information substance from credible sources, and (c) congressional members' expressions of credibility in knowledge claims of risk across various forms of public-facing materials. By doing so, I have sought to (1) link the cognitive (perceptual) and social (constructivist) perspectives of risk communication that have historically remained ensconced in disciplinary silos between socio-psychological and sociological approaches to risk, and (2) map these cognitive and social patterns of perception, negotiation, and performance to understand the extent to which sense-making procedures may be demarcated along partisan lines (i.e., as uniformly distinct between Democrats and Republicans). In turn, I have identified a site—congressional staffers affiliated with the Select Committee and CSC—where non-experts (in the normative sense of credentialed expertise) both receive and (re)produce definitions of climate risk that destabilize such definitions as they appear in source materials. This is not to argue that *all* staffers fundamentally alter *all* risk definitions with which they work (to whatever extent), but that processes of negotiation towards the development of knowledge claims expose risk

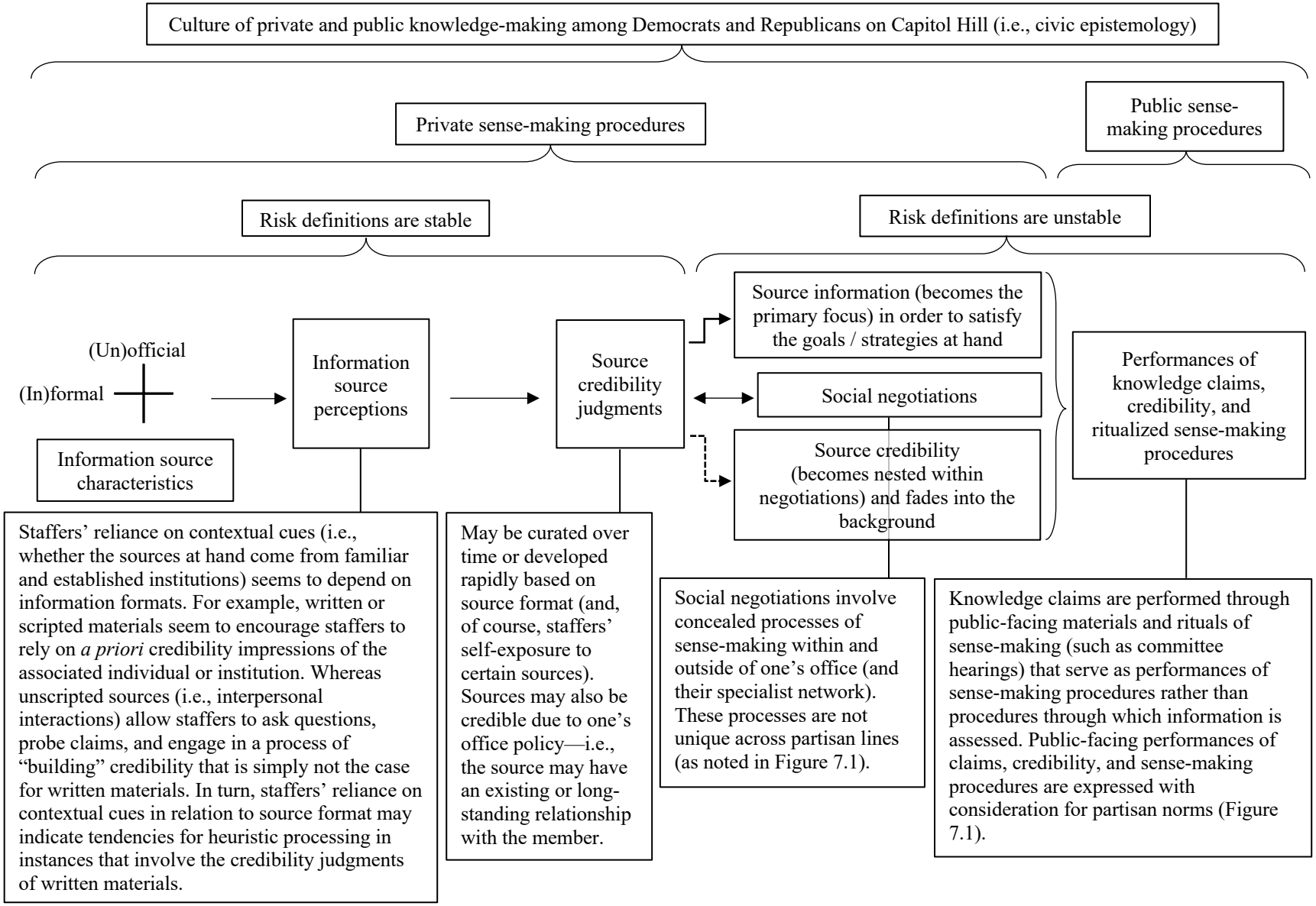
definitions to re-framings that may (a) diverge from those in their respective source materials and (b) undergo re-framing without the same epistemological controls (the peer-review process in particular) that are inherent to scientific domains in which expert risk claims are made.

Of course, motivations of concealed social negotiations that destabilize risk definitions are oriented towards the political or legislative goal(s) at hand. Just as sources are deemed credible based on contextual cues or through exchange-based relationships, they too become information palettes on which political or legislative strategies may be laid in the forms of public-facing knowledge claims or even rituals of sense-making. This explains both the overlapping and politically indistinguishable concealed sense-making procedures I encountered among legislative specialists affiliated with the Select Committee and CSC compared to the politically distinct credibility expressions and knowledge claims I encountered in public-facing materials and hearings. As argued in Chapter 7, this politically symmetrical private-public divide in sense-making procedures contributes to my suggestion of a civic epistemology that is specific to the site of Capitol Hill.

The processes of perception, negotiation, and performance detailed throughout this dissertation are summarized in Figure 8.1. As one may suspect, this model is an expanded and altered iteration from the sense-making model I offered in Figure 2.1 that was based on extant literature. Here, I account for patterns of perception and negotiation that involve distinct types of risk information sources and processes of credibility nesting that seem to occur as perceptions are formed and negotiations are initiated. Noted above these processes in Figure 8.1 are the points at which risk definitions are subject to re-framing (i.e., destabilization in relation to source materials) and the private-public divide that seems to distinguish overlapping sense-making procedures from politically distinct public-facing knowledge claims and performances of

learning. Considered in aggregate, the processes in Figure 8.1 seem to indicate the cultural parameters of learning (i.e., a civic epistemology) that manifest in (and may be unique to) this particular site.

Figure 8.1 Revised Integrated Model of Risk Sense-Making on Capitol Hill



As noted in the introduction of this study, issues of risk raise questions that may be addressed from various disciplinary and epistemological traditions. For risk communication in particular, questions about the perception *and* production of risk messages or knowledge claims have highlighted a notable divide between studies of message effects on the one hand and analyses of risk definition construction on the other hand (c.f., Hilgartner, 1992; Peters et al., 1997). While both sides of the proverbial coin seem concerned with forms of risk communication, they each inhere their own disciplinary associations, norms, and professional standards that seem to reify the boundaries that both keep these perspectives separate and act as parameters with which to reinforce the legitimacy of certain focused knowledge-making practices within the academy (Gieryn, 1983). Rickard (2019) uses the language of Cox and Pezzullo (2016) to examine the socio-psychological and sociological divide as one between pragmatic (i.e., effects-driven) and constitutive (i.e., constructivist) approaches towards risk communication that, while embedded in their disciplinary traditions, could collectively offer holistic perspectives not ordinarily achieved as separate forms of inquiry. To do this, Rickard (2019) argues one approach could involve the emergence of team-driven research on "wicked problems" (such as ocean acidification) that transcend pragmatic and constitutive divides in favor of findings that may "assist various stakeholders, such as local residents or natural resource managers, in making complex, value-laden decisions involving the management of environmental and human health risks" (p. 9). This sort of focus on discrete environmental issues may offer contexts of issues in which considerations are needed for both the design of risk messages and individuals' experiences, knowledge, or interpretations of such risks from their own perspectives (Rickard, 2019).

While the study of "wicked problems" may offer contexts in which to cut across disciplinary distinctions, I contend it is not the only approach in which to advance transdisciplinary studies of risk communication. Institutions and organizations such as the Select Committee and CSC on Capitol Hill provide one venue in which processes of pragmatic and constitutive risk communication occur in tandem and with potential impacts on political discourses and legislation. Indeed, practical but transdisciplinary work towards the end of informing the decisions of local stakeholders and managers of environmental initiatives may serve to enhance understandings that Árvai (2014) would classify as "effective" risk communication. Yet, sites that pose distinct social, environmental, and policy impacts are also engaged in procedures of risk communication that should be examined to not only consider how such processes inform our own understandings of disciplinary gaps, but how such institutions involved in risk communication relate to the processes they seek to affect. Of course, with such directives, research dilemmas may shift from questions of funding or collaboration to those of access and procedures of "studying up" (Nader, 1972). No doubt, concealed spaces of institutions or organizations engaged in risk communication processes are difficult to penetrate even indirectly, as one might suspect given my experiences of accessing staffers for this study noted in Chapter 3. I could also imagine the difficulty of studying institutions of risk communication a pursuit some might find questionable in relation to the uncertainties of data one could or could not collect. Nonetheless, if access is granted, researchers could examine existing sites of sense-making that inhere concurrent processes of perception and negotiation that have otherwise remained more conceptually distinct rather than overlapping both in theory and practice.

Considerations for the Influence of Congress

As noted earlier, I find it inevitable that some readers (however small the number) may consult this work in the effort to enhance their understandings of Congress or initiatives on Capitol Hill. Perhaps one is in charge of a new government relations team who is planning meetings with members and staff for an upcoming trip to the nation's capital; or, perhaps one is interested in advancing their particular cause or raising congressional awareness of an issue that may not be the primary focus of lawmakers. Whatever the motivation may be, I find it most helpful to make explicit the practical implications of this work rather than require readers to decode my findings on their own, and in turn, subject themselves to potential misinterpretations or misunderstandings that could result in unintended outcomes. In turn, I provide overarching key points for advancing initiatives on Capitol Hill that are based on my findings from this work and my interactions with staffers before, during, and after the data collection process. I have situated these key points in three broad categories that collectively comprise of "effective" advocacy on which I expound below: (1) relational, (2) substantive, and (3) aesthetic. To note, I consider "effective" advocacy to be any and all actions from which the advocator achieves their desired legislative change (or some degree of it).

Relational effectiveness. Relational effectiveness comes from the development of rapport with the staffers or members overseeing the legislation (or potential legislation) one seeks to affect or have introduced in the House or Senate. Legislative assistants are the primary gatekeepers of information between issue advocates and members, and often the primary individuals who decide whether substantive changes are made to forthcoming legislation. As such, the advocator should seek to make themselves familiar with the legislative staffers who are situated in the offices they find most appropriate to help accomplish their strategic goals. While

staffers seem to assign greater degrees of credibility to sources they consider familiar and established, one's affiliation with a familiar or established source will not necessarily be sufficient to garner immediate impressions of credibility; rather, Capitol Hill functions on interpersonal trust that is facilitated through relationships and repeated meetings over time. In turn, the advocator must begin holding meetings with staffers and plan to do so over the coming months if not years.[22]

Substantive effectiveness. Frequent interaction must be accompanied by the provision of "substantive" information. Perhaps the advocator is able to demonstrate community support for some initiative or provide evidence of potential local impacts from proposed legislation (among many other possibilities). In general, substantive information should be both compelling and helpful: it should make staffers' jobs easier and their reasoning for particular change(s) more (not less) compelling.

From a practical standpoint, the advocator should seek to make their information viewable on a single sheet of paper they can leave with whom they meet. While it may be tempting to simply email these documents to staffers *en masse* across various offices, it is best to take a targeted approach where the advocator solicits only those whose districts are affected in the most pronounced or severe ways. For broad issues such as "climate change," the advocator could either narrow their focus to address issues under this umbrella or contact staffers who work for committee leaders whose jurisdiction oversees (and holds hearings about) climate change more generally and specific issues thereof.

Aesthetic effectiveness. Provisions of substance should not forgo considerations of the aesthetics with which substantive information is delivered. Just as one should expect to present

[22] The operational process for contacting specific congressional offices to obtain names of key staffers (and, in turn, their email addresses) is detailed on page 67 along with the standard template for email addresses.

themselves in professional attire for meetings on Capitol Hill, so too should they be mindful of the stylistic choices they make to convey their information or cause. While topical specialists, legislative assistants are also particularly sensitive to the terms used to describe various issues and the potential political affiliations those terms may signify. For example, Republican staffers may be more apt to discuss environmental issues rather than climate change issues, while Democrats may be the opposite (of course, depending on the office at hand). Similarly, aesthetic choices for how one conveys their information should abide by the "less is more" adage. This will ease the energy needed to interpret one's information while conveying the advocator's understanding of staffers' limited time and bandwidth.

Considered together, these three considerations for the influence of Congress may be laughably general or raise more questions than answers. For some, they may be helpful and provide key reminders for those in the midst of developing materials or holding meetings on the Hill. What may become most salient for many readers, however, is the technical and artistic complexity involved in the influence of legislative processes that consumes sizable portions of various budgets among public and private entities alike. No doubt, significant resources are needed to build rapport, hold meetings, deliver materials, and advance causes with any degree of potency. Yet, this should not discourage anyone from dipping their toes in the waters of the policy process.

Strengths of the Current Study

There are several strengths of this work that involve not only contributions to risk communication research, but burgeoning efforts of social scientists to understand the use of scientific or technical information on Capitol Hill. As noted in the initial chapter of this work, researchers (political scientists in particular) have long questioned the use of information on

Capitol Hill in terms of staffers' selection of information sources (e.g., Bauer et al., 1972; Bimber, 1996; Hojnacki & Kimball, 1998, 1999; Malbin, 1980; Smith 1988; Whiteman, 1995). Yet, less attention has been paid to questions of *why* or *how* information moves through concealed processes of sense-making in the legislative process. In turn, some scholars have begun to focus specifically on the use of science in lawmaking on Capitol Hill but with questions focused on policy outcomes relative to (scientific) information inputs (Akerlof, 2018). While notable given its focus on the use of scientific information, such work has not explicitly considered the underlying social/political tensions that result in the outputs on which focus is usually directed, or even how notions of credibility and objective "truth" may be regarded as constructs relative to political discourses or regionally-focused issues for both Democrats and Republicans. As noted earlier in this work, partisan tensions seem to serve more as discursive filters through which staffers examine scientific issues, which seems to contribute to emerging conversations about uses of research in the legislative process.

Another notable strength of this work is its contribution to risk communication through an analysis of social processes that involve both perceptions and negotiations of knowledge claims about climate-related risks. Previous studies have examined contexts such as national parks or pesticide applicators to consider how forms of risk communication flow between and among non-scientists who nonetheless hold direct experience with the very risks they discuss with others (Rickard, 2011, 2012). And earlier work has sought to connect the individual and social processes by which risk perceptions are formed and "amplified" through social interactions or exposures to media (among others) (Kasperson et al., 1988; Lewis & Tyshenko, 2009; McComas et al., 2010). Yet, studies have not necessarily considered the contexts in which risk information may be both perceived and (re)shaped towards the end of affecting some form

of social control (such as policy), and in turn, knowledge (Hilgartner et al., 2015; Jasanoff & Kim, 2015), perhaps in part due to the limited contexts in which these processes may occur. While congressional staffers are admittedly difficult to reach within a difficult-to-penetrate site of knowledge-making, they provide new insight into the field of risk communication that could spur similar ambitious studies of sense-making institutions. Most notable from this work is the relationship between individual perceptions and processes of credibility nesting towards the end of developing public-facing knowledge claims and rituals of sense-making that consider their affiliated partisan norms.

A final strength of this work is the ethnographic approach I applied to not only examine staffers on Capitol Hill but the efforts I expended to access these individuals in the first place. Much work that takes place within this context and among congressional staffers seems to overlook the rather laborious and tenuous procedures by which one is granted access (or even a glimpse) into the inner sanctums in which concealed processes of sense-making occur. Reports of staffers' impressions of certain information sources or forms of science too often note their distribution of a survey or use of an in-person interview without accounting for the procedures that granted them such access. One may even find themselves puzzled to find some researchers are simply provided "office space" in the Capitol to complete their work (Whiteman, 1995, p. x). Taking an ethnographic approach implies thick description not only of the phenomena I observed towards the end of building theory, but my relationship to the research site and the individuals with whom I interacted in it. In turn, this work not only contributed to theory, but shed light on the procedures by which future researchers may access Capitol Hill for their own work.

Limitations

Of course, the strengths of this work are not without its limitations, and several are worth noting here. First, this study used interviews conducted in a rather narrow frame of time—i.e., it was cross-sectional. As such, findings from this work do not account for possible changes that may occur over time, or contrarily, the resilience of a distinct sense-making culture that remains pervasive even as staffers rotate out of their positions into the private sector. While this work does consider public-facing materials from two congressional sessions, it is also a rather narrow timeframe in the broader context of sense-making on Capitol Hill.

Second, this study relies heavily on interview data to assess information source perceptions and processes by which staffers negotiate knowledge claims of risk. Overlapping patterns of reported processes of perception and negotiation suggest that staffers were "honest" in their descriptions of concealed sense-making procedures, but reports based on memory leave room for error and lost detail that can only be captured from in-person observations of phenomena as they occur in the moment, and/or repeated forms of these observations over time. Unfortunately, this study was not equipped with the necessary resources or access to obtain this level of data, so results should be regarded as a formative step on which future studies might build with enhanced levels of access.

Third, this study focused on a narrow sample of two bipartisan climate-related organizations on Capitol Hill that may not represent the views of all staffers (and their offices) across other topic areas. As noted in the initial chapter of this work, climate change poses questions of scientific and technical complexity that have been interpreted through partisan lenses. It raises questions that seem to tear at the fabric of politics and science from which observations between disparities may be made. Given my focus on climate change in particular

to examine patterns of sense-making as they relate to politics, it remains unclear if sense-making procedures as they emerged in this study might be similar across other congressional organizations and topics.

Fourth, while I consider my ethnographic approach a unique strength of this work, I must also acknowledge the inherent limitations of generalizing from a limited number of interviews and a purposive sample of public-facing documents. As noted in Chapter 3, I approached this work using the lens of Guba (1981) to derive analogs to the "rationalistic" concepts of reliability and validity, which include (a) credibility, (b) transferability, (c) dependability, and (d) confirmability. Rather than advocate for (or develop findings amid) expectations of generalizing to other populations, I have sought to focus on a narrow sample from which findings may be described in this context and potentially transferred to other groups while considering the qualifications from which the current data was collected. In this light, the findings from this work remain deeply embedded in (and even inseparable from) the context in which they were found (Yin, 2009); yet, they still shed light on previously concealed processes that may inform future studies of risk communication on Capitol Hill or other distinct contexts in which risk messages are both interpreted and developed.

Recommendations for Future Research

The findings from this work raise several questions for future studies that may either connect socio-psychological and sociological processes of risk communication or further explore processes of risk and science communication on Capitol Hill. The first of such questions seems related to the process of assessing credibility and credibility nesting as a form of individual judgment that connects source perceptions with social negotiations. In contexts where knowledge claims are both interpreted and developed, such as scientific institutions or government entities,

future studies may seek to further explore whether and to what extent credibility inheres contextual characteristics that deviate from parameters of previous work (e.g., Meyer, 1988) or whether credibility nesting is a process that manifests as knowledge claims are developed (and potentially negotiated with collaborators). Just as knowledge claims are negotiated, risks may be (re)framed and redefined, and further studies focusing on this process could further elaborate on how this occurs either between staffers on Capitol Hill or between individuals situated in other sense-making institutions.

While this study considered the relationship between information source characteristics and staffers' reliance on contextual cues to make credibility judgments, this work did not probe for further evidence to support the notion that reliance on contextual cues reliably indicates the use of heuristics. Future case studies of sense-making institutions might need larger samples and alternative approaches (such as surveys and the analysis of quantitative data) to examine the relationship between information source characteristics and forms of cognitive processing, but such work could reveal additional nuance about the role of source characteristics that I was not able to fully capture here.

Specialist networks emerged as a key component involved in staffers' evaluations of credible sources and their development of knowledge claims about climate change risks. While these networks were not used on every occasion, they were used as (a) vetting mechanisms to assess the credibility of unknown sources, (b) conduits for bipartisan collaboration, and (c) sources of specialized information from expert sources (such as lobbyists). Little work has examined the role of these specialist networks in staffers' legislative work on Capitol Hill, and future studies could take various approaches to examine how exchange-based relationships operate in this context—both with staffers in other offices and external expert sources (such as

lobbyists and key stakeholders). Indeed, trust and the perception of mutual benefits seem to motivate staffers and external sources to participate in these voluntary networks, but future work could examine and map these information networks across offices and the extent of their permeability across partisan lines. While this sort of work might venture into the space of social network analysis (Kadushin, 2012), it could offer insight on the diffusion of norms (and perhaps a culture of learning) on Capitol Hill that seems to impose the parameters in which risk claims are developed.

Finally, additional analyses in the domain of risk communication should continue to examine processes of sense-making on Capitol Hill but with a broader focus across topic areas and even chambers. Processes of learning in the House may not translate to those in the Senate, and it is unclear whether the trends observed here are even consistent across other topic areas. Towards the end of continuing to explore the conceptual bridges that link the socio-psychological and sociological approaches to risk communication, scholars should view Capitol Hill as one context in which these theoretical questions may be answered and continually explored.

Concluding Remarks

The late German Chancellor Otto von Bismarck once remarked that "laws are like sausages. It's better not to see them being made." Implying a sort of messiness or even nastiness to the concealed processes of lawmaking (and similarly, sausage-making), I suspect the late Chancellor would offer a similar quip for the procedures involved in making sense of complex scientific issues (such as climate change) on Capitol Hill. As one might suspect based on the findings of this work, processes of understanding complex scientific issues in political environments are not necessarily simple and perhaps more metaphorically aligned with the

amalgams of meat (or information) that come to resemble sausages on the one hand and knowledge claims of risk on the other hand. Yet, procedures that may appear scrappy, random, or even distributed across partisan lines may be observed more as recognizable patterns of perception and negotiation that are primarily a function of local culture. While the patterns in this work seem to indicate the parameters of a culture of sense-making on Capitol Hill, they also shed light on the relationship between perceptions of risk messages and the construction of risk claims that have otherwise remained conceptually distinct and disparate across disciplinary boundaries. In turn, this work is one step towards uncovering the relationship between the perceptual and social processes of risk communication just as it offers a formative perspective on which future studies may build.

APPENDIX A

RECRUITMENT EMAILS

As noted in Chapter 3, I used slightly different language in recruitment emails for Democrats and Republicans so as to proactively ease any suspicion that could arise from my use of certain terms that are somewhat politically charged. The email below was distributed to Democratic staffers, while the subsequent email was distributed to Republican staffers.

FROM: Jason R. Holley
SUBJECT: Quick question

Hi [NAME],

I hope your week is going well.

I'm reaching out to virtually introduce myself and ask a quick question. My name is Jason Holley. I'm currently finishing my PhD from Cornell and writing my dissertation on how staffers assess information sources about climate change issues and risks.

Given your work with Rep. [NAME] and the [Select Committee / Climate Solutions Caucus], I thought you'd be a great person to talk to. Are you available sometime in the near future to discuss your experiences on the Hill? To note, everything is anonymous.

I live in DC so I'm happy to meet in person or discuss via phone. I look forward to hearing from you.

Best,

Jason

Jason R. Holley, PhD Candidate
Cornell University
Department of Communication
e: jrh374@cornell.edu

FROM: Jason R. Holley
SUBJECT: Quick question

Hi [NAME],

I hope your week is going well.

I'm reaching out to virtually introduce myself and ask a quick question. My name is Jason Holley and I'm a former policy intern for the House GOP Conference (when it was led by Rep. McMorris Rodgers). I'm currently finishing my PhD from Cornell and writing my dissertation on how staffers assess information sources about environmental issues.

Given your work with Rep. [NAME] and the [Select Committee / Climate Solutions Caucus], I thought you'd be a great person to talk to. Are you available sometime in the near future to discuss your experiences on the Hill? To note, everything is anonymous.

I live in DC so I'm happy to meet in person or discuss via phone. I look forward to hearing from you.

Best,

Jason

Jason R. Holley, PhD Candidate
Cornell University
Department of Communication
e: jrh374@cornell.edu

APPENDIX B

INFORMED CONSENT

My name is Jason Holley, a graduate student in the Department of Communication at Cornell University. This research study examines how members and staffers develop statements about science and risk in the context of the [Select Committee on the Climate Crisis / Climate Solutions Caucus]. This research will consider how participants individually assess information sources and how such assessments relate to social interactions with colleagues.

The interview will take anywhere from 25 to 60 minutes.

Your decision whether or not to participate will not affect your current or future relations with Cornell University, nor any organization you're affiliated with. Your participation is voluntary, and you may refuse to participate before the interview begins, withdraw, or ask questions at any time, and/or skip any question with no effect.

Your responses to this interview will be kept anonymous in the final report, with exception to the political party with which you are affiliated. Research records of this interview will be securely stored on the Principal Investigator's (Jason Holley) password protected computer. Audio recordings and transcriptions of the interview will be destroyed when their use is no longer needed.

I would like your permission to audio record this interview to ensure we represent your responses accurately. You may still participate in the interview if you are not willing to be audio recorded.

- Do you have any questions before we begin?
- Do you consent to being interviewed?
- Do you consent to being audio recorded?

[If additional information is requested]

The principal investigator conducting this study is Jason Holley, a graduate student in the Department of Communication at Cornell University. He can be reached by email at jrh374@cornell.edu or by phone at 702-839-8191.

If you have any questions or concerns regarding your rights as a subject in this study, you may contact the Institutional Review Board (IRB) for Human Participants at 607-255-5138 or access their website at http://www.irb.cornell.edu. You may also report your concerns or complaints anonymously through Ethicspoint online at www.hotline.cornell.edu or by calling toll free at 1-866-293-3077. Ethicspoint is an independent organization that serves as a liaison between the University and the person bringing the complaint so that anonymity can be ensured.

APPENDIX C

SEMI-STRUCTURED INTERVIEW GUIDE

Outline of Semi-Structured In-Depth Interview Questions

Each question listed below serves as a general guideline to elicit participants' assessments of source credibility and how such assessments relate to social interactions with colleagues in the process of developing knowledge claims about climate risks. Subsequent answers to a given prompt may deviate from this outline, and as such, it serves primarily as a framework for discussion.

Source credibility (perceptions of information sources)

1. When conducting research for the [Select Committee / Climate Solutions Caucus], what makes an information source trustworthy or credible?

    a. How important are certain characteristics (e.g., the name of an institution, whether the message is from a fellow colleague on Capitol Hill or a lobbyist, etc.) when assessing the credibility of an information source?

2. What types of information sources do you consult (or are open to consulting) when conducting research on topics related to the [Select Committee / Climate Solutions Caucus]?

    a. Are there certain information sources that lead you to think carefully about their validity or usability?

        i. What are those sources? (i.e., where do they come from? News site, lobbyist? etc.)
        ii. What characteristics of the source(s) cause you to think carefully about using them?

    b. Are there certain information sources that you find highly trustworthy or credible?

        i. What are those sources? (i.e., where do they come from? News site, lobbyist? etc.)
        ii. What makes those sources so trustworthy or credible?

3. Are there any politically-related sources that you find credible or trustworthy?

    a. What are those sources? (i.e., where do they come from? News site, lobbyist? etc.)
    b. What makes those sources so trustworthy or credible? Does political affiliation matter?

How perceived credibility relates to social interactions

1. How do you discuss credible vs. non-credible sources with colleagues when researching ideas, strategies, or developing public-facing statements with colleagues?

    a. What sort of information source characteristics are discussed in these interactions?

2. To what extent are your impressions of a source's credibility important in discussions of ideas, strategies, or public-facing statements with colleagues?

3. How do you discuss information sources with colleagues when discussing ideas, strategies, or public-facing statements?

4. What sorts of processes are involved when developing strategies or public-facing statements and other materials?

Additional information (if necessary)

1. Overall, what else makes an information source usable?

2. Do you have any other insights about using information or discussing sources with colleagues we haven't discussed?

[Thank participant; answer any additional questions; debrief]

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