

Challenging Global Warming as a Social Problem: An Analysis of the Conservative Movement's Counter-Claims

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The sociological literature on global environmental change emphasizes the processes by which the problem of global warming is socially constructed. However, the opposing efforts to construct the "non-problematicity" of global warming advanced by the conservative movement are largely ignored. Utilizing recent work on framing processes in the social movements literature and claims-making from the social problems literature, this paper analyzes the counter-claims promoted by the conservative movement between 1990 and 1997 as it mobilized to challenge the legitimacy of global warming as a social problem. A thematic content analysis of publications circulated on the web sites of prominent conservative think tanks reveals three major counter-claims. First, the movement criticized the evidentiary basis of global warming as weak, if not entirely wrong. Second, the movement argued that global warming will have substantial benefits if it occurs. Third, the movement warned that proposed action to ameliorate global warming would do more harm than good. In short, the conservative movement asserted that, while the science of global warming appears to be growing more and more uncertain, the harmful effects of global warming policy are becoming increasingly certain. In order to better understand the controversy over global warming, future research should pay attention to the influence of the conservative movement by identifying the crucial roles of conservative foundations, conservative think tanks, and sympathetic "skeptical" scientists in undermining the growing scientific consensus over the reality of global warming.

In the past decade, global climate change became a widely accepted social problem. Also referred to as global warming or the anthropogenic greenhouse effect, global climate change is the discernible increase in mean global temperature resulting from the release of greenhouse gases produced by human activities. Awareness of this global threat reinforced public concern about environmental problems and thereby provided environmental activists, scientists, and policy-makers with new momentum in their efforts to promote environmental protection. Not surprisingly, opponents of these efforts mobilized in recent years to mount intense opposition to calls for major international action to prevent global warming such as treaties designed to reduce carbon dioxide emissions (Brown 1997; Gelbspan 1997). The purpose of this paper is to examine this growing opposition, which has heretofore been relatively ignored.

In particular, we will explore the role played by the American conservative movement in challenging the legitimacy of the climate change problem. It will be shown that core organizations in the conservative movement mobilized in recent years as a *countermovement* opposing the efforts of the environmental movement and its allies to establish the seriousness of global environmental problems. Specifically, we report the results of a content analysis of publica-

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tions concerning climate change distributed via the Internet sites of key conservative think tanks, organizations that have influenced policy-making in areas ranging from health care to taxation. This analysis examines the nature of the counter-claims used by the conservative movement in its efforts to delegitimize the claim that global warming is a serious threat deserving governmental action. While there is a large body of literature on the role of framing in social movements and a rapidly growing body of literature on countermovements, there is, as yet, very little work on the framing processes of countermovements. Our analysis employs two existing typologies of counter-rhetoric in an effort to demonstrate the utility of examining the framing processes employed by countermovements.

The existing body of social scientific literature on global warming has been dominated by a social constructionist approach (Dunlap and Catton 1994, p. 24; Rosa and Dietz 1998, p. 440), most particularly, that of a social problems orientation to claims-making. After reviewing these studies, we turn to a brief theoretical discussion of the parallels and divergences between a social problems orientation and a social movements orientation, comparing their respective concepts of claims and frames. We argue that, in order to understand the global warming controversy in the United States, it is necessary to supplement the social problems' focus on claims-making with attention to framing processes and movement/countermovement interaction.

Legitimation of Global Warming as A Problem

In the early 1990s, social scientists began to study how social and political forces facilitated the construction of global warming as a legitimate social problem requiring ameliorative action. In explaining the variation in public attention to the issue of global warming, most early studies in the social sciences either utilized Downs' (1972) issue-attention cycle or Hilgartner and Bosk's (1988) public arenas model. The more robust findings that emerged from these studies include the following: First, media coverage of global warming was minimal prior to 1988 (Mazur and Lee 1993, p. 695; Miller, et al. 1990, p. 29), but soon peaked between the middle of 1989 and early 1990 (McComas and Shanahan 1999, p. 43; Trumbo 1995, p. 31; Williams and Frey 1997, p. 289). Claims-makers were able to achieve this increased media attention to global warming for several reasons: (1) through its timely connection to more popular issues such as nuclear winter and ozone depletion (Mazur and Lee, p. 709; Williams and Frey 1997, p. 291), (2) because of the extreme drought during the summer of 1988 (Mazur and Lee, p. 709; Ungar 1992, pp. 491-492), and (3) because of James Hansen's dramatic Senate testimony in June 1988 attributing the abnormally hot weather plaguing our nation to global warming (Mazur and Lee, p. 698; Miller, et al., p. 35; Trumbo 1995, p. 25).

Early news stories on global warming relied heavily upon scientists as sources. Over time, however, economic and political specialists edged out scientific experts as the dominant sources in these news stories (Lichter and Lichter 1992, p. 3; Miller, et al. 1990, p. 34; Trumbo 1996, p. 277; Wilkins 1993, p. 78). With this shift in sources, the news media altered its focus from stories about global warming science to stories about policy debates regarding regulations and treaties (Lichter and Lichter, p. 2; Trumbo 1995, p. 26). At the same time, counter-claims began to emerge with the growing concern over the economic costs of binding action and the ascent of the Bush administration (Mazur and Lee 1993, p. 699; Williams and Frey 1997, p. 298). In general, support for the reality of global warming was higher in news stories than in opinion-editorial articles, where the ideas of the few key scientists skeptical of global warming science flourished (Wilkins, p. 79).

As the proponents of global warming theory eventually lost media dominance, the "skeptics" and politicians critical of the scientific evidence gained more visibility in the media (Lichter and Lichter 1992, p. 3; McComas and Shanahan 1999, p. 48; Wilkins 1993, p. 78). The prevalence of the "dueling scientists scenario," the tendency of most science-related news articles to cite scientists with opposing views, probably contributed to this shift in news coverage of global

warming. Many researchers assert that the rising skepticism also reflected the entry of political sources, especially members of the Bush administration, into the media debate (Lichter and Lichter, p. 3; McComas and Shanahan, p. 51; Nissani 1999, p. 36; Trumbo 1995, p. 26; Ungar 1992, p. 494). Media attention eventually began to decrease after 1990 to levels lower than the peak coverage in 1989, but higher than the level prior to 1988 (Ungar, p. 493; Williams and Frey 1997, p. 298), consistent with the latter stages of the public arenas model and the issue-attention cycle.

We believe that this existing sociological research on global warming from a social problems orientation has produced an inadequate understanding of the global warming controversy. Since most of the studies noted above ended in the early 1990s, concluding that global warming was completing the requisite stages of both the public arenas model and the issue-attention cycle, they are unable to shed light on more recent developments. Also, while the studies do track the claims regarding global warming via the media, they nevertheless fail to systematically address the historical context of the social actors involved in the problem definition process. Furthermore, the studies only occasionally acknowledge the existence of counter-claims, while never really dealing with the content or sources of these counter-claims. This is symptomatic of the more general asymmetric focus on the social construction of a condition's problematicity at the expense of ignoring what Freudenburg (2000) calls the social construction of its "non-problematicity."¹ In particular, Freudenburg argues that analyzing efforts to define issues as non-problematic provides insights into the use of power by dominant interests (also see Schnaiberg 1994: 39–42).

We think the dearth of work on the social construction of the non-problematicity of global warming limits our sociological understanding of the role of power in struggles to place global warming on the policy agenda. For instance, Ungar (1998) recently argued that the substantial controversy over global warming is due to it not being as marketable as the more successfully defined problem of ozone depletion, while the studies noted above claim global warming merely ran its course as a social problem and now competes with more pressing problems for attention. Unfortunately, these accounts fail to acknowledge the effects of the powerful opposition that has arisen to challenge the legitimacy of global warming. Thus, following Freudenburg (2000), we believe that an adequate account of a social problem's "career" should address efforts to construct its non-problematicity, as well as those to construct its problematicity. To overcome the limitations of existing studies analyzing the construction of global warming as a problem, we shift to a social movements orientation and examine the framing activities of a countermovement that challenges the legitimacy of global warming's problem status.

Social Problems and Social Movements

In the past, some sociologists attempted to bridge the divide between the social problems literature and social movements literature. Bash (1994, 1995) writes extensively on the differences between these two orientations. He argues that the sociology of continental Europe adopted a social movements orientation able to accommodate both a macro- and micro-level focus on social processes. He believes that historicity and broad contextual analysis are integral to this orientation. On the other hand, Bash (1994, p. 257) sees the dominant thrust of sociology in the United States as having defined its vital concerns as social problems that "appeared to crop up one by one and each, apprehended individually, begged for expeditious case-by-case resolution." This results in a relatively ahistorical approach that leads to micro-level situational analyses.

1. Freudenburg (2000, p. 106) uses the term problematicity to mean a condition's status as a legitimate social problem.

Regardless of these differences, several theorists have attempted to synthesize the social problems and social movements orientations. In the first major effort to bridge these two literatures, Mauss (1975) suggests that the claims-making approach of social problems theory is best understood from a social movements perspective. Since claims-making behavior typically reflects the actions of social movement participants, social problems should simply be seen as varieties of social movements. Troyer (1989) also ponders the necessity of maintaining two distinct bodies of literature if both might actually be studying the same phenomena. He found extensive overlap between social movement approaches and social constructionist approaches in the social problems literature, pointing out that both give theoretical attention to the meaning construction process and both focus on the interaction between claimants and their target audiences (pp. 54–55). Troyer eventually erred on the side of caution in his conclusion: “In the final analysis, the idea that one approach encompasses and subsumes the other seems premature and shortsighted” (p. 56).

While the concept of “claim” is central to recent work in the social problems orientation, the concept of “frame” is central to recent work in the social movements orientation. The concept of claim is derived from Spector and Kitsuse’s (1977) classic exposition of the constructionist approach to social problems, which became dominant in social problems research.² The concepts of claim and claims-making now are essential to social problems research (see e.g., Loseke 1999). The concept of frame is most extensively developed in Snow, et al. (1986).³ The concepts of frame and framing processes are now popular in social movements research (see e.g., Benford and Snow 2000).⁴

On the surface, the concepts of claim and frame appear to be quite similar. Both are primarily seen as discursive tools of social actors. Because of this, they are often interpreted as text and analyzed methodologically as rhetorical argumentation. Also, both refer to the everyday activities of social problem definers or social movement participants. As such, they are both commonly associated with perceived injustices and/or grievances. Thus, claims and frames are often described as symbolic challenges to the dominant discourse of a society. While these two concepts may seem similar in some respects, there are, nonetheless, important differences between them. In the spirit of Bash (1994, 1995), we believe that a brief explication of these differences can shed light on the divergence between a social problems perspective and a social movements perspective.⁵

First, claims are identified as specific products of social problem definers and they are conceptually integrated with the internal cycle of a social problem. As such, the concept’s narrow scope contributes to theoretical overemphasis on the ahistorical and internal characteristics of each individually recognized social problem at the expense of any systematic examination of the larger historical and social environment in which these definers operate (Bash 1994). Obviously, social actors defining a condition as problematic and thus seeking res-

2 In their work Spector and Kitsuse (1977) write the following: “The activity of making claims, complaints, or demands for change is the core of what we call social problems activities. Definitions of conditions as social problems are constructed by members of a society who attempt to call attention to situations they find repugnant and who try to mobilize the institutions to do something about them. . . . Claims-making is always a form of interaction: a demand made by one party to another that something be done about some putative condition. A claim implies that the claimant has a right at least to be heard, if not to receive satisfaction” (p. 78).

3 In this work, Snow, et al. (1986) write the following: “The term ‘frame’ (and framework) is borrowed from Goffman (1974, p. 21) to denote ‘schemata of interpretation’ that enable individuals ‘to locate, perceive, identify, and label’ occurrences within their life space and the world at large. By rendering events or occurrences meaningful, frames function to organize experience and guide action, whether individual or collective” (p. 464).

4 In our discussion of frames, we concentrate solely on the most prominent intellectual tradition in the literature—that of Snow and his colleagues. A reader desiring a more comprehensive summary of framing should consult Benford and Snow’s (2000) recent overview of the social movements literature on framing processes.

5 Because each concept is embedded within a different theoretical orientation, we should be on guard against the casual substitution of one for the other that seems to be occurring with greater frequency in recent works (e.g., Brulle 1994, Meyer and Staggenborg 1996).

olution, are simultaneously constrained and enabled by existing structures within the larger social environment. The theoretical legacy of the concept of frame allows for a more insightful analysis of phenomena external to this original social movement or group of claims-makers. In particular, it allows for a more complete examination of the historical and social context in which movement activists mobilize. Williams' (1998) discussion of frames in his examination of the role of power in the social construction of environmental problems is a promising example of how this concept helps transcend a narrow focus on social problem definers by facilitating consideration of their external environment.

Second, the concept of claim seems to necessitate, or at least overemphasize, the agency of individual actors. A quick perusal of the social problems literature suggests there is little recognition, or at least scant analysis, of the constraints social problem definers face in claims-making (Loseke 1999). Indeed, claims are regularly construed as the direct product of a sole entity—the claims-makers. On the other hand, the concept of frame lends itself to efforts that take account of structure, while still assuming some level of agency on the part of social actors. The work of Snow and colleagues perhaps best characterizes this theoretical consideration of structure, as well as agency. Benford and Snow (2000) emphasize that frames are developed, generated, and elaborated through interactive and contested framing processes involving multiple stakeholders. Snow, et al.'s (1986) identification of the strategic frame alignment processes of bridging, amplification, extension, and transformation points out how movement activists are constrained and enabled by existing cultural frames. Furthermore, Snow and Benford (1992, p. 142) argue that the master frames that transcend different movements are integral to the emergence and course of larger cycles of protest.

Finally, as it has been employed in the literature on the social construction of social problems, the concept of claim is quite closely tied to characterizations of the first, and sometimes second, face of power (Lukes 1974). That is, with claims-making, the explicit emphasis is on observable behaviors and the direct confrontation of competing interests. On the other hand, the concept of framing invokes notions of the third face of power by specifying the ideological processes of cultural naming. Again, Williams' (1998) discussion of how frames of environmental problems often challenge the cultural stock of knowledge and, therefore, draw attention to the hegemonic activities of the powerful is a recent example of the potential theoretical depth of the framing concept. Thus, the framing concept provides more leverage for understanding the underlying structures of power in which social problems discourse is embedded.

We are *not* suggesting that an emphasis on framing processes derived from the social movements literature should replace the emphasis on claims-making activities derived from social problems theory in the analysis of social problems. Rather, to the extent that frames often contain claims and framing processes involve claims-making processes (Benford and Snow 2000, pp. 119–120), we are arguing that attention to framing processes provides a necessary supplement to an emphasis on claims-making activities for enhancing our understanding of social problems. While future work should aim at synthesizing the conceptual strengths of framing processes and claims-making activities, we offer a small step in this direction by illustrating how such an approach may grant us more theoretical purchase in the examination of one social problem. Thus, to overcome the limitations of the past sociological work on global warming guided by a social problems perspective, we employ recent social movements work on framing processes and movement/counter-movement interaction to guide our analysis of the conservative movement's counter-claims about this problem.

We now turn to a brief discussion of anti-environmental opposition before specifically addressing the recent mobilization of the conservative movement to oppose the legitimacy of global environmental problems. We are now able to conceptualize the recent global warming controversy in the United States as a framing contest (Benford and Snow 2000) between the environmental establishment and, among others, the conservative movement. Later, we shed light on the conservative movement's anti-environmental counter-frame through our analysis of its specific counter-claims about global warming.

The Emergence of a Countermovement

According to Brulle (2000) and Switzer (1997), there has always been opposition to environmental movements and protection efforts in the United States, but this opposition "is more diverse than many observers have recognized" (Switzer 1997, p. xiii). The contemporary strands of the "green backlash" consist of industry opposition to environmental policy, as well as "grassroots" opposition as manifest in the wise-use movement, the county supremacy movement, and the property rights movement. Most of these segments tend to focus on local or regional issues, particularly challenging government restrictions on natural resource use. However, in the case of global environmental problems, we see a new thrust of environmental opposition—the full-scale involvement of the conservative movement. So, while there has always been opposition to environmental movements and protection, the global frame of environmental problems is generating even more—especially from the mainstream conservative movement (Beder 1997, Bruner and Oelschlaeger 1994).

The global frame of environmental problems is the "schemata of interpretation" that enables us to perceive that, for the first time in history, humans are disrupting the global ecosystem in ways that affect, not only "environmental quality," but also the current and future well-being of our species. This global frame is prominently reflected in the scientific establishment's widespread acknowledgement of global environmental change (GEC) and is clearly solidified in an official endorsement from the National Academy of Sciences (Silver with DeFries 1990). Because of this frame's considerable flexibility, numerous environmental problems, especially global warming, are increasingly interpreted as related instances of unprecedented human impact on global ecosystems.

Along with government and university scientists, particularly those involved with the Intergovernmental Panel on Climate Change (IPCC), environmental organizations such as the Natural Resources Defense Council played a major role in promoting specific claims about global warming since the late 1980s. In essence, these environmental proponents claim that increasing scientific evidence supports the idea that global warming is either occurring now, or will occur in the near future. Further, they assert that global warming will negatively affect nearly every aspect of our lives, causing potentially momentous problems in the future. In addition, they argue that the actions needed to slow or halt global warming are beneficial overall, since they will also help ameliorate other maladies such as resource depletion and pollution. Thus, they claim that we should act immediately to avoid future global crises. Over time, environmentalists promoting these claims have successfully mobilized to define global warming as a legitimate problem in need of amelioration (see e.g., Schneider 1998). For example, in a 1992 national survey, a majority of Americans not only saw global warming as a problem, but also thought that it was already occurring (Dunlap 1998).

In this context, it is not surprising that the conservative movement turned its attention to global environmental change (GEC) and global warming in particular. Despite assertions that environmentalism represents a new ideology that is orthogonal to traditional liberalism-conservatism (e.g., Paehlke 1989), studies have consistently found conservatism to be negatively related to pro-environmental attitudes and actions among the general public, and especially among political elites such as members of Congress (Kamieniecki 1995). The reason is that pursuit of environmental protection often involves government action that is seen as threatening core elements of conservatism, such as the primacy of individual freedom, private property rights, laissez-faire government, and promotion of free enterprise (e.g., Meyer 1964).

More broadly, conservatives often strongly defend a traditional frame about humans and nature that some have called the Dominant Social Paradigm (Dunlap and Van Liere 1984) and others have called Manifest Destiny (Brulle 2000). The Dominant Social Paradigm includes core elements of conservative ideology, but also faith in science and technology, support for economic growth, faith in material abundance, and faith in future prosperity.

(Dunlap and Van Liere 1984). The discourse of Manifest Destiny stresses that human welfare is dependent upon unlimited access to abundant natural resources, development of these resources, and transformation of these resources into useful commodities through labor (Brulle 2000)

The degree to which contemporary conservatism's intense commitment to traditional American values influences its orientation toward environmentalism is reflected in a volume entitled, *American Values: An Environmental Vision*, published by the conservative Environmental Policy Analysis Network. The introduction notes

Since the 1970s, American environmental policy has been based on the assumption that the federal government, through command-and-control laws and regulations imposed from Washington, D.C., is best suited to provide for the environment. However, this approach has trod on our traditional values by limiting individual liberty, unconstitutionally expanding the reach of government, hindering free markets, and harming our economic prosperity. Also, command-and-control was often based on biased value judgments and politics, rather than sound science, a key American value symbolized by our technological ingenuity and innovation (Cohen, et al. 1996, pp. 1-2)

Given conservatism's historical unease with environmentalism and environmental protection, it should come as no surprise that the conservative movement would react negatively toward growing concern with global environmental problems such as climate change. The emergence of global warming and the possibility of large-scale social change resulting from efforts to ameliorate it are seen as far more threatening to American industry, prosperity, lifestyles, and the entire "American way of life" than are traditional pollution control measures (e.g., Bailey 1993). Specifically, the characterization of global warming as a major problem and the consequent threat of an internationally binding treaty to curb carbon dioxide emissions are seen as a direct threat to sustained economic growth, the free market, national sovereignty, and the continued abolition of governmental regulations—key goals promoted by the conservative movement. Given the success of the conservative movement in other policy areas in recent years (Blumenthal 1986, Diamond 1995, Stefancic and Delgado 1996), it seems reasonable to expect the conservative movement would vigorously oppose internationally binding global warming policies by challenging environmental proponents' global frame and their specific claims about global warming.

By examining the specific counter-claims on global warming that are a part of the conservative movement's anti-environmental counter-frame, we build upon social movements research on countermovements and framing contests.⁶ Mottl (1980, p. 620) defines a countermovement⁷ as "a particular kind of protest movement which is a response to the social change advocated by an initial movement." Zald and Useem (1987) remind us that "a countermovement is likely to emerge if the [original] movement appears to be accomplishing its goals" (p. 254). The theoretical need to examine the mobilization of a countermovement to better understand the ultimate outcome of the original change-oriented social movement was first noted conceptually by Vander Zanden (1959) and empirically supported more recently by Marshall (1985) and Voss (1996). Our position is that the mainstream conservative movement has taken on the characteristics of a countermovement in recent years in its opposition to the successful global thrust of the environmental movement. Thus, following Vander Zanden's advice, we examine the mobilization of this countermovement to better understand current debates over the status of global warming as a problem.

6. While we are only focusing on the counter-claims regarding climate change, it should be kept in mind that similar counter-claims exist regarding other global environmental problems such as ozone depletion, biodiversity loss, and tropical rainforest destruction (see, e.g., Brown 1997).

7. See also Lo (1982), Zald and Useem (1987), and Meyer and Staggenborg (1996) for additional conceptualizations of countermovements.

Among other types of interaction, movements and countermovements are “involved in framing contests attempting to persuade authorities and bystanders of the rightness of their cause” (Zald 1996, p. 269). While some attention has been given to defining and describing aspects of countermovements as noted above, little research has been performed on countermovement framing processes, and those few existing studies are largely historical case studies sharing few theoretical links (e.g., Marshall 1985, Warnick 1977).⁸ Benford and Snow (2000, p. 626) point out that countermovements “sometimes publicly challenge the [original] movement’s diagnostic and prognostic framings.” Noting, again, that frames are comprised of specific claims, we argue that such challenges are present in the counter-claims of a countermovement. To date, the most refined attempts to systematically establish typologies of “counter-rhetoric” are by Hirschman (1991) and Ibarra and Kitsuse (1993)—the latter work coming from a social problems perspective. We draw upon both works in the following analysis to illustrate how the conservative movement challenges environmental proponents’ diagnostic and prognostic frames about global warming.

The Study

This study systematically examines the nature of the conservative movement’s counter-claims regarding global warming as contained in documents circulated by major conservative think tanks between 1990 and 1997. While performing this task, we are also providing needed balance to the social science literature on global environmental problems, which, to date, disproportionately analyzes and deconstructs the claims of environmental proponents. By examining the conservative movement’s counter-claims, we are not only providing needed symmetry, but also shedding light on the conservative movement’s efforts to construct the “non-problematicity” of global warming (Freudenburg 2000). In this section, we will first explain the process we used to identify our sample of documents and then briefly describe the coding procedures used in our content analysis.

Sampling

In extending previous work on the conservative movement, this research utilizes the results of past studies that identified the core of the conservative policy-planning network. We merged the lists of influential conservative think tanks from two academic studies (Allen 1992; Burch 1997) and three nonacademic studies (Dolny 1996, National Committee for Responsive Philanthropy 1997, People for the American Way 1997). Thus, our composite list includes all those conservative think tanks that received the largest amount of funding from conservative foundations, garnered the most media citations in recent years, and have the strongest affiliations with past Republican administrations. By synthesizing these recent studies, we attempt to identify the conservative think tanks that would potentially be most influential in the global warming policy arena.

In addition, three conservative think tanks were added to this list. Even though these three think tanks were not identified by the earlier studies, it seems imperative to include them in this analysis due to their specialized concern with environmental issues. The Heartland Institute and the Foundation for Research on Economics and Environment are both regional think tanks dedicated, primarily, to studying environmental issues, while the National Center for Public Policy Research is a national think tank that visibly identifies the Environ-

8. See McCaffrey and Keys (2000) for a recent examination of how a movement reacts to a countermovement’s challenge. Unfortunately, consistent with the authors’ sole focus on the framing processes of the original social movement, they fail to systematically analyze the countermovement’s counter-framing processes.

mental Policy Task Force, the Earth Day Information Center, and the Global Warming Information Center as major projects.⁹ Including these specialty think tanks resulted in a final composite list of thirty think tanks.¹⁰

At this point, an Internet search was performed for each think tank's official web site. The Internet was used in this study for four reasons. First, and perhaps most importantly, it allowed for the timely and inexpensive gathering of data that would otherwise be difficult to collect. Second, the Internet is increasingly important to the conservative movement for disseminating information quickly and cheaply (National Committee for Responsive Philanthropy 1997, p. 21). Third, the general public appears to be increasingly using the Internet to find information promptly on issues of the day. Finally, an increasing number of scholars have begun to recognize the Internet as a stage upon which movement-counter-movement interaction takes place (e.g., Peckham 1998). The four think tanks on our composite list without web sites were dropped from the study at this stage.¹¹

We then conducted a systematic search on the official web sites of the remaining twenty-six think tanks for documents written between 1990 and 1997 on "global warming," "greenhouse effect," and "climate change." Nineteen-ninety was chosen as the beginning year, since it marked the emergence of a concerted backlash against global warming within the Bush administration and within the conservative movement (Gelbspan 1997). Furthermore, a preliminary search of the web sites revealed no relevant documents published before 1990. Upon completion of the search in April 1998, the resulting sampling frame of documents consisted of 278 items on climate change listed on the web sites of fourteen think tanks. This sampling frame is not exhaustive with regard to the population of documents on global warming *within the conservative policy-planning network*, since a few state-level think tanks also posted documents on global warming. Nevertheless, since these smaller think tanks are neither influential on a national level nor recognized as specializing in environmental issues, their exclusion here seems appropriate. Thus, it is reasonable to assume the sampling frame contains the vast majority of documents on global warming circulating within the conservative movement's policy-planning network. The sample in this study consists of 224 publications on global warming, or 80.6% of the 278 originally identified, which could be printed out from the Internet or obtained directly from a think tank at a reasonable price.¹² Time and financial limitations prevented the sample from perfectly matching the sampling frame.¹³ Table 1 enumerates the exact number of sampled documents listed on each conservative think tank's web site.

As seen in Table 2, the two most common types of documents produced by conservative think tanks were "policy study" or "policy analysis" pieces, which constitute 23.7% of the

9. Founded in Chicago, Illinois, in 1984 by Joseph L. Bast, the Heartland Institute has a 100-member board of advisors that oversees such projects as the publication of a monthly newspaper *Environment News*. Founded in Bozeman, Montana, in 1986 by John Baden, the Foundation for Research on Economics and Environment has a staff of eight analysts that routinely produces policy papers on environmental policy. The National Center for Public Policy Research was founded in 1982 and is located in Washington, D.C. The National Center specializes in research on environmental policy, regulatory policy, fiscal policy, and defense policy.

10. In addition to the fourteen think tanks listed later in Table 1, our composite list of 30 think tanks includes the following: Hudson Institute, National Bureau of Economic Research, Institute for Foreign Policy Analysis, National Taxpayers Union and Foundation, Political Economy Research Center, Progress and Freedom Foundation, International Institute for Strategic Studies, Lehman Institute, Center for the Study of Popular Culture, Madison Center for Educational Affairs, Manhattan Institute, Institute for Contemporary Studies, National Strategy Information Center, Center for Strategic and International Studies, Institute for Research on the Economics of Taxation, and Free Congress Research and Education Foundation.

11. These are the National Strategy Information Center, Institute for Research on the Economics of Taxation, Center for the Study of Popular Culture, and Madison Center for Educational Affairs.

12. These publications will be made available upon request.

13. An analysis of the titles of the excluded publications revealed that they closely mirror the titles of the publications *within the sample*. Thus, there is no compelling reason to believe that the publications not included in the sample would jeopardize the generalizability of our results.

Table 1 • Number of Documents On Global Warming Listed on Each Conservative Think Tank's Web Site

| <i>Conservative Think Tank</i> | <i># of Documents</i> |
|--|-----------------------|
| National Center for Policy Analysis | 45 |
| Heartland Institute | 38 |
| National Center for Public Policy Research | 38 |
| Competitive Enterprise Institute | 34 |
| Hoover Institution | 21 |
| Marshall Institute | 15 |
| Cato Institute | 13 |
| Citizens for a Sound Economy Foundation | 13 |
| Heritage Foundation | 8 |
| American Enterprise Institute | 7 |
| Reason Public Policy Institute | 5 |
| Foundation for Research on Economics and the Environment | 4 |
| Pacific Research Institute | 4 |
| Claremont Institute | 2 |

Note The total number of documents in this table sums to 247 instead of 224 because 17 documents are identified by two think tanks and three documents are mentioned by three think tanks

documents, and press releases, which constitute 23.3% of the documents. While the average policy study was over nine pages long and usually written primarily for policy-makers, the average press release was under a page in length and written for eventual dissemination to the general public. Nearly 20% of the documents were articles reprinted from various periodicals produced by conservative think tanks (e.g., *Regulation* published by Cato Institute). Furthermore, another 11.1% of the documents were op-ed essays reprinted from popular newspapers and magazines, while an additional 10.7% were reprinted speech transcripts from scheduled public appearances. Approximately 6.3% of the documents were articles reprinted from *World Climate Report*, a magazine edited by leading "skeptic," Patrick J. Michaels, and funded by Western Fuels Association. The final 5.4% of documents were either whole books or chapters in edited books written for a general audience.

No documents in the sample were produced in 1990, and only a few were produced each year until 1996. In that year, more documents on global warming were produced than in all of the previous years combined. This production rate increased even more with a staggering 166 documents on global warming produced in 1997. Concomitant with the rapidly increas-

Table 2 • Type and Year of Publication of Documents on Global Warming Circulated by Major Conservative Think Tanks

| <i>Type of Document</i> | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | Total |
|---|------|------|------|------|------|------|------|------|-------|
| Book or section in book | 0 | 0 | 2 | 3 | 2 | 2 | 3 | 0 | 12 |
| Op-ed essay in popular media | 0 | 0 | 0 | 0 | 1 | 1 | 4 | 19 | 25 |
| Think tank magazine or newsletter article | 0 | 0 | 1 | 0 | 0 | 0 | 7 | 36 | 44 |
| Article in <i>World Climate Report</i> | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 7 | 14 |
| Policy study or policy analysis | 0 | 1 | 6 | 0 | 4 | 3 | 9 | 30 | 53 |
| Speech transcript | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 22 | 24 |
| Press release | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 52 | 52 |
| Total | 0 | 1 | 9 | 3 | 7 | 7 | 31 | 166 | 224 |

ing rate of production in 1996 and 1997, brief press releases and op-ed essays replaced lengthy books and policy studies as the most prevalent types of documents produced. Of the 27 documents produced between 1990 and 1995, 85% (23 of 27) were books, chapters in books, or lengthy policy studies. Of the 197 documents produced in 1996 and 1997, only 21% were these types of publications, while 45% were shorter news releases or op-ed essays.

These patterns are best understood by situating them within the historical context of two major international events: the 1992 UN Conference on Environment and Development (UNCED) from June 3–14 in Rio de Janeiro, Brazil, and the 1997 Third Conference of the Parties (COP-3) from December 1–7 in Kyoto, Japan. While only one document on global warming was produced in 1990 and 1991, 1992 saw the production of nine documents: two books, six policy studies, and one article in a think tank magazine. In 1992, only a few conservative think tanks, most notably the Marshall Institute, produced these rather lengthy documents on global warming. In the three years after the Rio Conference, there was a relative decline in the production of documents on global warming. Annual production did not eclipse the 1992 total until it increased dramatically in 1996 and 1997 on the verge of the Kyoto Conference where the threat of internationally binding action loomed. Increases in the production of almost all types of documents occurred. However, the general pattern is that a growing number of conservative think tanks began to produce more documents of shorter length tailored toward brevity and persuasiveness. In short, as the stakes rose on the verge of the Kyoto conference, the conservative movement stepped up mobilization efforts to challenge the legitimacy of global warming as a problem.

Coding

Each of the 224 publications in the sample was coded and analyzed during the summer of 1998. Fifty documents in the sample were pre-coded in early May to develop a feasible coding scheme. To better recognize the counter-claims promoted by the conservative movement, we utilized inductive coding procedures. Inductive analysis allowed us optimal observational flexibility for identifying the similarities and dissimilarities in the themes of our sampled documents (see Babbie 1995, pp. 295–297). Because of the recentness of both the problem status of global warming and the conservative movement's challenge to global environmental problems in general, it was imperative to examine the publications prior to developing a coding scheme. After identifying the major themes contained in the first 50 documents, we constructed a coding scheme that incorporated these themes in an exhaustive and mutually exclusive fashion. This coding scheme, essentially equivalent to Table 3, was then used to code the content of all the documents in the sample. Those documents clearly displaying multiple themes were coded in multiple categories. The fact that no modifications were necessary when coding the full sample confirms the content validity of the coding scheme.

Upon completion of coding the major themes in all the documents, we systematically grouped the similar and related themes into more general categories to reflect the major counter-claims used by the conservative movement. While we utilized an inductive coding process in this study, we will attempt, whenever possible, to demonstrate similarities with two other works that address counter-claims-making activities. Hirschman (1991) examines how countermovements calling for inaction invoke a rhetoric of reaction that stresses jeopardy (we risk losing achievements already gained), futility (any action is a waste of time and resources), and perverse effects (our actions will only make matters worse). Similarly, Ibarra and Kitsuse (1993) argue that countermovements utilize counter-rhetorical strategies to either block the attempted characterization of an original claim by a social movement, or the call for ameliorative action, or both. Thus, in the following section, we will draw parallels between the themes we explicate and the strategies these researchers identified.

Table 3 • The Conservative Movement's Counter-Claims Regarding Global Warming

| Theme | Description | N | % |
|----------------------------|---|-----|------|
| <u>Counter-Claim One</u> | | | |
| | <i>The evidentiary basis of global warming is weak and even wrong</i> | 159 | 71.0 |
| 1 | The scientific evidence for global warming is highly uncertain | 141 | 62.9 |
| 2 | Mainstream climate research is "junk" science | 30 | 13.4 |
| 3 | The IPCC intentionally altered its reports to create a "scientific consensus" on global warming | 16 | 7.1 |
| 4 | Global warming is merely a myth or scare tactic produced and perpetuated by environmentalists and bureaucrats | 41 | 18.3 |
| 5 | Global warming is merely a political tool of the Clinton Administration | 31 | 13.8 |
| <u>Counter-Claim Two</u> | | | |
| | <i>Global warming would be beneficial if it were to occur</i> | 30 | 13.4 |
| 1 | Global warming would improve our quality of life | 10 | 4.5 |
| 2 | Global warming would improve our health | 10 | 4.5 |
| 3 | Global warming would improve our agriculture | 20 | 8.9 |
| <u>Counter-Claim Three</u> | | | |
| | <i>Global warming policies would do more harm than good</i> | 139 | 62.1 |
| 1 | Proposed action would harm the national economy | 130 | 58.0 |
| 2 | Proposed action would weaken national security | 4 | 1.8 |
| 3 | Proposed action would threaten national sovereignty | 9 | 4.0 |
| 4 | Proposed action would actually harm the environment | 7 | 3.1 |

Counter-Claims about Global Warming

Our thematic content analysis identifies three broad counter-claims through which the conservative movement challenges the legitimacy of global warming. Table 3 is a summary outline of these counter-claims.¹⁴ First, the conservative movement criticizes the scientific evidence and general beliefs in support of the existence of anthropogenic global warming. That is, the counter-movement argues that the problematic *condition* does not exist. Second, the movement emphasizes the potential benefits of global warming, if it should occur. That is, the countermovement argues that the condition, if it should exist, would not be *problematic*. These two counter-claims specifically challenge environmental proponents' diagnostic framing of global warming as a problem.

Third, conservatives stress that taking any proposed internationally binding action would have numerous negative consequences. That is, the countermovement argues that solutions proposed by environmental proponents would be more detrimental than ameliorative. This counter-claim specifically challenges environmental proponents' prognostic framing of solutions to the global warming problem. Taken as a whole, these three counter-claims support the conservative movement's advocacy of inaction, thus undercutting the efficacy of environmental proponents' motivational framing to urge ameliorative collective action. Each of these three broad counter-claims is comprised of more specific themes. In the remainder of this section, we will describe each of these three counter-claims by providing illustrations of their constituent themes. For each data excerpt we present below, we identify the conservative think tank that circulated the publication.

14 Our findings are similar to Schnaiberg's (1994: 39–42) more sweeping analysis of the nature of counter-claims promoted by capitalist producers when challenging environmentalists' claims. Schnaiberg argues that capitalist producers engage in "consciousness-lowering" activities that challenge environmentalists' claims that environmental problems are serious, are the products of the production system, and can be alleviated without unreasonable costs.

Criticizing the Evidentiary Basis of Global Warming

The predominant counter-claim, found in 159 sampled documents (71.0%), attempts to discredit the scientific evidence for global warming and, thereby, undermine its credibility in the eyes of the public. In short, the five themes that comprise this counter-claim, all debunk the evidentiary basis for global warming. One theme holds that the scientific evidence for the existence of anthropogenic global warming is characterized by substantial uncertainty and, thus, does not support environmental proponents' assertion that global warming is a serious problem. In the 141 documents displaying this theme, climate science is described with such words as "contradictory," "flawed," and "murky." With this characterization, some documents attack the claim that *any* consensus exists in the scientific community over the global warming issue. The following examples best illustrate this assertion:

There is no scientific "consensus" about the likelihood, extent, or even reality of human-induced global warming (National Center for Public Policy Research)

There is no scientific consensus that global warming is a problem or that humans are its cause (National Center for Policy Analysis)

Not only is there no scientific consensus about the existence of global warming according to these documents, but also it is strongly suggested that global warming is *definitely* not occurring. One document from the National Center for Public Policy Research proclaims, "Even if scientists haven't developed a consensus on global warming, the scientific data has: Global warming is not occurring." As the following excerpts indicate, all of this culminates in the assertion that climate scientists simply do not know much, if anything, about global warming:

A decade of focus on global warming and billions of dollars of research funds have still failed to establish that global warming is a significant problem (Competitive Enterprise Institute)

Scientists do not agree on man's effect on climate and it is unlikely that they will know the answer to this question anytime in the near future (Citizens for a Sound Economy Foundation)

In the words of a National Center for Policy Analysis publication, this theme proclaims that the scientific evidence for global warming is "uncertain at best, completely wrong at worst."

Another theme goes further by actually questioning the credibility of mainstream climate research. In thirty sampled documents (13.4%), the body of mainstream climate science research that provides evidence for environmental proponents is characterized by such terms as "junk science" and "tabloid science." In its *Issues '96: The Candidate's Briefing Book*, the Heritage Foundation declares that it is not clear whether a warming trend is occurring or would occur because "the climate models being used are biased in favor of warming." While some other publications also question the credibility of climate models, many others criticize climate scientists as well. This is illustrated in the following examples:

For all those who viewed the Union of Concerned Scientists' (UCS) recent foray into "sound science" as akin to Dr. Kevorkian opening a suicide prevention hotline, comes this bit of confirmation. The Tucson, Arizona-based Doctors for Disaster Preparedness has obtained a tape of a media training teleconference for scientists hosted by the UCS that exposes the group's "Sound Science Initiative" as merely a tactical device to promote the global warming scare (National Center for Public Policy Research)

The balance of evidence—to use the UN's lingo—now suggests that some scientists will do anything to ensure that their access to federal grants for global warming research continues. We must not place their greed above the needs of America's most disadvantaged citizens (National Center for Public Policy Research)

In short, this theme closely parallels Ibarra and Kitsuse's (1993) "counter-rhetoric of insincerity" or the characterization of a claim as suspect because of a supposed hidden agenda.

on the part of the claims-makers. The characterization of mainstream climate research, in general, and global warming theory, specifically, as “junk science” has been particularly strategic in recent years as it accompanies the conservative movement’s claim that it has aligned itself with “sound science.”

A third theme, found in 16 documents (7.1%), claims that the IPCC (Intergovernmental Panel on Climate Change) has intentionally “doctored” its reports to create a scientific consensus about global warming and suppress the contrary views of “skeptical” scientists. This public criticism of the IPCC is aimed at its very foundation as several of the documents claim that the entire peer-review process within the IPCC is motivated by political interests. Most of these documents focus on the alleged improprieties of the IPCC’s (1996) *Climate Change 1995: The Science of Climate Change*.¹⁵ The Marshall Institute is the most visible conservative think tank behind most of the allegations of wrongdoing by the IPCC. In an opinion-editorial essay discussing how the published version of the IPCC’s 1996 study differs from the version approved by its contributing scientists, Frederick Seitz of the Marshall Institute declares that he has “never witnessed a more disturbing corruption of the peer-review process than the events that led to this IPCC report.”

In a Marshall Institute report, leading “skeptical” scientist, Patrick J. Michaels, concludes, “The distorting bias lies right at the heart of the IPCC’s process.” Another Marshall Institute report claims, “The IPCC process is all about manufacturing a consensus among researchers, and that makes sense if science is really about interests.” In a *CEI Update* article, Competitive Enterprise Institute research associate, James M. Sheehan, declares, “What is clear is that the UN [IPCC] panel is so thoroughly politicized that its integrity and objectivity cannot be taken for granted.” Clearly, this theme also parallels Ibarra and Kitsuse’s “counter-rhetoric of insincerity.” It is interesting that no conservative document ever mentions any peer-reviewed social science articles also critical of the IPCC and government-funded research in general.¹⁶

Another theme, found in forty-one sampled documents (18.3%), is that global warming is merely a myth or a scare tactic produced and perpetuated by environmentalists and bureaucrats. Documents containing this theme basically assert that such parties rely upon imaginatively catastrophic scenarios to arouse support for their cause and justify any action that would maintain the security of their livelihoods. In short, the conservatives criticize what they perceive to be “doom and gloom” imagery. Phrases such as “doomsday crowd,” “greenhouse alarmists,” “millenarian doom saying,” “modern-day apocalyptics,” and “prophets of doom” typify the manner through which the conservatives present this assertion.

In general, documents containing this theme tend to involve more name-calling than actual scientific discussion. As the following excerpts show, conservatives frame the global warming issue as an attempt on the part of “radical” environmentalists to “take over the world.”

Radical environmentalism—which seeks to impose ever bigger government on society—has become the last refuge of many of the world’s socialists (National Center for Policy Analysis)

After the balloon bursts on global warming and it has been incorporated like overpopulation, resource depletion, biotech plagues, and the ozone hole into the conventional wisdom of doom, to what new doom will the environmental millenarians turn next? What new crisis can be conjured up and used to promote their sociopolitical engineering schemes while enhancing their power and influence over the world’s governments? (Cato Institute)

15. As a response to the critics of this series of events, Edwards and Schneider (1997) have clarified the IPCC peer review process and, thereby, disarmed many of the countermovement’s allegations.

16. One such notable work is Sonja Boehmer-Christiansen’s (1994a, 1994b) two-part article in *Global Environmental Change*. In this work, Boehmer-Christiansen (1994a) argues that the IPCC is politically driven and more concerned with research funding than with research: “The primary interest of research is the creation of concern in order to demonstrate policy relevance and attract funding” (p. 141). Conservatives were either unaware of this work or simply chose not to use it for supporting evidence, even when making the same argument.

Furthermore, several documents criticize the manner through which these “apocalyptic” environmentalists present their claims. As a Cato Institute publication declares, “Doomsayers indiscriminately latch onto and publicize just about any natural anomaly or local disaster as evidence to bolster their predictions of impending worldwide catastrophe.”

A few documents specifically argue that money is the driving force behind the environmentalists’ claims of global warming. In his well-known article in Cato Institute’s *Regulation*, actually a reprinted speech underwritten by OPEC, leading “skeptical” scientist, Richard Lindzen, makes it clear that self-perpetuation is a major concern with environmental organizations and that “global warming has become one of the major battle cries in their fundraising efforts.” As a whole, this theme is a good example of what Ibarra and Kitsuse (1993) refer to as the “counter-rhetoric of hysteria,” or the dismissal of a claim because it is merely seen as a stereotypical expression from a hysterical social group. In this case, the conservatives dismiss global warming’s problem status by characterizing it as a mere scare tactic of “radical environmentalists.”

A final theme in this first counter-claim is that global warming is primarily a political tool of the Clinton Administration. The thirty-one documents (13.8%) espousing this theme assert that the Clinton Administration used the global warming issue as a way to gain more support and assert more control over the American people. Both a National Center for Policy Analysis policy brief and a Heritage Foundation backgrounder accuse the Clinton Administration of suppressing studies that lend support for those parties challenging a global warming treaty.

The scientific community’s alleged widespread support for the administration’s global warming agenda is more a reflection of the White House’s public relations skills than real backing from the scientific community (Heartland Institute).

Alarmists in the media and the Clinton administration clearly have decided that the best way to win the global warming debate is by shouting down the opposition and demonizing them in the eyes of the public (Cato Institute).

Some documents specifically criticize the actions of Vice President Al Gore with regard to the global warming issue. The Competitive Enterprise Institute ran a bulletin from the Kyoto Conference in *CEI Update* criticizing the activities of the Vice-President, who is referred to as the “Chief Druid.” In a Cato Institute essay, leading skeptic, Patrick J. Michaels, alleges that the Vice-President’s recent activism regarding climate change is merely political posturing.

Other documents implicate the administration in a larger conspiracy. In a Heartland Institute newspaper article, James M. Sheehan, research associate at Competitive Enterprise Institute, proclaims that the Clinton administration’s position and activities on global warming were heavily directed by environmental organizations. A Competitive Enterprise Institute policy study considers “Clinton-Gore, the United Nations, and the greenhouse lobby” to be one cohesive group acting in conspiracy on the global warming issue. Similar to the previous theme, this present theme also exemplifies Ibarra and Kitsuse’s (1993) “counter-rhetoric of insincerity.”

Through each of these five themes, the conservative movement attempts to discredit the scientific evidence for global warming and, thereby, undermine its credibility in the eyes of the public. Thus, this first and fundamental counter-claim allows the conservative movement to challenge the scientific basis of global warming as a legitimate problem. This counter-claim is essential to the conservative movement’s agenda, since lay people and policy-makers must rely primarily upon science for evidence of global warming. By presenting this science as uncertain at best and completely wrong at worst, the conservative movement directly challenges the claim that global warming is a legitimate problem.

The Potential Benefits from Global Warming

Not only does the conservative movement argue that climate science cannot yet prove that global warming is occurring, but it uses a second counter-claim to proclaim the *benefits* of

global warming, should it actually occur. While only appearing in 30 of the sampled documents (13.4%), this counter-claim nevertheless is a crucial element of the conservative position. By challenging the allegedly pessimistic claims of environmentalists with an optimistic counter-claim, the conservatives are able to challenge further the claim that global warming is a *problem*. The following excerpts concisely illustrate this counter-claim.

Some research even suggests that a moderately warmer climate would be a far better one for humanity (Competitive Enterprise Institute, Heartland Institute)

On the whole, mankind should benefit from an upward tick in the thermometer (Hoover Institution)

It is especially important to note that this counter-claim is consistent with the previous one, since it identifies benefits that are explicitly hypothetical. As one Hoover Institution publication states, "Global warming, if it were to occur, would probably benefit most Americans." Three themes constitute this counter-claim espousing the potential benefits of global warming.

One theme, found in ten documents (4.5%), specifically claims improvements in our quality of living should global warming occur.¹⁷ Most documents having this theme mention improvements in our day-to-day lives, including such enhancements as lower heating bills and reduced transportation delays and accidents. These two selections nicely depict this theme.

Less cold weather would mean less snow shoveling, fewer days of driving on icy roads, lower heating bills, and reduced outlays for clothing (Hoover Institution)

Warmer weather means, if anything, fewer power outages and less frequent interruptions of wired communications (Hoover Institution)

Other documents make explicit reference to the probability of an expanding tourism market. One Hoover Institution publication declares, "New tourist opportunities might develop in Alaska, Northern Canada, and other locales at higher latitudes or in upper elevations."

Another theme, also found in 10 documents, specifically states that global warming would improve our general health, if it would occur. According to a Hoover Institution article, "If the IPCC is right and the globe does warm, history suggests that human health is likely to improve." Other documents claim that global warming would reduce the amount of disease and sickness in the world, thus, saving a large number of people from impending death.

Global warming could save billions of people from malnutrition (National Center for Public Policy Research)

A warmer climate would actually reduce disease and cut mortality. More people die of the cold than of the heat, more die in the winter than the summer (Hoover Institution)

Global warming could save thousands of human lives (National Center for Public Policy Research)

Interestingly, Hoover Institution fellow, Thomas Gale Moore, author of the recent Cato Institute book, *Climate of Fear* (1998), has written almost all the documents containing this theme, as well as several containing the next one.

This counter-claim's final theme, found in 20 documents (8.9%), specifically claims that global warming would benefit agriculture. In general, global warming is seen as "an agricultural boon." The following two excerpts illustrate this assertion.

More carbon dioxide in the air would lead to more luxuriant plant growth and greater crop yields. The small increase in carbon dioxide experienced, to date, has probably advanced the much-ballyhooed green revolution, with its striking increases in food production (Heartland Institute)

The enrichment of the atmosphere with carbon dioxide will fertilize plants and make for more vigorous growth (Hoover Institution)

17 This theme seems to indicate both a total lack of concern for ecological impacts and very little understanding of basic ecology.

This agricultural boon would, presumably, come about both by an increase in the amount of arable land and by an increase in agricultural productivity as the next two selections indicate.

Global warming would expand the world's agricultural belt (Heritage Foundation)

Doubling carbon dioxide levels may increase average crop yield by an estimated 33% (Foundation for Research on Economics and the Environment)

Once again, all the documents exhibiting this counter-claim hold that global warming would offer ample benefits if it does occur. In fact, as noted earlier, most assert that the benefits would outweigh the costs. This counter-claim is essential to the conservative movement's position in two ways. First, by identifying hypothetical conditions, conservatives are further strengthening their position that global warming is not yet occurring, and still might not occur in the future. Second, by identifying benefits that lay people and policy-makers can easily identify, they are able to problematize environmentalists' claims that global warming is a problem. The synthesis of the first two counter-claims provides the basis for the conservative movement's position on global warming—that is, global warming is not occurring, but if it should occur in the future, it would not be a problem. These counter-claims provide a foundation for the final one.

The Harmful Effects of Proposed Action

The third counter-claim, which stresses the negative impacts of proposed international action, is found in 139 of the sampled documents (62.1%). This counter-claim is comprised of four specific themes that respectively assert that any proposed internationally binding action will be harmful to the national economy, national security, national sovereignty, and—quite ironically—the environment. On the whole, this counter-claim parallels a strategy identified by Ibarra and Kitsuse (1993) as the “counter-rhetoric of the costs involved.” This counter-claim argues that the proposed ameliorative treaties would cause more harm than would the threat of global warming. This counter-claim is also a prime example of how countermovements tend to invoke a reactionary rhetoric stressing futility and jeopardy (Hirschman 1991). Through this counter-claim, the conservative movement argues that proposed actions would waste time and resources and such actions could even make matters worse.

The first theme, found in 130 documents (58.0%), is that the proposed actions to ameliorate global warming will harm the national economy. These documents describe the potential impacts on the U.S. economy using such terms as “devastating” and “staggering.” The following excerpts illustrate the general claim that our economy would suffer:

A binding U.N. Treaty will cripple our economy (Competitive Enterprise Institute)

The implications of the proposed climate change commitments for the U.S. economy are grave (National Center for Policy Analysis)

These documents particularly argue that the United States will be at a disadvantage in the global economy since developing countries will not be obligated to sign the proposed treaties to limit carbon dioxide emissions. Most of these publications make specific references to a loss of economic output or a decrease in economic growth as a result of the proposed binding action:

The national economy, permanently, would lose \$3.3 trillion in output between 2001 and 2020 (Heritage Foundation)

Annual GDP levels are expected to fall between \$200 and \$300 billion (Citizens for a Sound Economy Foundation)

The [Kyoto] treaty would cut economic growth by 50% by the year 2005 (Heartland Institute)

Moreover, these documents often identify more specific sectors or elements of the national economy that would suffer greatly. For instance, the conservative movement claims that pro-

posed actions harm such generalized groups as the business community and industry, while also threatening the well being of individual workers and consumers

Another theme, found in only four documents (1.8%), asserts that proposed treaties will be a detriment to national security. Such a small number of documents is surprising given the conservative movement's emphasis on a strong national defense. Some examples are as follows:

The areas that will be at risk if we must reduce our military fossil fuel emissions are the readiness of our forces and the literal day-to-day ability to go fight the nation's wars if we have to. (National Center for Policy Analysis)

Opportunities for military espionage increase if international representatives are allowed to inspect U.S. planes, ships, and tanks to ensure that they meet emissions standards. (Heritage Foundation, National Center for Public Policy Research)

In sum, the conservative movement claims that proposed treaties jeopardize our military intelligence and readiness and, thereby, our national security.

A third theme, found in nine documents (4.0%), is that proposed treaties will threaten our national sovereignty. On the whole, the conservative movement claims that the United States will be turning over its sovereignty to powerful international bureaucrats who are "responsible neither to any nation nor to any individual." The following examples illustrate this theme.

One of the most disturbing aspects of this treaty is the threat to U.S. sovereignty. Is this country really ready and prepared to turn over its industry and responsibility for its manufacturing to multi-lateral international organizations with the power to close our own industries down? (Competitive Enterprise Institute)

When you subject American industry and business and jobs and all dynamics of our society, of our culture, of our country, of our government to international bodies with awesome power, the power to dictate industries being shut down, levying fines, we've crossed another line here. We have a major problem. (Heartland Institute)

This theme takes on further significance when one remembers that two themes within the first counter-claim implicate these same international bureaucrats as being party to a conspiracy to elevate global warming as a problem in need of a solution. This current theme complements these conspiratorial allegations by identifying what these "powerful interests" would allegedly control if any proposed treaty is accepted.

This counter-claim's final theme, found in seven documents (3.1%), ironically declares that the proposed treaties designed to ameliorate global warming will actually promote environmental degradation. The following examples illustrate this theme.

The treaty could actually cause environmental damage and preclude efforts to continue environmental improvements, not only in the developed world, but more importantly, in developing countries. (National Center for Policy Analysis)

To those who believe that industrial economies, as we know them, are at the root of all that is wrong with the world, curtailing industrial activity in the name of protecting public health and the environment, makes certain sense. But the real consequence of this will be to harm public health and the environment. (Heartland Institute)

In examining how countermovements call for inaction, Hirschman (1991) argues that they invoke a rhetoric of reaction stressing jeopardy, the risk of losing achievements that we have already gained. This last theme runs parallel to Hirschman's (1991) argument by asserting that the environmental improvements of recent decades are at risk with any new treaty.

All of the themes in this counter-claim assert that there will definitely be harmful effects from any proposed treaty aimed at reducing carbon dioxide emissions. Proposed treaties are claimed to have harmful effects on most, if not all, sectors of the national economy, on national

security, on national sovereignty, and on the environment. It is quite interesting that, while the conservatives harshly criticize the apocalyptic imagery of environmentalists, they also rely strongly upon apocalyptic imagery of their own when discussing these purported harmful effects of taking action to halt global warming. The themes in this counter-claim are essential to the conservative movement's position, since they emphasize the supposedly certain, harmful effects of policies to control global warming. Thus, the certainty of this counter-claim appears in stark opposition to the alleged uncertainty of the environmental proponents' claims.

Summary and Conclusion

In the past decade, the environmental movement successfully extended its mobilization to the international level by collaborating with scientists and policy-makers to bring several global environmental problems to the public's attention. Not surprisingly, those who oppose environmental protection efforts have begun to challenge the legitimacy of these problems. In this paper, we focus specifically on global climate change. Global warming was successfully defined as a social problem and placed on the policy agenda by the early 1990s, but its problem status was quickly challenged. While Brulle (2000) and Switzer (1997) identify several strands of "green backlash" in the United States, we argue that a new strand of environmental opposition—the conservative movement—is at the core of recent challenges to global environmental problems, particularly global warming.

It was noted earlier that much sociological research on GFC focuses on how various conditions, such as global warming, were successfully defined as social problems. This led some social scientists to "deconstruct" the claims of environmentalists and their scientific allies (e.g., Boehmer-Christiansen 1994a, 1994b, Taylor and Buttel 1992), and others to highlight the role of the media (e.g., Mazur and Lee 1993, McComas and Shanahan 1999, Trumbo 1995, 1996) or the unique characteristics of climate change relative to other problems (e.g., Ungar 1992, 1998) to account for the waxing and waning of global warming as a salient social problem. What is surprising, given sociology's sensitivity to power structures, is this literature's general neglect of organized opposition to the environmental lobby's framing of global warming as a serious problem. Specifically, social scientists paid little attention to the intense efforts of industry and the conservative movement to construct what Freudenburg (2000) calls the "non-problematicity" of global warming.

By focusing on the mobilization of the conservative movement into an effective counter-movement directly opposing environmental proponents' framing of global warming as a problem, our research is an effort to add needed balance to existing literature. Even though our study is limited to analyzing the content of the counter-claims used by the conservative movement to establish global warming's non-problematicity, it is a necessary first step in demonstrating that the controversy over global warming—and the resulting difficulty its advocates have in keeping it on the public agenda—is not simply a function of waning media attention, the ambiguities of climate change signals, or the complexities of climate science, but stems, in large part, from the concerted efforts of a powerful countermovement. Drawing upon recent social movements research on countermovements and frames, supplemented by work on counter-rhetoric, we provide insight into the sources and nature of the controversy over global warming and consequent difficulty in implementing policies to deal with it. The controversy is not an inevitable outcome of the issue-attention cycle or of the competitiveness of the public arena, but a direct function of the exercise of power by an influential countermovement.

Our research identifies three counter-claims through which the conservative movement challenged global warming's legitimacy as a social problem. First, conservatives claim that the evidentiary basis of global warming is weak, if not wrong. Second, conservatives argue that the net effect of global warming would be beneficial should it occur. Third, conservatives

argue that the policies proposed to ameliorate the alleged global warming problem would do more harm than good. Briefly then, the conservative movement asserts that, while the science of global warming is becoming more *uncertain*, the harmful effects of climate change policy are becoming more *certain*. This view, the essence of the conservative movement's position, is illustrated in the following excerpts:

While global warming is highly uncertain, the impacts of global warming policies are not (Heartland Institute, Competitive Enterprise Institute)

The risks of climate change are speculative, those of climate change policy are all too real (National Center for Public Policy Research)

The coupling of uncertain risks from global warming with certain economic risks from proposed action epitomizes the complementary relationships among these counter-claims. In total, these three counter-claims comprise the conservative movement's response to environmental proponents' call for ameliorative action. Consistent with both Hirschman's (1991) and Ibarra and Kitsuse's (1993) work on counter-rhetorical strategies, we see that the conservative movement employs counter-claims that serve to block any proposed action on global warming that challenges its interests. Mottl (1980) identified this strategy as the defining trait of a countermovement. Not surprisingly, the conservative movement's challenge of global warming's problem status is consistent with the fundamental tenets of conservative ideology (Meyer 1964).

The counter-claims identified in this paper were highly visible and widely employed by conservative activists in an effort to halt United States' endorsement of the Kyoto Protocol in 1997. Almost 75% (166 of 224) of the sampled documents were written in 1997 alone, and most of these were published on the verge of the Kyoto Conference. Besides distributing documents on global warming, several conservative think tanks also sponsored press conferences and public speeches to promote their position. For instance, the National Center for Policy Analysis held a press conference on global warming for members of the House of Representatives on June 13, 1997, and the Competitive Enterprise Institute hosted a similar press conference at the National Press Club two days later. These two conservative think tanks then co-sponsored a press conference of the same nature for members of the Senate on September 29, 1997. Also, David Ridenour, Vice-President of the National Center for Public Policy Research, spoke at a rally against climate policy held on the West side of the U.S. Capitol Building on October 30, 1997. Furthermore, prior to and during the Kyoto Conference, several conservative think tanks sent representatives to Kyoto to promote their views to the media. Most prominently, the Competitive Enterprise Institute and the National Center for Public Policy Research published daily media bulletins. These and other examples of the conservative movement's heightened activities seem to indicate that the counter-claims identified in this paper have real-world practicality. As such, we expect to see the conservative movement heighten its mobilization efforts whenever the possibility increases that the United States will sign a climate treaty to reduce carbon dioxide emissions.

While our study provides insight into the nature of the conservative movement's counter-claims regarding global warming, future research is needed to examine the structure and operation of this countermovement with regard to global warming. Existing journalistic (Gelbspan 1997) and activist (Ozone Action 1996a, 1996b) analyses highlight the crucial roles of conservative foundations, conservative think tanks, and sympathetic "skeptical" scientists in debates over global warming, and it is time for in-depth sociological analyses of these phenomena as well. Future work on global warming and GEC in general, needs to move beyond analyses of the claims of environmentalists and their scientific and policy allies to a consideration of the social forces opposing the "environmental lobby." Thus, we clearly need to pay more attention to the efforts of the conservative movement and its industry allies to

mobilize an effective countermovement dedicated to establishing the *non*-problematicity of global warming

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