

The Phenomenology of Global Warming: The Role of Proposed Solutions as Competitive Factors in the Public Arenas of Discourse

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Abstract

Even in the face of growing evidence that global warming is a very real threat to human social systems, global warming has received relatively little media coverage. From a phenomenological perspective this paper explores the possibility that one reason for this limited coverage may be that on an experiential level, proposed solutions offered for global warming have not provided closure to the loss of taken-for-grantedness associated with the problematic disturbance of the everyday life-world brought about by the initial problem claim. To address this issue the public arenas model of social problems (Hilgartner and Bosk 1988) is extended through a discussion of social action and typification drawn from the phenomenology of Alfred Schütz. A content analysis of UPI wire reports, Readers Guide articles, and Science articles from 1976 to 1998 suggests that the types of proposed solutions to global warming in these sources have largely not permitted the taken-for-grantedness of the life-world to be maintained. As a result media coverage of global warming has declined over the last twenty years and counter claims have become a significant part of the discourse.

Keywords: *phenomenology, global warming, environmental problems*

Introduction

Debate over the last twenty years concerning the nature, extent, and impact of global warming has served to illustrate that media representations of social problems are never simple reflections of “objective” conditions. Rather, they are social agreements or understandings. Researchers have pointed out that objective conditions do not by themselves determine the extent of public interest and media coverage that a social problem will receive (Hilgartner and Bosk 1988, 54; Spector and Kitsuse 1977). Disagreement exists, however, about why coverage of environmental problems varies

over time. Downs (1972) and Dunlap (1992, 90-91) for example, argue for a “natural history” of environmental problems in which environmental problems come to widespread attention and then decline from public view as part of their natural life-course. Mazur (1998), on the other hand, argues for what has been called a “linear transmission model” of social problems where media sources “set the agenda” for public and political interest in environmental problems. Lastly, Hilgartner and Bosk (1988) provide a rhetorical model of social problems they call the public arenas model. Rhetorical models describe the rise and decline of media coverage of social problems as a dialogue between cultural contexts, the needs of the audience, competition in the media, actions of powerful political actors, and the nature of the environmental problems themselves. For discussions of the rhetorical approach see Hilgartner and Bosk (1998), Wilmoth and Ball (1995), Williams and Frey (1997), and Williams (1998).

Rhetorical models of social problems offer the most robust explanations for the rise and particularly the decline of environmental problems in the media. That is, both natural history and linear transmission models are flawed. Addressing the shortcomings of natural history models Mazur (1998, 470) points out “much sociological research has focused on how issues gain attention of the press, but little has examined why real problems fall from the news — beyond the cliché that they have become ‘stale’.” However, Mazur’s linear transmission explanation for public interest in global environmental problems provides even a less satisfying answer for falling coverage. He suggests that individual decisions, and personnel reassignments in major news organizations might have caused the decline. “Perhaps most American news organizations dropped the global environment after 1991 because their flagship, *The New York Times*, tired of the story. About that time the *Times*’s activist environmental reporter, Philip Shabecoff, left the paper, and the *Times* did indeed diminish its coverage, but I am unable to say if it was acting as a leader or a follower of other news

organization” (Mazur 1998, 469). This explanation ignores very important, real world and rhetorical issues that impact media coverage. The public arenas model of social problems, on the other hand, embraces the complexity of media claims about social problems. This model suggests that social problem packages must compete for attention in the limited space provided by various public arenas (Hilgartner and Bosk 1988). Competition in the media, then, is a central feature of the public arenas model.

As Hilgartner and Bosk (1988) point out, it is appropriate to ask what factors enable this competition. That is, what factors enable a social problem such as global warming to better compete for media coverage? Recent research has discussed many of these factors such as: real world events, the dramatic potential of global warming as a social problem, the complexity of the problem and existing political realities (Ungar 1992, 483; Mazur and Lee 1993, 981; Williams and Frey 1997). For example, in regard to global warming and ozone depletion, Ungar (1998) argues that such competitive factors lead to a “hot crisis” that favored ozone depletion over global warming in the media. In addition, Wilmoth and Ball (1995, 318) suggest, in an examination of the population problem, that proposed solutions to a social problem may also be an important competitive factor.

... we argue that a social problem is a collective definition of a social phenomenon as bad. Merely identifying badness, however, does not make a social problem worthy of public attention: In order to compete for attention in the various public arenas, a plan of action is needed. Proposing a solution to the badness, and linking the solution to the cessation or melioration of the badness, helps badness claims cohere as a social problem that can be used to mobilize a collective response (Wilmoth and Ball 1995, 320).

Proposed solutions, then, are thought to make a social problem “cohere” in public consciousness after initial claims are made in the media.¹ This claim, however, requires closer examination and questioning. Specifically, why do proposed solutions help an environmental-social problem gain public attention? Further, do all proposed solutions serve this purpose? The current environmental literature has failed to address this issue. Far from detached theoretical questions, answers to these questions provide important insight into the ways environmental problems might be packaged in order to gain public attention, a requirement if the realistic remediation of large-scale environmental problems such as global warming is ever possible.

This analysis explores the role of proposed solutions to global warming over the last twenty years. Media reports from

United Press International wire reports, *Science*, and citations from the *Readers Guide to Periodical Literature* are examined. It is argued that proposed solutions to global warming have not resonated well with existing cultural themes, and that for this reason they have not provided an antidote to the loss of taken-for-grantedness caused by the claim “global warming.” As a result, media interest in global warming has declined over the last ten years and counter claims have become a significant part of the ongoing media discourse.

The Problem

Global warming came to widespread public attention in the late 1980’s. This rise in coverage has been linked to record global temperatures (Mazur and Lee 1993; Ungar 1992; Ungar 1998), and to its similarity to previously identified global environmental problems such as ozone depletion (Mazur 1998). Little attention, however has been paid to the reasons that global warming coverage fell in later years, and no analyses have addressed the role proposed solutions might have played in this decline. This is an important oversight. As part of the widespread media attention to global warming in the late 1980’s, a small number of proposed solutions to the problem were suggested. Importantly for this analysis, these solutions were curious in nature. That is, they all seemed somewhat far-fetched, impractical, and technological. Such remedies included the so-called “Geritol fix,” and the use of mirror satellites positioned around the globe to deflect solar energy. What all of these solutions to global warming shared was a resonance with existing cultural themes of modernism, they were then “packageable.” This requires further discussion.

Packageable solutions are those that square with common sense understandings of the world. These solutions allow us to bundle complicated social problems claims such as global warming into an understandable and taken-for-granted form. On the other hand, nonpackageable solutions are solutions that do not provide the ready conceptual packages that packageable solutions do. Technological solutions to global warming follow in the footsteps of other technological solutions to historically high profile social problems. During the last 100 years technology has been used to effectively address disease epidemics, inadequate public sanitation, and unsafe food (Goodman and Redclift 1991). Therefore, technological remedies to emerging environmental problems such as global warming resonated well with this preexisting cultural theme. Early in the discourse about global warming (1987-1989) this resonance was evident (See Figure 3). These technological solutions provided a way to package early claims about global warming in the media (Wilmoth and Ball 1995). But this technological packaging only lasted a short time.

After 1989 calls for the reduced use of fossil fuels and the need for international political cooperation came to dominate media discussions of proposed solutions. While these proposed solutions were more realistic, solutions to global warming, they nonetheless were dismissed in the media as not politically or socially feasible. In short, these solutions were not packageable and in the end were ineffective at gar-

nering public consensus about global warming. Shortly following this period of peaked interest in global warming, media coverage dropped dramatically and never again became a salient issue in the media. In the following section a theoretical explanation is offered that explains how proposed solutions to global warming address the collective insecurity that social problem claims cause.

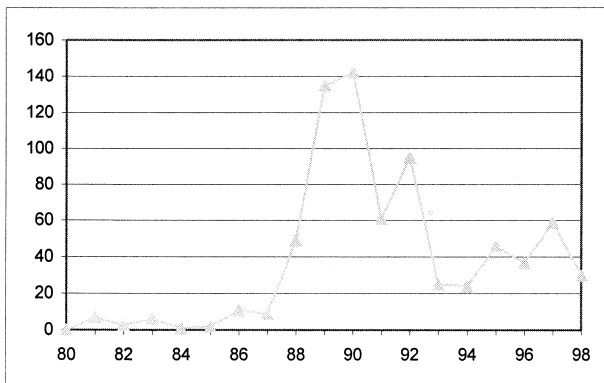
Theoretical discussion

When considering what constitutes an environmental-social problem, it seems reasonable to consider against what background we formulate such a claim. To say that something is “problematic” is to presuppose that there is an “unproblematic” state. Environmental-social problem claims, then, identify “badness” and the “disorder” of what is perceived to be a “normal,” orderly world.² The basis for this sense of orderliness (the realm of the unproblematic) requires further explanation.

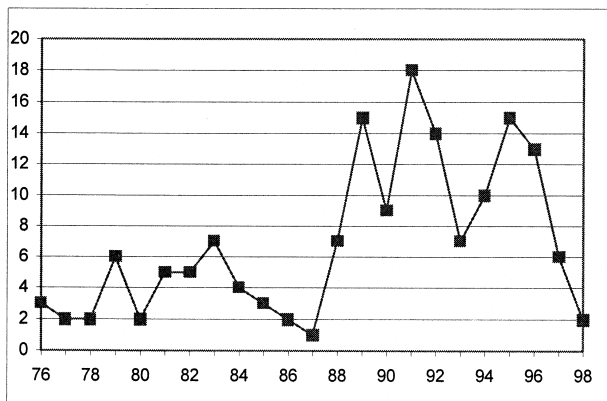
The realm of the unproblematic has been characterized by Schutz and Luckmann (1973, 3) as the “everyday life-world.” Through our immersion in the life-world we plan, act, go about our affairs, and eventually die. The hallmark characteristic of the life-world is that it is “taken-for-granted.” As Schutz and Luckmann (1973, 3-4) put it:

“The everyday life-world is to be understood as that province of reality which the wide-awake and normal adult simply takes for granted in the attitude of common sense. By this taken-for-grantedness, we designate everything which we experience as unquestionable; every state of affairs is for us unproblematic until further notice.”

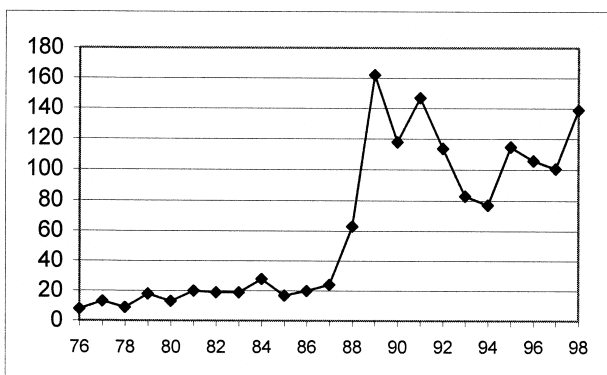
To make the observation that humans exist in a state of taken-for-grantedness, however, only describes the final outcome of the complicated world building process through which humans construct order with social institutions and other social arrangements. Taken-for-grantedness is an empirical phenomenon for sure, but it only exists as a consequence of the ongoing process of social world building. While it is impossible to discuss all of the considerably important issues involved here, it is important to note that humans exist in a “relative position of world openness” (Berger and Luckmann 1966, 47). That is, humans do not enter a world that is biologically defined for them by instinct. In short, humans enter a world that must be ordered by social institutions and cultural constructions. The end result of this structuring of social life is the taken-for-grantedness characterized by what we have earlier called the life-world. Under normal, unproblematic circumstances reality of all sorts (social, natural, etc.) appears to the social actor to be self-evidently real and taken-for-granted - “that’s just the way it is.”³



United Press International (UPI) 1980-1998



Science 1976-1998



Readers Guide 1976-1998

Figure 1. Annual number of articles about global warming.

Thomason (1982) points out that the taken-for-grantedness of the life-world takes on a central significance in an individual's ability to understand and effectively operate in daily life. Without the structure of the social world and its symptomatic taken-for-grantedness, the individual would be confronted with and overwhelmed by the chaos of everyday life, reality would be a paralyzing cacophony of competing sensory stimuli.⁴ In this sense, the social order and its institutions can be thought of as "nomic instrumentalities," the instruments of individual and collective sanity (Berger 1966; Thomason 1982). This realization suggests an issue of central importance to our discussion of the role of proposed solutions to environmental-social problems and the ability of global warming to compete in the media. That is, environmental-social problem claims threaten the taken-for-grantedness of the life-world in a profound fashion. Such a threat, if the taken-for-grantedness and sanity of the social world is to be maintained, must be resolved in some way. Specifically, social action in the form of a proposed solution must be conceived, planned, or taken.

The central point to be made here is that environmental-social problem claims invite action in the form of proposed solutions in order to resolve the problem of the loss of taken-for-grantedness they create. Because proposed solutions resolve this loss of taken-for-grantedness they help a social problem such as global warming to compete for attention in the media. The manner in which proposed solutions allow taken-for-grantedness to be regained is a matter to which we now turn.

Reclaiming Taken-for-Grantedness

Taken-for-grantedness can be regained in three potential ways. The first is to retypify the newly identified problem as "problematic until further notice." In such cases the social problem is left in an indeterminate status, that is, it is unresolved, and taken-for-granted as problematic. While this approach is at least possible, it is nevertheless unlikely. Social problems that are typified as "problematic until further notice" do not fully address the element of action always implied in any social problem claim. Such a lack of resolution ultimately has the effect of interfering with the taken-for-grantedness of the life-world. Retypifications of problematic circumstances, if they are to be effective antidotes to the loss of taken-for-grantedness instigated by social problem claims, must contain a clear statement of what must be done (a solution).

The second approach to regain taken-for-grantedness is by at least conceptualizing a socially viable solution to the environmental-social problem at hand. Such a conceptualization allows the problem to be "packaged" in a way that makes the situation a matter of common sense and at the

same time resolves our orientation to the problem in terms of action - "it tells us what we must do." It is important to note, however, that what is central to this process is not necessarily the realistic solution of the problem (though this can be the case as well) or a commitment to act, but rather the resolution of the loss of taken-for-grantedness associated with the social problem claim. As Schutz (1967) has pointed out, the world of everyday life is not primarily concerned with such theoretical formulations, rather the life-world is the domain of common sense; it is "pretheoretical". What Schutz suggests here is that in everyday life we take an unthinking approach toward daily life and its concerns, thus favoring those courses of action and conceptual formulations that resonate with our existing, socially held stock of knowledge and its taken-for-granted realities. To the extent that proposed solutions to social problems resonate with these themes and provide a solution to the action element instigated by the problem claim, they can be seen as "packageable solutions." That is, they provide a ready antidote to the loss of taken-for-grantedness associated with the original social problem claim.

The third approach that may be taken to remedy the loss of taken-for-grantedness associated with a social problem claim and its related action element does not involve retypification as such, but rather a reassertion of prior typifications and rejection of the social problem claim. In essence, "counter claims" can be made that dispute the social problem claim therefore rendering proposed social problems unworthy of attention. This inattention enables an unmodified version of the existing stock of knowledge to be maintained with its inherent taken-for-grantedness. In this way the social problem claim is made unproblematic.

It perhaps goes without saying that the later two of these three means of reconfiguring the problematic might well be related. That is, in the absence of packageable solutions to social problems in the media it is likely that the number of counter claims will increase. Wilmoth and Ball (1995, 321) in fact, mention this expectation. They state, "The presence of a socially feasible solution in an issue culture will tend to reduce the incidence of articles that advance contradictory packages; conversely, the absence of such a solution will tend to increase the incidence of articles that employ contradictory packages."

Of these three approaches to reconfiguring the problematic, then, only two appear likely as they apply to a discussion of global warming if they are to solve the problem of loss of taken-for-grantedness: the presentation of a social problem with a packageable solution, or in the absence of such packages the emergence of counter claims. Guided by these theoretical insights, it will be suggested in the following analysis that media interest in global warming has declined over the last ten years, that proposed solutions have in fact made

up a very small portion of these media reports, that these solutions have been primarily of a “nonpackageable” nature, and that as a result counter claims have become a significant part of the ongoing media discourse.

Data and Methods

Media coverage concerning global warming is analyzed from three media sources: *The Readers Guide to Periodical Literature*, United Press International (UPI) wire reports, and *Science*. These sources were selected in order to address the content of a wide variety of media discourse and also because these sources have, at least to some extent, distinct and different audiences. The period of concern for this proposed research is 1976 through 1998. This period was selected because it begins with what has been argued to be the first public attention given to global warming (Ungar 1992). In order to assess the impact of proposed solutions upon the ability of global warming to compete for attention in the media both the quantity and nature of coverage was considered.

Several units of analysis are commonly used in content analysis including paragraphs, sentences, or even words (Weber 1990). However, because the articles and wire reports under consideration were generally written to express one central idea, it is possible to treat each article or wire report as a consistent and distinct unit of analysis. The unit of analysis for this research, then, is simply individual articles or wire reports.

Data were collected and identified for the study period with the aid of computer databases of citation references and abstracts in addition to hard copy references for years not available in a database. Citations from the *Readers Guide to Periodical Literature* were not used for substantive analysis but were instead counted by incidence for each year of the study period. This approach was taken because of the large number of articles to be found in *Readers Guide*. Once collected, data were coded according to four concerns: (1) the quantity of overall coverage, (2) the quantity of coverage devoted to proposed solutions, (3) the type of these proposed solutions, and the (4) substantive nature of claims made about global warming. These categories are further elaborated in Table 1.⁵

All coding categories are ostensibly new measures of unknown validity, but appear to have a great deal of face validity. The reliability of these measures was addressed through a test coding of a sample of articles and wire reports. Two coders coded a number of articles and wire reports. Systematic differences in coding results were resolved through a further refinement of the coding system. In the end, the coding system proved to be quite reliable. The

Table 1. Content analysis coding categories.

The Quantity of Global Warming Coverage: Refers to the quantity of coverage given to global warming in the three media sources under consideration.

The Number of Proposed Solutions: Refers to the number of articles and wire reports from Science and United Press International with a primary focus upon solutions to global warming.

The Type of Proposed Solutions: Refers to the substantive nature of proposed solutions about global warming in both Science and United Press International wire reports. Packageable solutions are those that easily resonate with the existing cultural themes of modernity and progress and include biological solutions (planting trees, etc.) and technological solutions. Non-packageable solutions on the other hand include political, and economic solutions, or calls for social action. These types of solutions are categorized as nonpackageable because they generally leave solutions to global warming unresolved. That is, on a social-cultural level, these sorts of proposed solutions are seen to be less effective and more contentious than biological and technological proposed solutions. Such solutions do not provide the same taken-for-grantedness provided by packageable solutions.

The Substantive Nature of Claims about Global Warming: Refers to the nature of claims made about global warming. Claims refer to articles and wire reports that point to global warming as a real and significant problem. Counter claims refer to articles and wire reports describing global warming as an insignificant or nonexistent problem. Neutral articles refer to those articles and wire reports primarily concerned with the science of global warming thus making no claims or counter claim about the status of global warming.

two coders were able to agree about how an article should be coded nearly 90% of the time.

Analysis and Discussion

The Quantity of Global Warming Coverage

The total coverage given to global warming in the three arenas of public discourse have followed a similar path over the last twenty years (see Figure 1). From the period 1976 to 1987 very little attention was given to global warming. This was particularly true of the *Readers Guide to Periodical Literature* and United Press International. Science also devoted little attention to global warming but more than *Readers Guide* and United Press International. For example, six articles were written in 1979 and again in 1983. The attention given in *Science* is understandable because it was during this time that claims were being assembled in scientific terms. That is, science often leads the way in the original articulation of environmental claims (Taylor and Buttel 1992).

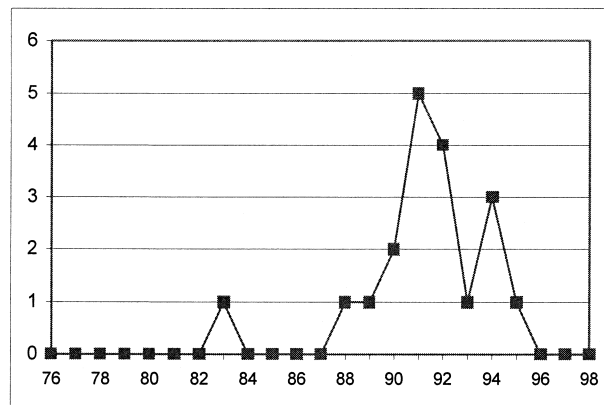
Beginning in 1988 all three discourses became more interested in global warming. As earlier mentioned this was in part the result of record temperatures and pervasive drought in the United States. Coverage escalated thereafter

peaking in all three sources in the years 1989 through 1991. After this peak coverage rapidly declined to a level higher than the pre 1988 levels yet significantly lower than the 1989 through 1991 levels.

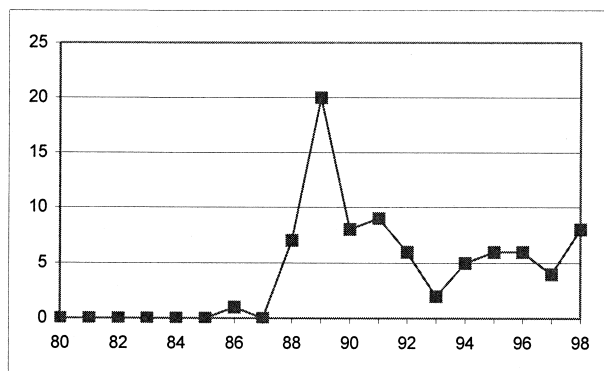
Curiously, interest again increased in 1995 and 1997 in all three sources (Figure 1). This was a result of three factors. First was the increased public interest in the IPCC (Intergovernmental Panel on Climate Change) report that had long been in preparation through the United Nations (IPCC 1995). Words about conflicts over the final report became public knowledge at this time and were disseminated in the media. The second reason media interest was revived in 1995 and 1996 is because this period of time coincided with a presidential election year in the United States. As Figure 3 indicates the rise in proposed solutions to global warming during this period was entirely due to political and economic discourse. Democrats offered global warming as an issue in the 1996 campaign and sought to differentiate themselves from Republicans who historically had shown pessimism about global warming. For example, in February of 1996 President Clinton addressed flood victims in Pennsylvania and vowed that while global warming has not been proven to be the cause of the floods we should do 'everything we can' to combat it (UPI 1996). A similar increase in political interest in global warming was noted during the 1992 election where a large share of the dialog about global warming was of a political nature (see Figure 3) (Williams and Frey 1997). The third reason for the increase in media coverage had to do with the preparations for the forthcoming Kyoto conference on global warming in December of 1997. Stemming from the United Nations Framework on Climate and Change, major industrialized nations agreed at Kyoto to cut greenhouse gas emissions by more than 5 percent from their 1990 levels.

The Number of Proposed Solutions

Substantive analysis of the content from *Science* and United Press International Wire Reports show that coverage concerning proposed solutions to global warming made up only a very small portion of the overall discourse. For example, of the total UPI wire reports for the year 1989, only 20 made reference to a proposed solution (14%) (See Figure 2). Results were similar in *Science*. In 1991 only 27% of all articles discussed solutions to global warming. In regard to the total number of proposed solutions to global warming made over the twenty-year period, it is clear that they have followed a similar path of increase and decline as the overall coverage previously discussed. Of most interest for this analysis, however, is the observation that proposed solutions have made up a very small portion of the overall debate about global warming in the media.



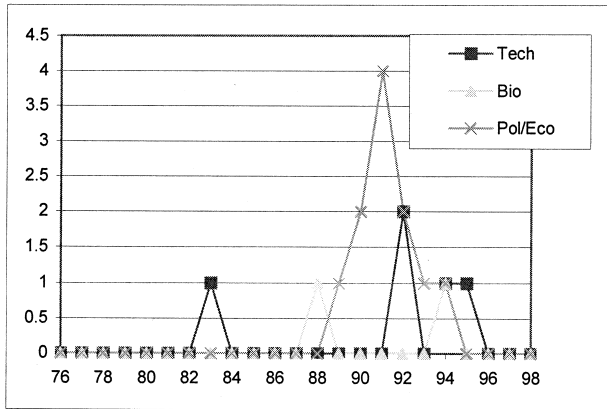
Science 1976-1998



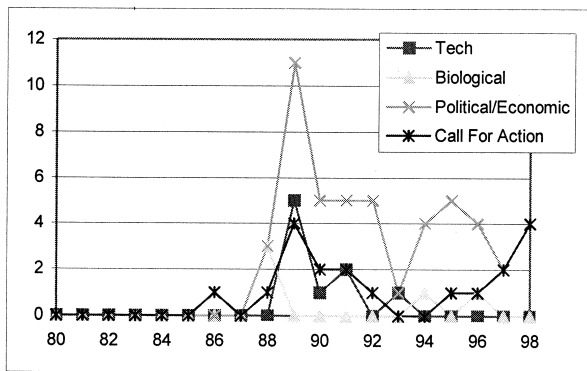
United Press International (UPI) 1980-1998

Figure 2. Annual number of proposed solutions to global warming.

Proposed solutions to global warming were found to be of four general types: technological, biological, political economic, and call for action (Figure 3). Political economic solutions were by far the most common type of proposed solution. Political economic proposed solutions were characterized by coverage of national and global treaties, resolutions to implement carbon taxes, and coverage of proposed regulation of industries linked to the production of greenhouse gasses. Calls for action were also noted and include calls for attention to global warming by political and scientific leaders. Biological proposed solutions include solutions such as planting trees to increase the uptake of carbon dioxide. Coverage of technological proposed solutions, on the other hand, involved actions such as positioning satellite mirrors in space, and the so-called Geritol fix, a process where iron oxide is spread across the ocean surface, therefore increasing the amount of algae and the rate at which carbon



Science 1976-1998



United Press International (UPI) 1980-1998

Figure 3. Annual number of proposed solutions to global warming by category.

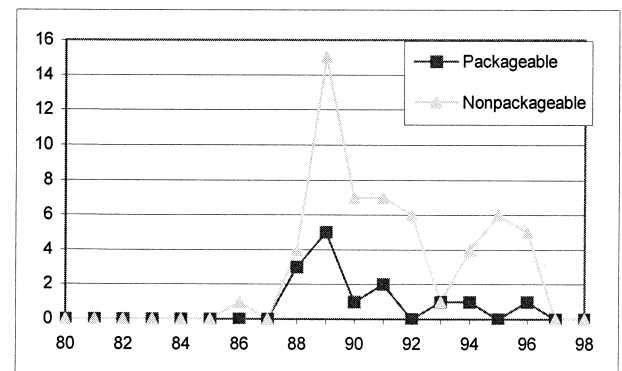
dioxide is absorbed. Also include in this category are proposed solutions such as the use of electric cars, nuclear power, and cleaner burning fuels.

These four types of solutions: political economic, call for action, biological, and technological were further collapsed into two general types: packageable and nonpackageable solutions (Figure 4). Political economic and calls for action were categorized as nonpackageable because they generally leave global warming as a social problem in an unresolved state. That is, on a social-cultural level, these sorts of proposed solutions are seen to be less effective and more contentious than biological and technological proposed solutions. On the level of taken-for-grantedness, biological and technological solutions better resonate with existing cultural understandings of modernity and progress. To state this in terms we have already mentioned, nonpackageable solutions do not allow the taken-for-grantedness lost with the original social problem claim to be regained. Rather, the social problem claim “global warming” remained “problematic until fur-

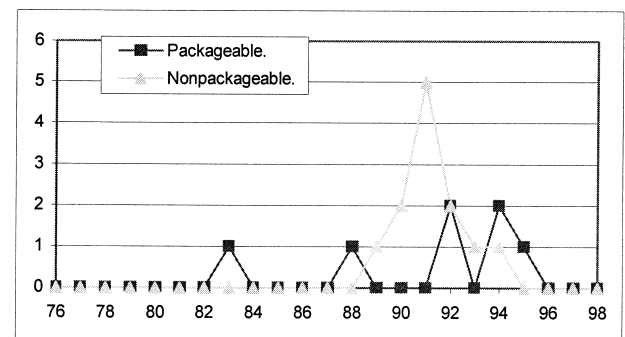
ther notice.” Packageable solutions, on the other hand, resonate with the preexisting cultural themes of modernity and progress and, therefore, offer conceptual packages easily understood by the intended audience, thus allowing global warming to be typified in such a way that it can, again, become unproblematic and taken-for-granted. As indicated in Figure 4 non-packageable solutions have consistently far outnumbered packageable solutions to global warming. This is especially true of the proposed solutions found in United Press International, but also in *Science*. It is important to point out, as we shall see, that this realization may have had an important consequence for the nature of claims made about global warming.

The Nature of Claims About Global Warming

As argued earlier, in the face of a large number of non-packageable solutions to global warming and the inadequate antidote to the loss of taken-for-grantedness that they provide, the nature of claims made about global warming were



United Press International (UPI) 1980-1998



Science 1976-1998

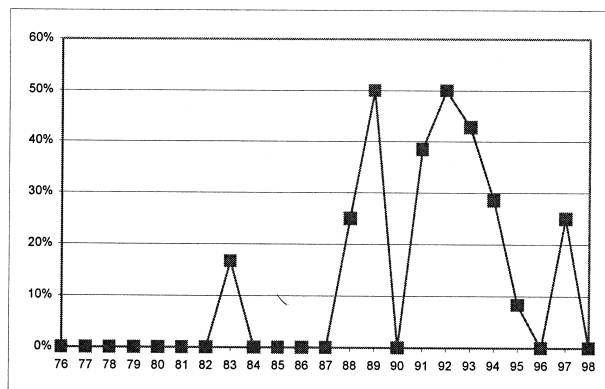
Figure 4. Annual number of packageable solutions to global warming by category.

expected to include a number of counter claims. Counter claims, it should be remembered, also provide an antidote to the loss of taken-for-grantedness. That is, “counter claims” serve to dispute the social problem claim therefore rendering proposed social problems unworthy of attention. This inattention enables an unmodified version of the stock of knowledge to be maintained including an attitude of taken-for-grantedness. In this way the social problem claim is made unproblematic.

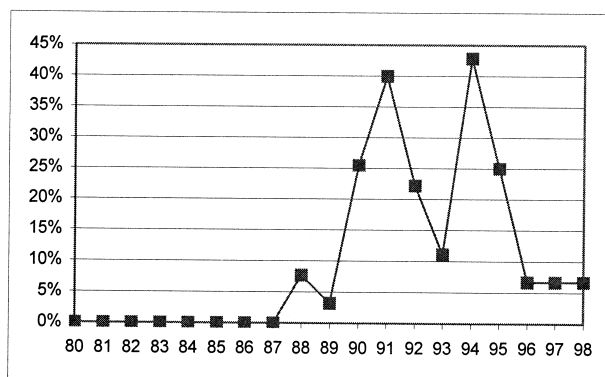
The majority of counter claims made about global warming during this period were based upon the “uncertainty of global warming science.” This is not surprising. It has been pointed out that scientific arguments about environmental problems are inherently prone to uncertainty (Harper 1995, 134). Taylor and Buttel (1992) suggest that environmental, scientific issues are by nature subject to deconstruction. They state, “science-centered environmentalism is, however, vulnerable to deconstruction. Environmental problems, almost by definition, involve multiple, interacting causes, allowing scientists to question the definitions and procedures of other scientists, promote alternative explanations and cast doubt on the certainty of predictions” (Taylor and Buttel 1992, 405-406). Robert Balling (1992), for example, argues, that while carbon dioxide does seem to be increasing in the atmosphere, projected increases in global temperature seem to be overstated. Much of this overstatement, say other critics, involves the lack of consideration given to certain “feedback mechanisms” in global climate such as the role of the oceans in carbon dioxide absorption (Joos et al. 1999, 464), the reflectivity of polar ice, and the role of clouds (Kerr 1997, 1040).

Not surprisingly, counter claims about global warming which exploit scientific uncertainty have been frequently disseminated by industry sponsored environmental groups centered around global warming. The Western Fuels Association (1997), for example, reprints, and distributes articles that express uncertainty about specific scientific issues related to global warming suggesting that such limited uncertainty should invalidate the overall public concern for global warming as an environmental-social problem. This uncertainty when combined with concerns about the economic cost of the remediation of global warming (Wildavsky 1992) has provided the central theme for most counter claims.

Figure 5 describes the percentage of counter claims in relation to both neutral statements and claims made about global warming in *Science* and UPI. These figures clearly show that counter claims made up only a small portion of the discourse prior to 1988 and 1989. This period apparently represented a “honeymoon period” for claims about global warming. After this period, however, counter claims came to represent forty (UPI 1991) to fifty (*Science* 1989) percent of



Science 1976-1998



United Press International (UPI) 1980-1998

Figure 5. Annual percentage of counter claims about global warming.

all claims made about global warming. In addition, it also appears that this increase in counter claims is related to the increase in nonpackageable solutions. That is, the increase in counter claims seems to parallel the rapid increase in the number of nonpackageable solutions. While it is impossible to draw definite causal conclusions about this relationship, in terms of our earlier discussions about reconfiguring problematic circumstances, it is a plausible explanation for these events.

Conclusion

This analysis has explored the relationship between the nature and extent of proposed solutions to global warming and the ability of global warming to compete for attention in the media. By framing global warming in the phenomenology of everyday life, a better understanding of media coverage of environmental problems was presented. Without this

phenomenological context the role proposed solutions play in the framing of environmental problems is not understandable. As relates to global warming this is certainly the case.

Because the claim “global warming” disrupted the necessary taken-for-grantedness of everyday life, proposed solutions to global warming were necessary (Wilmoth and Ball 1995). Not all proposed solutions, however, helped to remedy the loss of taken-for-grantedness. This analysis demonstrates that in the absence of packageable solutions to global warming the ability of global warming to compete in the media was impaired. The majority of proposed solutions to global warming during the study period were of a nonpackageable nature thus not resonating with existing cultural themes. As a result, media interest in global warming both declined over the last ten years, and increasingly came to be composed of counter claims.

Solutions to global warming will likely remain contested issues for many years. The relative prominence of counter claims stemming from a lack of packageable solutions to global warming is disturbing. The most important and certain solution to global warming is the reduction of fossil fuel use (de Sa 1998). But as has been demonstrated, political initiatives, scientific calls for action, and global treaties to curb fossil fuel use may themselves be responsible for the rise in counter claims making activities in the media. The findings reported here offer no simple way around this dilemma. This analysis is a preliminary excurses into the phenomenology of environmental problems. Comparative analyses of the proposed solutions to global warming and other large-scale environmental problems such as stratospheric ozone depletion might yield important findings. In the end, strategies for packaging large-scale environmental problems with solutions in the media might be developed that better enable realistic solutions to be pursued.

Endnotes

1. Proposed solutions always logically follow initial periods of claims making. That is, a problem must first be presented before solutions can be considered.
2. This is not to say that the “normal” orderly world is one that is normal and orderly only that in what ever state the environment is thought to be that it is taken as a matter of common sense - “that is just the way it is!”
3. Thomason (1982) refers to the process by which individuals experience the world as real and unquestionably given as reification. Reification is literally, to “thing-a-fy,” to make a product of consciousness thing like.
4. It should be pointed out that Zen Buddhism is a tradition that attempts to deconstruct (dereify) and break through taken-for-grantedness. For an excellent discussion of dereification and Zen Buddhism see (Moore 1995). Existential philosophy is also a dereif-

ing perspective that emphasizes the unique decision making potential of the individual. See Berger (1963) for a discussion of existentialism in sociology.

5. The coding categories provided in Table 1 were deductively selected for this analysis based upon the current theoretical discussion. Given the parameters provided by this perspective, these categories are reasonable. It is important to note, however, that this is not the only coding scheme possible for these data. Other theoretical perspectives would certainly require other coding categories.

References

- Balling, R. 1992. *The Heated Debate: Greenhouse Predictions Versus Climate Reality*. San Francisco: Pacific Research Institute for Public Policy.
- Berger, P. L. 1963. *Invitation to Sociology: a Humanistic Perspective*. New York: Anchor Press.
- Berger, P. L. and T. Luckmann. 1966. *The Social Construction of Reality: a Treatise in the Sociology of Knowledge*. New York: Doubleday.
- de Sa, P. 1998. Population, carbon emissions, and global warming, comment. *Population and Development Review* 24, 797-803.
- Downs, A. 1972. Up and down with ecology — the issue attention cycle. *Public Interest* 28, 38-50.
- Dunlap, R. E. 1992. Trends in public opinion toward environmental issues: 1965-1990. In R. E. Dunlap and A. G. Mertig (eds.), *American Environmentalism: The U.S. Movement, 1970-1990*, 89-116. New York: Taylor and Francis.
- Goodman, M. and M. Redclift. 1991. *Refashioning Nature, Food, Ecology, and Culture*. London: Routledge.
- Harper, C. L. 1995. *Environment and Society, Human Perspectives on Environmental Issues*. New Jersey: Prentice Hall.
- Hilgartner, S. and C. Bosk. 1988. The rise and fall of social problems, a public arenas model. *American Journal of Sociology* 94, 53-78.
- Intergovernmental Panel on Climate Change. 1995. *The Science of Climate Change Contribution of Working Group I to the Second Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge: Cambridge University Press.
- Joos, F., G. K. Plattner, T. F. Stocker, O. Marchal, A. Schmittner. 1999. Global warming and marine carbon cycle feedbacks on future atmospheric CO₂. *Science* 284, 164-167.
- Kerr, R. A. 1997. Greenhouse forecasting still cloudy. *Science* 276, 1040-1042.
- Mazur, A. 1998. Global environmental change in the news: 1987-90 vs 1992-6. *International Sociology* 13, 457-472.
- Mazur, A. and J. Lee. 1993. Sounding the global alarm, environmental issues in the US national news. *Social Studies of Science* 23, 681-720.
- Moore, R. J. 1995. Dereification in Zen Buddhism. *The Sociological Quarterly* 36, 699-723.
- Schutz, A. 1967. *The Phenomenology of the Social World*. Evanston: Northwestern University Press.
- Schutz, A. and T. Luckmann. 1973. *The Structures of the Life-World Vol. II*. Evanston: Northwestern University Press.
- Spector, M. and J. Kitsuse. 1977. *Constructing Social Problems*. New York: Cummings.

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- Taylor, P. J. and F. H. Buttel. 1992. How do we know we have global environmental problems? Science and the globalization of environmental discourse. *Geoforum* 23,405-416.
- Thomason, B. C. 1982. *Making Sense of Reification, Alfred Schutz and Constructionist Theory*. London: Humanities Press.
- Ungar, S. 1998. Bringing the issue back in, comparing, the marketability of the ozone hole and global warming. *Social Problems* 45, 510-527.
- Ungar, S. 1992. The rise and (relative) decline of global warming as a social problem. *The Sociological Quarterly* 33, 483-501.
- United Press International. 1996. Clinton urges action on global warming, Feb 16th.
- Weber, R. P. 1990. *Basic Content Analysis*. Beverly Hills, CA: Sage.
- Western Fuels Association. 1997. Internet Location, <http://www.westernfuels.org/index2.htm>.
- Wildavsky, Aaron. 1992. Global Warming as a Means of Achieving an Egalitarian Society: An Introduction. In R. Balling (ed.), *The Heated Debate: Greenhouse Predictions Versus Climate Reality*, xv-xxxvi. San Francisco: Pacific Research Institute for Public Policy.
- Williams, J. 1998. Knowledge, consequences, and experience: the social construction of environmental problems. *Sociological Inquiry* 68, 476-497.
- Williams, J. and R. S. Frey. 1997. The changing status of global warming as a social problem, competing factors in two public arenas. In D. Chekki (ed.), *Research in Community Sociology*, 279-299. Greenwich, CT: JAI Press.
- Wilmoth, J. R. and P. Ball. 1995. Arguments and action in the life of a social problem, a case study of 'overpopulation,' 1946-1990. *Social Problems* 42, 318-340.