ISSA Proceedings 1998 - Science And Rationalism In Warranting Assent: Examination Of Congressional Environmental Arguments



In 1994, the new Republican majority in Congress began an effort to shift America's environmental policy. The Republicans offered Americans a "Contract With America" (CWA), a list of legislation the Republican's vowed to pass. The "Contract" offered among other things, promises of a balanced budget, a scaling down of bureaucratic

regulations and most important to this project, an alteration in environmental policy (Gosselin, 1995; Phillips, 1995). Republicans argued that rollbacks in environmental legislation were made in order to offset the waste of governmental over-regulation (Byrne & Rebuffoni, 1995, p. 1A). It was proposed "that local people are better stewards of the land, that environmentalists care more about nonhumans than humans and that cutbacks would help balance the budget" (Byrne & Rebuffoni, 1995, p. 1A). Regulatory reform was argued as a way to loosen environmental regulations and cut cleanup aid, in order to stimulate economic growth and control governmental spending (Rebovich, 1995).

The purpose of this essay is to analyze the argumentative strategies of the environmental debate in the 104th Congress. It will examine how the Republicans used the concept of "Sound Science," as a catalyst for environmental reform. Specifically, two questions are posed:

(1) What role does "Sound Science" serve in altering environmental legislation. Specific attention will be paid to how "science" as a rational enterprise serves to justify environmental rollbacks and decenter environmentalists' claims.

(2) What role does "definition" play in public argument.

In making these arguments, this project examines Republican's rhetoric in the *Congressional Record* from November 1, 1995 to 1996 – the beginning of the use of "Sound Science" to the end of the 104th session of Congress. This study will

first discuss the role of definition in argument. It will then turn to a detailed examination of how the term "Sound Science" was rhetorically constructed and employed in environmental debate during the 104th Congress. It will be argued that "Sound Science" was a justification for repealing environmental legislation. Finally, some important theoretical explanations for argumentation scholars will be suggested.

1. The role of definition in public argument

The purpose of this section is to reveal how definitions are used and their implications in public argument. The intent is to focus on how definitions become epistemological, creating and maintaining public knowledges. Additionally, this section will evaluate how definitions serve to legitimate and marginalize particular perspectives.

There are several implications to the study of definition in public argument. Initially, definition provides a way of knowing. Herrick (1995) posited that: "To define is to advance a meaning or classification for a word, person, object or act" (p. 143). However, the complexity of symbolic meanings extends beyond the act of individuals attributing meaning. Edelman (1964) explained that: The meanings, however, are not in the symbols. They are in society and therefore in men [sic]. Political symbols bring out in concentrated form those particular meanings and emotions which the members of a group create and reinforce in each other. There is nothing about any symbol that requires that it stand for only one thing. (p. 11) Our knowledges become integrally intertwined with the terminology that we use. Insofar as we can shift our term usage, we would correspondingly shift our orientation and knowledge toward an object or action.

Moreover, we assume that definitions will increase clarity in public argument. The idea of advancing clear and precise meaning to increase the understanding of the terms is to increase the quality of the debate (Capp & Capp, 1965; Vedung, 1995). Furthermore, definitions provide an understanding of specific historical contexts. Argumentative contexts not only suggest the appropriateness of definitions, but also the appropriateness of how definitions come into play. Cox (1981) argued that definitions function as context-specific 'rules' for actors' judgments and actions. These rules lead to a level of understanding of the definitions depending on the context in which they occur. In regards to the definition of "wetlands," Schiappa (1996) argued:

It is assumed that there is sufficient overlap in the competing definitions that no

harm results from a lack of strict uniformity. Besides, normally no one in academic settings has the authority to declare one specific definition to be that which everyone in a given discipline must follow. Public laws, on the other hand, are aimed at precisely this sort of denotative conformity. (p. 212) Denotative conformity is the ability of terms to be defined in a clear and precise manner where a common understanding is achieved. In other words, the ability of Congressional Representatives to define terms in a clear and precise manner is not only beneficial, but should be expected. Adding further to the level of preciseness of denotative conformity in the legislative process is the issue of scientific expertise. Caution should also be raised concerning who is defining the terms, as competing definitions can be made to serve different political interests.

This section has examined definition as a way of knowing. The section focused on definition not only as a part of an argument but as an argument itself. Specifically, the role that definition plays in public argument was examined. It was argued that definition serves to delimit argument by shifting the focus away from one issue toward another. Definitions help to keep the meanings of terms and symbols known. By increasing the clarity of terms, definitions lead to a common understanding of the terms; thus increasing the common ground for those involved in the argument. In addition, a lack of an understanding and implications of specific terms implicates the audience evaluating the discourse. Moreover, definitions alter social situations and historical contexts. There are differences between definitions that focus on what "ought" to count versus what "is." Misconceptions often are the result of vague and ambiguous definitions of terms. Moreover, vague and ambiguous definitions shift the focus from issues central to argument to the definition of terms. Ultimately, definitions function as social influence and control, thus possessing the ability to change our understanding of the world.

In the environmental debate, the use of the terms "sound science" has profound implications. The next section will evaluate how "sound science" reconfigures the public debate over the environment. Specifically, it will be argued that the lack of an explicit definition of "Sound Science" allowed for the delimitation of argumentative grounds in the environmental debate. As a result of some of the Republican Controlled Congress's use of "Sound Science," significant environmental legislation has been repealed.

2. The republican's use of sound science

The environmental debate in Congress centered around several issues. It politicized ecological issues to the extent that the debate was no longer concerned with questions of ecology but instead, focused on political issues. "Sound Science" ceased to exist as an ecological issue and entered the debate as a political concern. The Republicans, in politicizing these terms shifted what should have been an environmental debate, into the realm of political concerns.

Some Republicans in the 104th Congress have employed the term "Sound Science" as a strategy in the environmental debate. "Sound Science" implies a science that is an "all knowing refutable claim" that can be proved or disproved (Eisenberg, 1984; Lyne, 1990). An examination of how "Sound Science" was employed in Congressional debate illustrates how vagueness and ambiguity can limit the argumentative ground. If a definition is never offered, the ability to refute an argument based upon "Sound Science" diminishes.

To evaluate Republicans' argumentative strategies this project will evaluate the term "Sound Science" and those terms used in conjunction with the "Sound Science" theme.

Sound Science as Rational

The descriptive terms cluster around "Sound Science" offer insight into what the term encompasses. The terms associated with "Sound Science" have three general themes. First, "Sound Science" can be examined through its association to the "type" of data used. Second, "Sound Science" is associated with terms that concern the validity of the treatment, testing procedures, or the objectives of the procedures. Third, "Sound Science" has been associated with terms that suggest that there is a preferred type of reasoning that should underlie making a decision. "Sound Science" is often associated with the terms "accuracy," and "hard evidence." "Accuracy, consistency and predictability are often considered 'scientific' values" (Kuhn, 1977, p. 331). "Sound Science" gains argumentative strength through connection with these terms. For example, when "Sound Science" is associated with the term "credible," it implies that there are certain identifiable standards that have to be met, and implies that current "science" is not meeting them.

The focus on data also suggests that any errors could be within the data. For example, regarding the data used to estimate insect outbreak, Representative Cunningham (R-California) in the House Resolution 175 (1995) stated:

The USDA [United States Department of Agriculture] must rely on a sufficient

amount of credible, hard data before a change is to be made. Never before has the USDA been responsible in designing a system of this type or scale. Therefore, before such an undertaking is to occur, I believe that the science must be sound. (E2119) Cunningham is suggesting that a quantifiable level of hard data determine "Sound Science." According to Berthold (1976) an indirect connection can be made "through mutual relationships to third terms" (p. 303). By stating that the data must be credible and hard, the Representative implies criteria for "designing the system." Therefore, the evaluation of the data is needed in order to measure and test for "Sound Science," which at this point has no "hard" definition. By confusing what constitutes "Sound Science," Republicans opposed to pro-environmental legislation can claim that the science used to determine that legislation was based on a science that was less than "sound."

Accurate information has been associated with "Sound Science" numerous times in the environmental debate. For example, the planning and implementing of a general permit for the Energy and Water Development Act was argued on the House floor. Representative Riggs (R-California) stated that "it should be based on accurate information and sound science" (H. Res. 110, 1996). In this instance accurate information is linked with "Sound Science." The importance of "Sound Science" is enhanced by its close connection to accurate information. Science based on information that is less than accurate would be considered "unsound."

Although making the association between accurate information and "Sound Science," the Republicans who use the term fail to define how to determine "accuracy." They claim that legislation should be based on "Sound Science," which presumably means accurate information, but do not provide criteria concerning how to assess either. In failing to offer such criteria, Rigg's suggestion remains vague and unclear. Thompson (1971) argued that a clear understanding of the terms helps in reducing or avoiding confusion, and ensures that the debate will focus on the issues. If "Sound Science" remains unclear or undefined the focus will shift from the issues surrounding the environment to what constitutes "Sound Science."

The terms associated with "Sound Science" indicate that it requires some questioning of the objectives, treatment and testing involved. These questions can be seen as an attempt by those opposed to environmental legislation, to control the debate by questioning the science used by the other side. It suggests that current methods of testing procedures used for environmental legislation be based on a science imprecise. Monitoring and evaluating results have been argued as elements of "Sound Science" and the validity of the results has been questioned. Senator Gorton (R-Washington) argued that, "project recommendations shall be based on a determination that projects are based on sound science principles." He also explained "recommendations should have a clearly defined objective and outcome with provisions for monitoring and evaluation of results" (S. Res. 112, 1996). Gorton's discourse implies that "Sound Science" should have some "clearly defined" objective; that there should be some attainable end. Connecting project recommendations with "Sound Science" makes this association. If project recommendations are to be based on "Sound Science" then they should incorporate the use of "clearly defined objectives. According to Gorton, "Sound Science" is able to monitor and evaluate results.

Another component of "Sound Science" is appropriate treatment and testing. Former Senate majority leader Dole (R-Kansas) argued that the amount of legislation concerning drinking water "enhances important public health priorities by using 'sound science' and appropriate treatment and testing technologies" (S. Res. 189, 1996). Again "Sound Science" is used to connect to another term. Appropriate treatment and testing technologies are linked with "Sound Science" indicating that if the science is "sound," then the treatment and testing technologies will be sound as well. Unfortunately, Dole fails to indicate how much testing and treatment would constitute an "appropriate" amount.

"Sound Science" has been associated with terms that suggest making a decision based on some form of reasoning. Terms that have been used are "foresight," "reason," and "discretion. These terms imply that there is some form of logic or reasoning to guide decisions, thus, "Sound Science" should be based on some form of logic or reasoning.

The amount of power or validity imbued by association can be illustrated through other arguments addressing "Sound Science." The term "Sound Science" gains rhetorical strength through its implication of a science that is credible. Terms used with "Sound Science" suggest that scientific research is rigorous and follows a strict logic. Representative Chenoweth, from (R-Idaho) stated "We all want to promote the wise use of America's natural resources, but the driving force behind our current policies have [sic] little to do with sound science, foresight, or reason" (S. Res. 110, 1996). This association of "Sound Science" to foresight and reason suggests that a "logical" element must be present. Foresight implies that there is, or should be, some way to make accurate and appropriate predictions concerning environmental policies. By tying "Sound Science" to foresight, Representative Chenoweth suggests that current policies fail to make such predictions. Reason is tied to some logical thought process. If the reasoning chain is clear there should be no questioning of scientific methods used. If we accept Chenoweth's definition, "Sound Science" has the ability to make logical predictions concerning the phenomena being studied. If the science is "sound," it should contain foresight as well as reason.

"Sound Science" as Common Sense

Initially, Republicans supported rollbacks of environmental legislation in the name of "regulatory reform." Recently, it has been argued that there is a need for a "common sense" approach to environmental concerns. This section, will examine how some Republicans of the 104th Congress have clustered "Sound Science" with "common sense." "Common sense" by contrast is based on a less strict standard of validity. It will be argued that the association of "Sound Science" to "common sense" implies that the science used should be easily understandable, and that it should make sense to a lay person.

By forging a link between "Sound Science" and "common sense," advocates offer standards that can be in direct opposition to one another. "Sound Science" would seem to be based on a critical methodological approach to knowledge, suggesting a set standard or criteria against which claims can be measured. In contrast, "common sense" suggests that all one has to do is evaluate a situation determining whether it makes sense to a lay person. By appropriating both "Sound Science" and "common sense" the Republicans are free to use either as grounding in the environmental debate. The result is an effective two-pronged assault on the science used in environmental protection.

The association of "common sense" to "Sound Science" has several implications for the environmental debate: First, the association is used to suggest problems in the regulatory process. Second, the association implies that progress can be viewed as money spent properly.

Clusters have been made associating "Sound Science" to the regulatory process. Representative De Lay (R-Texas), argued on the Senate floor that "these riders [cuts to environmental legislation on appropriation bills] are about common sense, sound science, and flexibility, they're about making sure that we get real benefits out of our regulatory requirements so that the burden we place on Americans and on our businesses make sense" (H. Res. 178, 1995). The association of "Sound Science" to "common sense" indicates an ability of "sounding right," or "making sense" to the lay person. By explaining science in terms that "sound right," the assumption is that anyone can examine science and if it "sounds" good to them, then it is "sound." Thus, science is taken out of the hands of scientists and placed into the hands of the public.

"Sound Science" can be used to make the regulatory process more effective. De Lay stated: "That is why we are including this package in this bill, the provisions that make up this package are widely supported by a majority of both houses, and signify a return to common sense, sound science, regulatory flexibility, and a more effective regulatory system" (H. Res. 177, 1995). "Sound Science" is not only clustered with "common sense" but also with regulatory flexibility. This is significant because it suggests that there be some flexibility in the regulatory process.

Senator Bond (R-Missouri) spoke of the significant strides the country has made on environmental progress. Bond stated "I think we have come to the point now where we demand that the progress be on the basis of 'common sense,' of justifiable actions, of using sound science, of not duplicating efforts, and making sure that the dollars we spend on the environment...are spent properly" (S. Res. 151, 1995). It is implied that progress must be based on "common sense" and "Sound Science." In this instance, progress refers to the legislative choices made on the environment. If progress is based on "common sense," one would expect to see regulations and standards that would "just seem right." Thus, "Sound Science" must have the ability to "sound right," and "make sense" to a lay person.

Oppositional Terms to "Sound Science"

The terms opposed to "Sound Science" can be grouped in two ways. First, "emotion" and "speculations" are opposed to "Sound Science." Emotional disputes differ from common sense in that emotional forms of persuasion center on the tragedies of the environment. An emotional argument put forth by environmental advocates would be an easier argument to win, as often times environmental hazards that affect wildlife are easier to portray.

Republicans opposed to environmental legislation wanted to keep emotions out of the debate in order to avoid losing the debate based on this emotional appeal. Whereas, a common sense approach to environmental legislation stems from the difficulty in which scientific information is inherently hard to understand. Common sense arguments focus mainly on whether or not the argument, or logic makes sense. Second, the opposition of "Sound Science" to urgency and political expediency creates an impression of a science determined or influenced by politics. These opposition clusters help illustrate what "Sound Science" is not. In discussion concerning the National Educational Amendment Act (NEAA), the use of "Sound Science" implies that the Act should be based on science not emotion. The responsibility of the NEAA of 1996 was to ensure that environmental education was not one-sided or heavy-handed. Senator Inhofe (R-Oklahoma) stated: "Environmental ideas must be grounded in sound science and not [in] emotional bias. While these programs have not been guilty of this in the past, this is an important safeguard to protect the future of environmental education" (S. Res. 117, 1996). In this instance emotional bias is used in opposition to "Sound Science," signifying it as a devil term. This illustrates the strategy of moving the environmental debate into the political arena. While emotions are valid criteria for political decisions, they should not effect science. In the next sentence the Senator contradicts himself by observing that "these programs have not been guilty of this in the past," and thus, answers a problem he admits never existed.

Another key term that has been used to oppose "Sound Science" is media attention. Senator Faircloth (R-North Carolina) argued that, "...in the past, regulations have been aimed at issues identified through media attention rather than sound science" (S. Res. 115, 1995). This contrast between "Sound Science" and media attention implies that the media has an ability to control which issues gain attention. Issues that gain the media's attention are those that are most important and relevant. "Sound Science" should not be what the media reports, rather, it should focus on the issues that are relevant and most important to the environment.

Politics and political gain have also been used in opposition to "Sound Science." Senator Burns (R-Montana) commented, "the bill establishes an Endangered Species Commission which will ensure sound science, not politics, drives our decisions" (S. Res. 167, 1995). The Senator argues that "Sound Science" should "drive" the decisions. This contrast implies that science not concerned with politics is "Sound Science." Thus, "Sound Science" entails a sense of what is best for the environment regardless of the politics involved.

Republicans also argued that "Sound Science" should be separated from political influences.

Senator Kempthorne (R-Idaho) spoke of the Endangered Species Conservation Act (ESCA) suggesting that science and politics should be separated. The emphasis he stressed was how it must be reformed or else it will collapse due to the enormous pressure of the regulations that it has enacted. Senator Kempthorne in Senate Resolution 167 (1995) stated:

Let me go over the major provisions of the ESCA: This bill effectively separates science from politics, it is designed to actually conserve species while recognizing the rights of private property owners, the current act's mandate to recover every species regardless of cost or consequence is changed to allow us to prioritize our Nation's needs and to conserve species in the process. (15850)

The issues that are raised in this excerpt are three-fold. First, Kempthorne is trying to separate science from politics. Unfortunately, he acknowledges that it conserves some species and at the same time it protects the rights of private property owners: a distinctly political concern. Second, the mandate is changed in order to re-focus its priorities. Finally, the Senator offers that it changes the mandate from "recovering every species regardless of cost or consequences" to making cost and consequences a concern. This moves from conserving all of the species to only the ones that the process would catch in prioritizing the "Nation's" needs. The literal translation of the statement appears to be true in that the bill effectively separates science from politics. It is as if politics ignores science, and legislation completely ignores the science of conservation.

What level of science is needed to achieve the most "realistic assessment" is often questioned. The claim is that the assessment used should be based on the best science available. Senator Domenici (R-New Mexico) stated in Senate Resolution 118 (1995): My good science amendment was a specific remedy in one law.

But I believe that there is an urgent need for realistic and plausible exposure scenarios and sound science in all risk assessments. I am pleased, therefore, that the Dole bill requires that risk assessments be based only on the best available science, a basic requirement which has been sorely needed for far too long. (10395) In this instance "Sound Science" is associated with the "best available science" through the use of the mutual third term "risk assessments." The argument is very similar to the notion that science changes. When associating "Sound Science" to the best science available, the focus shifts to the currency of science. That implies that it is possible for risk assessments to use science that is considered outdated or not current. Unfortunately the Senator does not provide an explanation as to what constitutes the "best science." In not explaining the "best science."

In the final section, the association of "Sound Science" to cost benefit analysis will be examined. The following examples examine those instances where there is a direct link to costs or money. The importance of examining costs associated to the science used in environmental regulations will help illustrate the claim that the costs should not exceed the benefits. It has often been argued that the cost associated with protecting the environment has been too high.

Representative Lewis (R-California), argued "If you believe that [the] EPA should base decisions on proven sound science, risk assessment, and thorough costbenefit analysis, by all means join with us in perfecting this bill" (S. Res. 152, 1995). The association of cost-benefit analysis to "Sound Science" implies that there should be concern as to where the money is spent in environmental protection. Furthermore, the cost that would be required for industries to comply with the regulations of the EPA should also be considered. The implication of "Sound Science" and cost-benefit analysis to "perfecting this bill" implies that the bill needs to be perfected, and the way to perfect it is for the EPA to consider the costs and benefits. Unfortunately, it leaves out who gets to assess the costs and who receives the benefits. Representative McIntosh (R-Indiana) stated in the House Resolution 124 (1995) that:

This bill calls upon [the] EPA to reevaluate its rule – making activities in order to set priorities for the expenditure of public funds – to limit regulations only to those that serve a compelling public need, are based on sound science, and are cost effective... The bill is a clarion call for rational and realistic regulations that are based on sound science and subjected to risk assessment and cost-benefit analysis, regulations that are tailored to the magnitude of the problem addressed, and regulations that not only seek to achieve worthwhile goals, but also allow regulated sources to pursue the most effective means to those ends. (7938)

In his statement the representative maintains that money will only be allocated to regulations that "serve a compelling public need." Unfortunately, there is no explanation as to what constitutes the public need. Furthermore, if the public is unaware of the environmental harms, or if there is no threat posed to the public, then the EPA should not be concerned with it. The implication is that only when the public is concerned spending for those regulations will be enacted. There would be no consideration to instances that effect the environment itself or the wildlife it contains.

A cost benefit analysis will help in ensuring that the funds for environmental regulations are prioritized. The Senator explains the criteria for how funds for environmental regulations should be spent from Missouri. Senator Bond (R) explained the allocation of funds stated in Senate Resolution 34 (1996): After passage of this legislation, if sound science indicates that a significant risk needs

to be addressed, then, of course we must support sensible and cost-effective regulations. That is what this is all about. Making sure that we get regulations focused on the design to get rid of those risks...We have said that we are making funds available to be allocated on the basis of need, on the basis of sound science. If that, in fact, is such a need and sound science requires it, then money will go there...So we put the money into State revolving funds, we put the money into programs where it will be allocated on the basis of sound science, where it will be allocated on the basis of sound science, where it will be allocated on the basis of sound science, where it will be allocated on the basis of sound science, where it will be allocated on the basis of sound science, where it will be allocated on the basis of sound science.

The association of "Sound Science" to need suggests that in order for the science used to be considered "sound," it must fulfill some need. Another basis for how the funds are allocated is that they must be based on "how much danger is posed." This implies that if the harm does not affect or "pose" a threat than there is no need for funding. The use of "danger posed" is ambiguous. Danger has two possible implications or interpretations. First, it could be interpreted as danger towards people. Second, danger could be directed towards species or an animal becoming endangered. By not addressing this ambiguity the Senator allows the term to be vague and ambiguous.

Republicans of the 104th Congress did not define the term "Sound Science" they operationalized it in their rhetoric. Balance and change were associated with "Sound Science" indicating how both science and nature possess the ability to change or evolve. The essay also examined the connection of "Sound Science" to "common sense." This association illustrated the need for the science to sound right or make sense to the lay people. The terms used in opposition to "Sound Science" provided further insight in the strategic use of the term. Terms such as emotion and speculation suggested that science cannot be concerned with emotional appeals and that it should be proven. Politics was used in opposition indicating that science used in determining environmental outcomes should not be tied up in political influences. Finally, the association of "Sound Science" to cost benefit analysis and risk assessment was examined. It was implied that there needs to be a "realistic" risk assessment process but "realistic" was not defined. Furthermore, assessments should be made based on the best science available. The examination of "Sound Science" in conjunction with cost benefit analysis indicated that money should be spent based on the existence of a public need or a posed threat.

Through the strategic the use of "Sound Science," Republicans opposed to environmental legislation masked the real issues of the environmental debate. The argument that the EPA and environmental advocates fail to use "Sound Science" in the regulations and legislation they put forth was articulated. In successfully shifting the argument away from environmental issues to the term "Sound Science," Republicans opposed to environmental legislation limited the argumentative ground of environmental advocates. Thus, the argument shifted from the reasoning why environmental concerns are important and relevant, to whether or not the science used in determining the standard for environmental legislation was "sound."

3. Implications for public argument

This study offers several implications for public argument. First, it consolidated some of the previous research regarding definitions in argument. Past studies focused on how definitions promoted understanding in argument. However, these studies ignored the role that definition can play in masking issues by removing them from discussion. In the case of the environmental concerns of the 104th Congress, the use of "Sound Science" masked such issues as the need to protect air and water quality or endangered species. Conceptual ambiguity resulted in a lack of focused discussion. Vague and ambiguous terms are not clearly defined, thus their meaning can only be based on assumptions operationalized in their use. Furthermore, discussion may focus on the meaning of the ambiguous term, potentially avoiding the issues more relevant to the argument.

This study found that ambiguity in defining a term could function to limit meaningful debate by restricting the argumentative grounds of dialogue. More importantly, leaving key terms ambiguous allows proponents to shift focus from the issues central to the argument, to the definition of the term itself. One of the defining characteristics of definitional argument is the ability to delimit argumentative grounds. The associations employed by some Republicans of the 104th Congress aimed at establishing "Sound Science" as a standard for science used in environmental legislation. Keeping the meaning of "Sound Science" vague and ambiguous forced environmental advocates to answer critiques concerning the type of science used and kept policy concerns muted. In shifting the focus of the argument, opponents of environmental legislation. More importantly, by keeping "Sound Science" vague and ambiguous they were able to focus the debate on issues that were beneficial to their agenda.

Public argument "is publicized, made available for wide consumption and persuasion of the polity at large" (Fisher, 1989, p. 71). When environmental cuts

were openly debated on the House and Senate floor, they were defeated. The attachment of riders to appropriation bills suggested that the Republicans opposed to environmental legislation sought to avoid public scrutiny concerning their claim of regulatory reform.

REFERENCES

Berthold, C. A. (1976). Kenneth Burke's cluster-agon method. *Central States Speech Journal*, 27, 302-309.

Byrne, C., & Rebuffoni, D. (1995, Aug. 23). Voyageurs' future a litmus test for parks regulation. *Star Tribune*, pp. 1A (Lexis Nexis).

Capp, G.R., & Capp, T.R. (1965). Principles of argumentation and debate. Englewood Cliffs, N.J.: Prentice-Hall, Inc.

Edelman, M. (1964). *The symbolic uses of politics*. Urbana, Ill: University of Illinois Press.

Eisenberg, E. M. (1984). Ambiguity as strategy in organizational communication. *Communication Monographs*, 51, 227-242.

Fisher, W. (1989). *Human communication as narration: Toward a philosophy of reason, value, and action.* Columbia, SC: U of South Carolina Press.

Gosselin, P.G. (1995, Oct. 16). Republicans seem on course to deliver their revolution. *The Boston Globe*, pp. 1. (Lexis Nexis).

H. Res. 110, 104th Cong., 2nd Sess., 142 Cong. Rec. 8330 (1996).

H. Res. 115, 104th Cong., 2nd Sess., 142 Cong. Rec. 9438 (1996).

H. Res. 124, 104th Cong., 1st Sess., 141 Cong. Rec. 7938 (1995).

H. Res. 175, 104th Cong., 1st Sess., 141 Cong. Rec. (Extension of Remarks), E. 2119 (1995).

H. Res. 177, 104th Cong., 141 Cong. Rec. 12018 (1995).

H. Res. 178, 104th Cong., 1st Sess., 141 Cong. Rec. 2163 (1995).

Herrick, J. A. (1995). Argumentation understanding and shaping arguments. Arizona: Gorsuch Scarisbrick Publishers.

Kuhn, T. S. (1977). *The essential tension: Selected studies in scientific tradition and change*. Chicago: University of Chicago Press.

Lyne, J. (1990). Argument in the human sciences. In R. Trapp & J. Schuetz (Eds.), *Perspectives on argumentation: Essays in honor of Wayne Brockriede* (pp. 178-189). Illinois: Wavelength.

Phillips, K. (1995, Oct. 1). The grim experiment: After the '64 election, the democrats pushed the country too far left in creating the great society. Today, the GOP wants to pull America to the extreme right. Will they ever learn? *The Times*

Mirror Company, pp. 1 (Lexis Nexis).

- S. Res. 34, 104th Cong., 2nd Sess., 142 Cong. Rec. 1907 (1996).
- S. Res. 110, 104th Cong., 2nd Sess., 142 Cong. Rec. 8737 (1996).
- S. Res. 112, 104th Cong., 2nd Sess., 142 Cong. Rec. 8977 (1996).
- S. Res. 115, 104th Cong., 1st Sess., 141 Cong. Rec. 10138 (1995).
- S. Res. 117, 104th Cong., 2nd Sess., 142 Cong. Rec. 9670 (1996).
- S. Res. 118, 104th Cong., 1st Sess., 141 Cong. Rec. 10395 (1995).
- S. Res. 151, 104th Cong., 1st Sess., 141 Cong. Rec. 14224 (1995).
- S. Res. 152, 104th Cong., 1st Sess., 141 Cong. Rec. 14366 (1995).
- S. Res. 167 part II, Cong. Rec. 26 Oct. 1995: 15850.
- S. Res. 189, 104th Cong., 1st Sess., 141 Cong. Rec. 1774 (1996).

Schiappa, E. (1996). Towards a pragmatic approach to definition. "Wetlands" and the politics of meaning. In A. Light & E. Katz (Eds.), *Environmental pragmatism* (pp. 209-230). New York: Routledge.

Thompson, W. N. (1971). *Modern argumentation and debate*. New York: Harper & Row, Publishers.

Vedung, E. (1987). Rational argumentation and political deception. In F. H. van Emerson, R. Grootendorst, J. A. Blair, & C. A. Willard (Eds.), *Argumentation: Across the lines of discipline* (pp. 353-364). Providence, U.S.A.: Foris.