ISSA Proceedings 2006 – A Role For Dialectic In Science Studies

1. *Science studies and the rhetoric of science*

In the past few decades, our understanding of the workings of science have been immensely enriched and deepened by various theoretical approaches thriving in the conceptual space opened by the so-called Kuhnian revolution. The field of science studies has developed as a diverse inter- and cross-disciplinary enterprise where the attention shifted from the logical analysis of idealised proposition systems called 'theories' to the sensitive study of the actual practices of scientific activity. As the main thrust focused on the social dimensions of what scientists do, and how this is framed on different scales by the social environment, discursive pratices also became a major issue for several studies. While specific and contingent features of the linguistic medium of scientific communication used to be disregarded or ignored as either transparent or irrelevant by most traditional views, numerous recent approaches consider discursive reality to be constitutive of scientific knowledge production.

Typically, discourse-oriented analyses treat scientific communication in rhetorical terms (e.g. Bazerman 1988, Prelli 1989, Gross 1990, Pera and Shea 1991). The focus of attention is directed to scientific controversies where conflicting claims create spaces in which linguistic persuasive techniques become functional. In other words, discursive practices are seen as tools for persuasion, and language operates both as a transmitter of beliefs and a transmitter of cognitive attitudes to beliefs. While there are serious disagreements and divergences between certain approaches within rhetorical analyses of science – all the mentioned authors represent significantly different theoretical standpoints – I will refer to the family of these views with the umbrella term 'rhetoric of science'. For my purposes a dominant view in this 'rhetoric of science' is that belief acceptance is a process that cannot sufficiently be explained by idealised, discourse-insensitive cognitive factors.

Rhetoric of science fits in the main genre of science studies in several respects. First, by focusing on the influence of communicative performances on receptive

communities, it places scientific discourse in a social dimension. Second, by studying the linguistic medium of scientific communitcation, it contributes to broadening the complex of perspectives from which science is analysed, as opposed to the strictly 'cognitive' (i.e. logico-conceptual) interest of classical approaches. Third, since explanatory factors – rhetorical devices – are markedly different from the explicit evaluative criteria used by scientists, rhetoric of science relies on a clear distinction between actors' categories and analysts' categories, thus taking a meta-scientific attitude that does not fall back on its subject level. Fourth, it aims to provide empirical descriptions of the efficiency of persuasive techniques in specific situatuions, and refrains from formulating normative claims or 'universally' valid criteria.

The latter two points, distance from actors' categories and avoidance of normativity, are strongly interconnected notions, traceable back to the original commitments of science studies. According to a central commintment of the field, the way science studies reflects upon science is analogous to the way science reflects upon nature. In Bloor's highly inspirative Strong Programme, sociology of knowlede is a naturalistic enterprise where explanations of belief acceptance are formulated in terms of casuses, instead of reasons referred to by actors (e.g. Bloor 1992). The normative charge inherent in the concept of 'reason' is lacking from the entirely naturalistic concept of 'cause', and evaluative terms such as 'rationality', 'objectivity', or 'truth' are expelled from Bloor's programme where knowledge, instead of being 'justified true belief', is "whatever people take to be knowledge" in the purely descriptive sense (Bloor 1992, p. 5). Norms that govern or inform scientific research themselves become objects of explanation, and hence their normative force on the analyst of science cannot be accepted by her without facing the danger of blunt circularity.

However, such a strong rejection of normativity has been challenged even within science studies, where the influence of anthropology introduced participant observation methods at the expense of the 'stranger's perspective' favoured by sociologists (e.g. Latour and Woolgar 1979). The 'third wave of science studies' proposed by Collins and Evans (2002) attempts to bridge the gap between actors' and analysts' categories, by making use of a form of normativity that is simultanously binding for both scientists under study and those examining science. According to them, since the concept of 'expertise' informs both the analyst and the actor, a normative theory of expertise may facilitate a deeper insight to the workings of science without having to rely too much upon other

norms of scientific activity. In other words, while the analyst keeps some distance from the field she studies in order to benefit from the advantages of an external perspective, she remains close enough to understand some inherent properties hidden from the eyes of a complete stranger.

Nevertheless, 'expertise' seems too broad a concept to efficiently deal with the discourse of science. While it is apt to cover a number of aspects having to do with the 'craftmanship' profile of experimental science Collins and others investigate, discursive expertise needs further specification before building a normative theory of scientific communication while keeping an eye on fruitful insights of science studies. I propose that this form of expertise lies in the utilisation of argumentation-theory.

2. *The pragma-dialectical potential for science studies*

The pragma-dialectical approach to argumentation theory was developed in Amsterdam by van Eemeren, Grootendorst, Houtlosser, and others (e.g. Eemeren and Grootendorst 1992, Eemeren, Grootendorst, Jackson, and Jacobs 1993, Eemeren and Grootendorst 2004), combining several insights from different trends in contemporary discourse theories (see Eemeren *et al*. 1996). The approach relies on four "core commitments". Externalisation: instead of treating mental attitudes, the theory deals with externalised communicatory acts. Socialisation: argumentation is viewed as an interactional process between language users. Functionalisation: discursive elements are functional instruments within an environment of speech acts. Dialectification: argumentation is an attempt to convince a critical opponent by resolving the difference of opinion by rational means.

How does this programme agree with the main direction of science studies? *Externalisation* is perfectly in line with the empirical nature of the field: only by focusing on externalised elements of discourse can substantive, tangible reality be attributed to entities the theory deals with. Otherwise the analysis is restricted to either stipulated mental contents or idealised conceptual (re)constructions. In the first case, a sufficiently strong psychological theory of mental attitudes is required to support the analysis of the discourse, and even if such a theory were available – which does not seem to be the case – the study of argumentation would in all likelihood be reduced to that theory, rather than being developed in its own right. In the second case, self-sustained conceptual contents were to be abstracted from actual language use, and the result would be highly contingent

upon massive philosophical presuppositions concerning these 'World 3' entities. The most plausibe alternative is to subject concrete, externalised elements of discourse to empirical inquiry.

Socialisation is also promising, since the need for understanding scientific activity as an inherently social process is probably *the* central tenet of science studies. Moreover, while rhetoric also deals with social events, dialectic portrays a social dimension which is subtler than that of rhetoric in a number of respects. First, the communication model used by traditional rhetorical approaches is unidirectional: the basic element of discourse is a 'speech' (spoken or written) made by the active 'orator' and directed at the passive 'audience'. In dialectic, on the other hand, communication is viewed as fundamentally interactional in nature, and both parties play an active role in mutually shaping discursive space. Moreover, the parties of a dialectical dialogue are treated basically on equal terms, and they are endowed symmetrically with their positions in scientific communication – which more often than not seems a better model of actual scientific discourse within a core-group than the completely asymmetrical set-up suggested by the rhetorical perspective. Also, the fundamental element in rhetorical analysis is a unique persuasive act with no temporal dimension, while dialectic's essential interest in dynamic processes is more in line with the temporal sensitivity of many construction-oriented trends in science studies. While recent rhetoric of science has made serious and successful attempts to escape from the confines set by classical rhetorical inheritance, it seems that the potentials inherent in a dialectical perspective are often more promising to deal with several essential aspects of scientific discourse than those offered by the basic toolbox of rhetoric.

Functionalisation succeeds in taking discourse elements out of the formal context of logic and relocating them in the contingent environment of communicatory acts. Traditional argumentation theories worked in the framework of logical analysis, and evaluated arguments according to stipulatedly universal structural properties. In pragma-dialectic, purely structural reconstruction is replaced by functional analysis, and discursive elements are treated as speech acts serving specific purposes determined by the actual argumentative situation. This latter approach provides access to the discursive content, while leaving the rules of dialogue contingent and contestable. Access to contential issues is a key feature of dialectic approach since, in contrast with the structural reconstruction characteristic to philosophy of science, science studies aims to address the

emergence of specific knowledge contents, in addition to organising forms. However, in order to evaluate arguments understood in this framework, one needs to be able to internalise the 'form of life' in which the argumentative situation takes place, and it requires sharing some commitments between the analyst and the actor.

It is *dialectification* that might first seem partially at odds with some basic principles of science studies. Pragma-dialectic treats arguments as rational tools for resolving differences of opinion, and such an analysis relies on a normative theory of what it means to make rational moves in a controversy. Science studies with its relativistic taste, as I have argued, usually avoids such normative approaches. Similarly, rhetoric of science focuses on persuasion, which can be pursued in a purely descriptive manner. The pragma-dialectical school contrasts persuasion with convincing, in that while persuasion can be achieved by any tools, conviction is a result of rational discussion providing argumentative reasons for accepting or rejecting standpoints (Eemeren and Grootendorst 2004, pp 29-31). While rhetoric maintains a broad interest in all persuasive tools of *ethos, pathos*, and *logos*, dialectic puts a major, although not exclusive, stress on *logos* and offers an ideal model of rational discussion (pp. 21-22), as well as "commandments to reasonable discussants" (p. 190). If we appiled dialectic to scientific controversies, would it not amount to retreating to the mostly abandoned strongholds of normative philosophy of science?

Normativity as conceived by pragma-dialectic discourse analysis has several advantages over how traditional philosophers of science formulated normative claims. On the one hand, while philosophers proposed universal criteria of valid argumentation – i.e. forms of inductive or deductive inferences to ideal explanations – the pragma-dialectical model treats norms of rational discussion in a more flexible way. No rules of discussion are taken for granted once and for all, and the ideal model is fine-tuned with respect to the actual discursive practice. This is achieved by developing a careful interaction between descriptive and normative issues, and hence allowing for empirical feedback to the normative theory based on descriptive insights (pp. 27-31). Norms are neither *a priori* given nor absolute: they are abstracted from practice where, at the same time, they ought to hold.

On the other hand, rules of rational discussion are acknowledged both by actors and analysts. One does not need to become a scientist in order to be competent in

what it means to argue rationally, yet one needs to share some commitments with her scientist informants: a complete stranger has only limited access to understanding-based explanations. In his influential attack on the Strong Programme, Laudan criticised the symmetry principle – i.e. that the same types of causes must be attributed to 'rational' and 'irrational' beliefs – by emphasising that it is an 'empirical' question whether a belief is rational or not: a rational belief is one "that the agent can give reasons for antecedent to the adoption of the belief", and thus arguments are causally efficient in adopting rational beliefs (Laudan 1984, p. 58). (Similar but more detailed criticisms are Friedman 1998, Freedman 2005.) While it is a question whether recognition of arguments is an empirical matter or not, I see no point in doubting that argumentative reasons are seen in our broad culture as in some sense superior to other factors influencing belief acceptance. It especially applies to science: even if science does not manifest a pure ideal of rationality, as illustrated by many findings in science studies, here the norms of rational discourse seem to hold stronger than in other cultural enterprises. In order to understand discursive practices in science, it seems necessary to share some competence in these practices.

Collins and Evans (2002) distinguish between 'interactive expertise' and 'contributory expertise', claiming that analysts need a degree of expertise sufficiently strong to enable them to understand the problems of the field under study, while weaker than a level of expertise that would enable them to contribute to this field. In other words, their entry point to scientific activity is a competence that is similar to, but lesser than, what serves as knowledge base for scientific research. What I claim here is that it is not the degree but the range of expertise that provides access to discursive practice in science. Argumentation-theory may be the best candidate for capturing the kind of expertise that connects scientists to analysts of scientific discourse, thus offering a common forum for practice and interpreting that practice. Discourse theorists have *more* competence in analysing and evaluating arguments than the scientists who formulate these arguments: while scientists' discurisive competence stems from tacit practice and experience, scholars of argumetation derive their expertise from explicit, conscious, and systematic reflection.

What can we gain from the study of scientific arguments? First, with the application of a clear methodology, we can identify the realm of shared assumptions: the theoretical, conceptual, and methodological toolkit accepted and employed by actors situated in a given historical situation. Second, we can also

identify the space of disagreement, i.e. those assumptions that get addressed or challenged in a certain controversy. Third, we can map the conceptual order by analysing how other commitments are recruited in order to back or undermine these problematic assumptions. Fourth, we can follow the reasoned moves that result in changes in the conceptual order, thus learning not only how but also why certain episodes happen the way they do. Finally, we can evaluate discursive situations, and provide a feedback to scientists from which they might even benefit eventually.

3. *Terrains of applicability*

Still, further specification is required as to under what circumstances dialectic is an efficient tool to study scientific discourse. Markus (1987) argued that the primary discourse of science is so much formalised and ritualised that it is immune to hermeneutical analysis. According to this view, the most fundamental medium for communication in science is papers published in scientific journals, and the language used in these papers is regulated and impersonalised to such a degree that no informative research into the specific forms of language use is available in a hermeneutical framework. Markus' arguments seem to bear relevance to dialectic: since the pragma-dialectical model makes essential use of speech acts, the relative rarity of certain forms of speech acts in scientific publications may pose problems to the applicability of this approach. While papers argue for, and often against, certain standpoints, dialogic elements are submerged and traces of strategic moves are concealed (which in turn can be understood as a form of strategic maneuvering). In the least, scientific publications seem to pose a challenge to pragma-dialectical argumentation theory. (Note: these problems are not specific to dialectic, since, considering the 'dry' language of journal papers, they also seem to strike rhetorical aproaches.)

However, some less standardised forms of scientific communication are readily open to dialectical analysis. First, history of science provides countless examples of scientific argumentation where language use was less ritual and more flexible than today. Markus (1987) argues that the fundamental character of modern scientific prose was not fixed until the late nineteenth century – before that, a rich variety of discourse types had been available. For instance, dialogic treatises such as written by Galileo are clearly viable to style-sensitive discourse analyses. Also, scientific controversies written in letters, especially favoured in the 17th and 18th centuries, could provide a huge amount of fuel to pragma-dialectical studies (as

shown by Gabor Zemplen's analysis of the Newton-Lucas correspondence in this conference). Naturally, the question arises how far the validity of our norms of rational discussion can be projected on the historical past. This is a matter for both philosophical and empirical inquiry, but tentatively I assume that the range of these rules plausibly cover the modern, and most of the early modern, period. On the other hand, pragma-dialectic may contribute to the study of how specific norms were implicitly or explicity challenged, and how others were introduced to replace them, in actual scientific discourse.

Second, less formal types of scientific communication are also functional in knowledge production, as emphasised by different approaches in science studies. Sociologists and anthropologists often conduct 'field studies' by visiting research sites and recording informal discussions. While most of these studies are done form the relativist 'stranger's perspective', a normative theory of argumentation could prove fruitful for understanding the internal dynamics of these discursive interactions. For example, when the first wave of science studies introduced the concept of 'negotiation' in order to blur the stipulated distinction between pure intellectual discussions and interest-driven political-type disputes, it sacrificed not only undesirable philosophical presuppositions but also means of rational assessment. Perhaps it is time to re-introduce a similar, but still different, distinction between resolution-oriented rational discussion and persuasion-oriented opportunistic dispute – especially in the light of scientists' conviction that such a distinction does exist and plays an important role in shaping the order of various aspects of scientific activity.

Third, controversies belong to a type of discourse where, in contrast with the bulk of publications, disagreements and conflicting standpoints become functionally explicit. While in most papers authors are engaged in 'puzzle-solving' relying on a given and fixed theoretical, conceptual, and methodological toolbox, controversies often challenge certain elements of the set of shared assumptions. In other words, controversies in science tend to display meta-scientific, in addition to scientific, ambitions, and methodological, meta-theoretoical, or philosophical commitments are frequently at issue. The degree to which the space of disagreement gets functional in the controversy, as well as the size and shape of this disagreement space, can vary on broad scales. Pragma-dialectic analysis can be efficient in using speech act theory to identify which common assumptions get addressed and how the discussants make strategic moves to defend or reject contested commitments. Depending on the extent to which resolution is achieved or aimed at, distinctions can be made between different kinds of debates, as – following

Dascal's (2003) typology – e.g. between discussion (where the same norms are accepted on both sides, and the aim is to correct an error), dispute (where differences in commitments are too radical to make resolution possible), and controversy (in between the two other types, where some commitments become addressed but others remain available as bases on which resolution can be achieved)**[i]**.

4. *Conclusions*

The paper has tried to show that study of scientific activity could benefit from the application of the pragma-dialectic approach to discourse analysis. I argued that the basic commitments of pragma-dialectic are in fine agreement with several characterstics of recent trends in social studies of science. At the same time, a dialectical framework seems to have a number of advantages over a purely rhetorical one. I emphasised that dialectic endorses an interactive model of the social dimension, and it is sensitive to the temporal dynamics of communicatory practice. On the other hand, the model's normative elements create links between subject and interpretation while encouraging empirial flexibility. I also identified some forms of scientific communication in which pragma-dialectic approach seems especially promising.

However, all this theoretical talk is but a small and insufficient step. The usefulness of dialectic to science studies is to be demonstrated by providing detailed and informative case studies of argumentative dialogues in science. This paper, besides expressing my expectations, tried to contribute to the necessary conceptual preparations before the real work gets started.

NOTE

[i] With Gábor Zemplén, we are currently conducting a pragma-dialectical analysis of the (in)famous Bloor-Latour debate in science studies (Bloor 1999a,b, Latour 1999). The first rough results are published in Hungarian (Kutrovátz and Zemplén 2006), and we hope to prepare an English version after working further with the very intricate debate. Our findings indicate that this debate, while at places being presented by the opponents as promising the possibility of a fruitful controversy, belongs rather to the rank of quite hopeless disputes.

REFERENCES

Bazerman, Ch. (1988). *Shaping Written Knowledge: The Genre and Activity of the Research Article in Science.* Madison: University of Wisconsin Press.

Bloor, D. (1992). *Knowledge and Social Imagery.* London: Routledge and Kegan

Paul. 2nd ed.

Bloor, D. (1999a). Anti-Latour. *Studies in History and Philosophy of Science* 30/1: 81-112.

Bloor, D. (1999b). Reply to Bruno Latour. *Studies in History and Philosophy of Science* 30/1: 131-136.

Collins, H.& R. Evans (2002). The Third Wave of Science Studies: Studies of Expertise and Experience. *Social Studies of Science* 32/2: 235–296.

Dascal, M. (2003). *Interpretation and understanding.* Amsterdam: John Benjamins.

Eemeren, F. H. van, & R. Grootendorst (1992). *Argumentation, Communication, and Fallacies. A Pragma-Dialectical Perspective*. Hillsdale, NJ: Erlbaum.

Eemeren, F. H. van, & R. Grootendorst (2004). *A Systematic Theory of Argumentation. The Pragma-Dialectical Approach*. Cambridge: Cambridge University Press.

Eemeren, F. H. van, R. Grootendorst, S. Jackson, & S. Jacobs (1993). *Reconstructing Argumentative Discourse*. Tuscaloosa/London: The University of Alabama Press.

Eemeren, F. H. et al. (1996). *Fundamentals of Argumentation Theory.* Mahwah, NJ: Erlbaum.

Freedman, K. L. (2005). Naturalized Epistemology, or what the Strong Programme can't explain. *Studies in History and Philosophy of Science* 36/1: 135-148.

Friedman, M. (1998). On the Sociology of Knowledge and its Philosophical Agenda. *Studies in the History and Philosophy of Science* 29/2: 239-271.

Gross, A. G. (1990). *The Rhetoric of Science. Cambridge*, MA: Harvard University Press.

Kutrovátz, G, & G. Zemplén (2006). A Bloor-Latour vita. Egy tudományos vita érveléselméleti vizsgálata. In: J. Gervain & Cs. Pléh: *A láthatatlan nyelv.* Budapest: Osiris. In press.

Latour, B. (1999). For David Bloor… and Beyond: A Reply to David Bloor's 'Anti-Latour'. *Studies in History and Philosophy of Science* 30/1: 113-129.

Latour, B., & S. Woolgar (1979). *Laboratory Life: The Social Construction of Scientific Facts.* Beverly Hills: Sage.
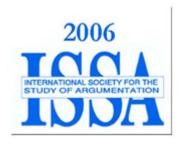
Laudan, L. (1984). The Pseudo-Science of Science? In: J.R. Brown (ed.). *Scientific rationality: The sociological turn* (p. 41-73), Dordrecht: Reidel.

Markus, Gy. (1987). Why Is There No Hermeneutics of Natural Sciences? Some Preliminary Theses. *Science in Context* 1: 5-51.

Pera, M., & W. R. Shea (eds.) (1991). *Persuading Science: The Art of Scientific Rhetoric*. Canton, MA: Science History Publications.

Prelli, L. J. (1989). *A Rhetoric of Science: Inventing Scientific Discourse*. Columbia: University of South Carolina Press.

ISSA Proceedings 2006 – Cinematic Arguments: The Efficacy Of The Day After Tomorrow In Public Arguments On Global Warming

1. Introduction: Science Fictions and Public Understandings of Science

The proposition that science fiction films play a role in shaping public discussions and understandings of science receives limited academic attention (Frank, 2003; Kirby, 2000, 2003a, 2003b; Vieth, 2001). Although science fiction films do succeed as texts that open intellectual space to consider the philosophical, cultural, and ethical dimensions of scientific and technological advancements (Aldridge, 1983; Kuhn, 1999, 2000; Stork, 1997; Suvin, 1979, 1988), popular science fiction films rarely are embraced by the scientific community for advancing a particular scientific argument. More often, scientists identify fictional films as irresponsible and inaccurate depictions of science that frustrate efforts to educate lay publics on the value of "real" scientific knowledge and, in an effort to stem the risk of public confusion, occupy the role of epistemic gatekeepers who parse out the science fact from the science fiction (Corbett & Durfee, 2004; Lewenstein, 1995; Nelkin, 1987; Silverstone, 1991; Wynne, 1995). The scientific commentary on the global warming disaster film, *The Day After Tomorrow*, however, marks a departure from the rhetorical practice of just

isolating science fact from science fiction as a way to promote proper scientific knowledge. Instead, scientific interlocutors commenting on the film craft a rhetorical space where obscuring the distinctions between "real" global warming science and its fictional representations functions as an argumentative commonplace to endorse a specific scientific argument. Despite substantial evidentiary support, the scientific arguments for combating global warming that circulate in public spheres often lose persuasive force when juxtaposed against skeptical arguments that identify shortcomings in global warming science and the potential economic risks associated with efforts to address global warming. Consequently, scientists and advocates spreading the word about climate change encounter a number of rhetorical difficulties, including how to communicate the dangers of global warming in ways that are both scientifically valid and effectively dramatic.

I argue that the public scientific discourse surrounding *The Day After Tomorrow* highlights a paradoxical rhetorical practice that mobilizes a patently fictional film as a *topos* for promoting a scientifically grounded argument in an effort to elucidate the dangers of global warming. I argue this rhetorical move functions as a form of oppositional argumentation that challenges the norms of public scientific discourse. In addition to using the blockbuster as an opportunity to focus public attention on global warming, scientific interlocutors employ the film's visual potency and pointed political commentary to buttress scientific arguments that illustrate the dangers of global warming. This paper illustrates how the scientific discourse on *The Day After Tomorrow* blurs the distinctions between fact and fiction to bolster arguments on global warming by first, examining the rhetorical difficulties inherent in public debates on climate change, and second, exploring the potential for oppositional arguments to alter the norms of public discussions of global warming.

2. *The Day After Tomorrow and the Public Debate on Global Warming*
In the weeks prior to its 2004 Memorial Day weekend release, *The Day After Tomorrow* became enveloped in a sustained public scientific discourse on global warming where scientific interlocutors capitalized on the opportunity to educate publics on the "reality" of global warming (Bridges, 2004; Coren, 2004). In addition to numerous newspaper articles and television specials, the National Resource Defense Council, Greenpeace, the Environmental Literacy Council, the Union of Concerned Scientists, National Snow and Ice Data Center, the Energy Future Coalition, and the Woods Hole Oceanographic Institution all created

websites to answer questions about the science in the film and the reality of global warming. Each website employed a variety of images and quotes from the film throughout its website, highlighting the various dangers of global warming (Griscom, 2004). On the days leading up to the film's release, many major newspapers featured stories on the global warming debate that used *The Day After Tomorrow* as a qualified attention-getting device designed to spur informed public debate on global warming (Bowles, 2004; Hager, 2004; Munoz, 2004; Sennott, 2004; Vancheri, 2004). Gretchen Cook-Anderson, a National Aeronautics and Space Administration (NASA) spokeswoman, notes "Whether its premise is valid or not, or possible or not, the very fact it's about climate change could help to spur debate and dialogue" (qtd. in Barollier, 2004). Likewise, Geochemist Michael Molitor suggests that the movie "is going to do more for the issue of climate change than anything I've done in my whole life" (qtd in. Booth, 2004). Wallace Broecker, the earth scientist who first identified the link between ocean currents and abrupt climate shifts, believes the film is "wolf-crying science," but he concedes that no researcher will turn down "an opening to get our message out" (qtd. in Dayton, 2004).

As these quotes illustrate, using the film as a topos for educating and motivating non-scientific publics on global warming efforts invites a serious problematic. While the film is a visually stunning text that focuses public attention on global warming, its depiction of climate change lacks degrees of scientific fidelity. This presents a troubling double bind for scientists using the film as a tool to promote public action against global warming. On one hand, the film boasts dramatic visuals and a clear scientific and political message that presents advocates with an opportunity to bring attention to a significant scientific and political issue. Unlike the exposure available to various scientific institutions and environmental activists groups, the considerable marketing budget and countless news articles examining the scientific fidelity of the film brought heightened public attention to various global warming issues previously unavailable to such advocates.

On the other hand, the film depicts the progression of global warming in a scientifically suspect manner. In a matter of days, the Earth is subject to global super-storms that lead to rapid sea-level rise, ultra-violent weather conditions, and flash-freezing. While the film highlights some credible depictions of the potential, long-term impacts of global warming, its description of such an environmental disaster opens scientists and environmental activists to the well-worn criticisms of alarmism levied by many skeptics. This Faustian bargain

presents a rhetorical challenge for many scientists and environmental advocates to simultaneously generate public interest on global warming while maintaining a level of scientific credibility.

The rhetorical difficulties of transmitting technical discourses into non-technical public spheres often complicates public policy deliberations (Farrell & Goodnight, 1981), and this double bind becomes even more challenging when we consider the inherent difficulties in rendering climate science understandable to non-scientific audiences. The technical sophistication of climate science coupled with the inherent complexity and countless variables of the global atmosphere increases the difficulty to communicate the causes and effects of warming to lay publics. Despite an overwhelming scientific consensus that human-induced global warming is real and presents the possibility of devastating consequences (IPCC, 2001), the multiplicity of stasis points in the global warming debate provides skeptics ample opportunity to undercut the persuasive force of consensual scientific evidence (O'Donnell, 2000).

Even within the scientific consensus, there are methodological, evidentiary, and interpretative disagreements over the rate and effect of global warming. And as scientists guided by the accepted discursive and epistemological scientific community standards, there is recognition that global warming science possesses degrees of uncertainty. Given the preference for scientific "certainty" before the installation of expensive and drastic policy actions, the skeptical argument prospers by rhetorically exploiting evidentiary or methodological discrepancies or shortcomings as illustrative of scientific uncertainty. By casting enough doubt on public descriptions of warming science, skeptics thwart meaningful policy changes designed to curb global warming in favor of maintaining the *status quo* and calling for more conclusive research before dramatic changes in public policy. The rhetorical posture of generating sufficient doubt on the science, regardless of the certainty within the scientific community, carries a persuasive force that discourages action against global warming, especially when such actions are juxtaposed to economic sacrifices for the American consumer. In other words, if the "certain" disadvantages of the policy changes necessary to curb global warming invite greater risk than the advantages of acting on an "uncertain" science, then there exists no pressing need for policy change.

These skeptical arguments are magnified further in non-scientific public spheres by the norms inherent to the journalistic community. The journalistic norms of objectivity and balanced reporting often run counter to accurately representing

the near consensus on the dangers of human-induced global warming. Such norms predispose journalists to cover both sides on any global warming story: a scientist and a skeptic. As a result, the credibility of the skeptical arguments becomes amplified within various non-scientific public spheres beyond their credibility within various scientific communities, thus creating a public image of a scientific controversy where one does not truly exist (Boykoff & Boykoff, 2004). All together, these rhetorical challenges create a discursive climate that increases difficulties for scientists and activists to mobilize public support for addressing global warming.

The wealth of scientific evidence suggests that warming is occurring and it is human-induced, and yet inaction is commonplace. Therefore, mere adjudication of the "facts" yield little results. The rhetorical strategy of "piling up" scientific facts does not guarantee publics understand climate science or that they would be sympathetic to such claims. As Gregory and Miller (1998) argue, such education efforts do little to enhance publics' appreciation, let alone understanding, of scientific issues. Gregory and Miller suggest that:
While facts may be interesting and no bad thing in themselves, knowledge of facts does not imply an understanding of their significance or implications, nor of their place in the wider scheme of science. More important, knowing the facts is often little help to citizens who are trying to come to terms with contemporary issues in science (Gregory & Miller, 1998 p. 90).

Because the contextualization of scientific facts is required for publics to understand the tangible implications of such scientific information, the interlocutors better equipped to rhetorically link scientific arguments with concrete implications often find greater sympathies from non-scientific publics. The rhetorical construction of global warming science by skeptics as insufficient to justify action coupled with claims of alarmism and immediate economic devastation enables a compelling discursive move that is difficult to counter with scientific evidence alone. Given the prospects of the devastating effects of unchecked global warming, scientists push for timely action, even if there is limited scientific uncertainty on the speed and consequences of global warming. This leaves rhetors advocating efforts to combat global warming with rather limited rhetorical options that simultaneously goad publics into action and skirts charges of alarmism. In other words, rhetors are searching for rhetorical devices that illustrate the tangible consequences of global warming that counter the

persuasive force of economic sacrifices. I suggest that the use of *The Day After Tomorrow* in the public scientific discourse on global warming as a form of oppositional argumentation that expands the rhetorical landscape by altering the norms of acceptable public scientific argumentation.

3. *Global Warming and the Norms of Public Scientific Discourse*

Argumentative norms serve an important role for rhetors and audiences to produce, understand, and adjudicate competing discourses. However, these norms can militate against the development of inventive discourses that can impact public controversies (Olson & Goodnight, 1994). These communicative norms function to legitimize hegemonic discourses by rendering arguments that fail to conform to such norms as inefficacious to the public conversation (Goodnight, 1992; Habermas, 1987). Consequently, rhetors must make use of oppositional arguments that utilize alternative persuasive techniques that do not conform to the accepted, and debilitating, norms and, in turn, capitalize on discursive opportunities that exist beyond deliberative spheres.

Kathryn Olson and G. Thomas Goodnight (1994), in their investigation of the rhetoric of the anti-fur controversy, posit that the use of oppositional arguments in social controversies function to alter both the content and norms of a given debate. They describe a social controversy as "an extended rhetorical engagement that critiques, resituates, and develops communication practices bridging the public and personal spheres." Further explaining that "social controversy occupies the pluralistic boundaries of democracy and flourishes at those sites of struggle where arguers criticize and invent alternatives to establish social conventions and sanctioned norms of communication" (249). As a result, a social controversy can center on a number of contestations of power and access to all points of the deliberative process. They note that traditional understandings of public sphere arguments assume a "more or less consensual vocabulary" shared by all interlocutors. Equal access to those discourses is not always available. This rhetorical effort is compounded when we consider how scientific discourses function to exclude non-scientists from the public discussions.

Alternative modes of rhetorical address, such as non-discursive modes of communication emerge to shake up calcified argumentative norms and expand possibilities for persuasion. In their analysis of anti-fur protest rhetoric, Olson and Goodnight argue that protesters employ persuasive tactics that are not illustrative of straightforward deliberative rhetoric. Instead, the protesters utilized dramatic visual and emotive rhetorical techniques that shifted the focus away from

'rational,' discursively based norms of acceptable argumentation. By incorporating arguments not traditionally associated with rational, deliberative rhetorics, the anti-fur protestors introduce arguments that possess a rhetorical force not grounded in the discursive practices established by hegemonic discourses.

Specialized spheres, where scientific argumentation and technological reasoning constitute the norms of acceptable argumentation, often militate against non-traditional, or non-scientific, rhetorics, as evidenced by the rhetoric of demarcation literature (Gieryn, 1999; Taylor, 1996). However, as scientific discourses migrate into public spheres where deliberation implicates issues that transcend narrow technological considerations, the opportunities for deployment of non-traditional forms of argument become more numerous. As Olson and Goodnight suggest, when rhetors employ non-traditional forms of argument that are particularly appealing to broad audiences, their rhetorical performances rearticulate the landscape of acceptable argument within deliberative spheres, even if they are not, in this case, appropriately scientific.

Olson and Goodnight suggest that social controversy "challenges the parameters of public discussion by extending argumentative engagements to the less-consensually based cultural and social regions of oppositional argument" (250). They contend that oppositional arguments work beyond the traditional norms of persuasive argumentation by challenging the enthymematic qualities of discursive argumentation that establishes reasonability that informs persuasion. In the case of global warming debates, creating enough uncertainty ensures that presumption remains with the *status quo*, especially when we consider the enthymematic force and historical success of economic arguments over abstract environmental concerns. Scientists, both those in the majority as well as the skeptics, champion Mertonian norms that privilege disinterestedness and skepticism, however, when these debates play out in public spheres, the skeptics mobilize these norms to undercut the rhetorical validity of the global warming arguments. Skeptics employ a rhetoric of sobering distance and doubt, arguing that scientists are utilizing fear tactics when describing the dangers of global warming, a rather unscientific discursive practice (McCright & Dunlap, 2000).

4. *The Heated Scientific Reponses to The Day After Tomorrow*
The very basic scientific premise of *The Day After Tomorrow* is based upon accepted science, despite the outlandish display of rapid climate change. In

addition to the scientific studies that suggest the existence of human caused global warming, there are numerous theories that predict global warming would disrupt the oceanic cycle resulting in varying levels of climatic disruption (Broecker, 2003; Ton, 2004; Weaver & Hillaire-Marcel, 2004). Furthermore, there exists scientific evidence that suggests the possibility of abrupt (measured in decades as opposed to weeks, as depicted in the film) and destabilizing climate change (Alley *et al.*, 2003; Calvin, 1998).

Although these scientific theories advance low-probability, high impact global warming scenarios, they receive serious government attention. An October 2003 Department of Defense report suggests that because of the scientific possibility of rapid climate change and the onset of a new ice age, the United States must take active measures to prepare for any risks associated with such climate shifts (Schwartz & Randall, 2003). The authors, who are actually employees of oil companies, argue that the rapid onset of a new ice age would spark resources wars and massive refugee migrations that the government is ill-equipped to handle. The media and the advertising campaign for the film were quick to recognize the parallels between an official government report and the events depicted in the movie (Whipple, 2004).

Even though these theories posit low-probability, high-impact global warming scenarios, they are important to consider because their effects would be both devastating and irreversible. Although abrupt climate change theories do not fall within the scientific mainstream, these scenarios are more dramatic and compelling. They are also most subject to criticisms of alarmism because of their low probability. The invocation of such dramatic theories might heighten awareness, but they are also criticized as the least scientific.

The Day After Tomorrow demonstrates a scenario where narrative conventions of a big-budget Hollywood disaster film conflict with the scientific message the movie attempts to articulate. That Hollywood takes artistic license with facts to spin a compelling yarn is an obvious and banal observation. However, dramatizing the effects of global warming is an important rhetorical strategy for encouraging publics to act now to curb such a threat (Nisbet, 2004). The extent to which these dramatic liberties indict the more factual elements articulates the central rhetorical dilemma for those invoking the film to increase attention to global warming. The stunning visuals may present an opportunity to depict the dangers of global warming, but the seeds to its rhetorical ineffectiveness are inherent. However, merely correcting "the science" in a film overlooks and even

undermines its possible contribution to public discourses on science.

In the case of *The Day After Tomorrow*, scientists are careful not to dismiss the film *carte blanche* as wholly fictitious, placing aspects of the film on a fact versus fiction spectrum that concedes that some aspects of the film reflect scientific fact. Within this fact versus fiction idiom, rhetors are careful to identify how the film reflects some scientific accuracy. For example, climate expert Tom Prugh, in an interview with National Geographic on the scientific fidelity of *The Day After Tomorrow*, answers the question "how realistic is this movie?" by noting, "it has a kernel of truth, although it has been 'Hollywoodized.' There is evidence that abrupt climate change has happened a couple of times in the last 13,000 years, but it's never happened in a few days, as it does in the movie. That's completely impossible." Prugh's comment begins with a relatively positive appraisal of film before conceding its fictional elements. Prugh completes the interview with an endorsement of the film: "I would urge people to go see the movie. I thought it was a lot of fun. I would also urge them to drive to the movie theater together with a few friends [to conserve gas an put less exhaust into the atmosphere] and turn out all the lights in the house before they leave" (qtd. in Lovgren, 2004a).

Furthermore, science rhetors sympathetic to the film are deliberate in calling attention to the dramatic elements that are requisites in a Hollywood film. Climate expert Heidi Cullen argues "some of the events in the movie we're beginning to see already. But of course everything is condensed and dramatized" (qtd. in Bowles & Vergano, 2004). Geoff Jenkins, a climatologist at the Hadley Centre for Climate Prediction and Research (which is depicted in the film), also provides a guarded account of the film when he states, "it's a movie and we shouldn't get too po-faced about it. Hollywood's not going to make money out of a bunch of scientists discussing uncertainties" (qtd. in Dayton, 2004).

This rhetorical strategy evident in most appraisals of the film attempts to render transparent narrative film making conventions (aspects of the film that are "just a movie") while maintaining the scientific credibility and significance of global warming. The science rhetors that use the film to promote public interest in climate change demonstrate a complex relationship with the film's rhetorical potential. In each case, these rhetors resist the straightforward classification of the film as "fact" or "fiction."

In contrast to this modulated perspective, there are a number of scientists sympathetic to global warming concerns who argue that the film has no place in

the public discourse on climate change. Their fundamental concern centers on how audiences will accept the film and how that might shape public understandings of climate science. Janet Sawin, a climate and energy program director at the Worldwatch Institute, captures this concern when she argues that "there is some concern that what the movie shows is so extreme that people will say, Oh, that could never happen, so I'm not going to worry about it. That blows a very serious issue out of proportion and could cause people who are skeptical to become even more skeptical" (qtd. in Lovgren, 2004b).

A survey of the public discourse suggests that there are three major issues that trouble science interlocutors who wish to expunge the film from public discussion. First, they suggest that warming skeptics exploit the scientific infidelities in the film to indict real global warming science. For example, skeptical scientists argue that the film's suggestion that global warming would initiate a massive ice age defies common sense.

While some reputable scientific theories indicate that warming could initiate an ice age, such an idea seems counterintuitive to those not well versed in meteorological sciences. These counter-intuitive depictions of the effects of global warming can prompt some audiences to dismiss global warming as a farce. Furthermore, during the 1970's numerous scientists and climate models predicted the onset of a new ice age. However, more sophisticated climate models and increased physical evidence suggests that steady global warming is the more likely scenario (McGuire, 2003).

Skeptics exploit this climate "flip-flop" as evidence of scientific uncertainty regarding global warming and the political motivations that inform climate science (Michaels, 2004a, 2004b). *The Day After Tomorrow*, some scientists argue, obfuscates the debate and invites rhetorically powerful skeptic indictments of global warming science (Hopey, 2004).

Second, some scientists argue that the cataclysmic events the film depicts, such as the flash-freezing superstorm and the exaggerated tsunami that crashes against the Statue of Liberty, although visually powerful, could confuse audiences as to the effects of global warming. These events are the dramatic devices that are the most obvious departure from scientific fact. Some scientists are concerned that such visual depictions are so ridiculous that audiences would discount global warming itself as a dramatic device and not a serious environmental and political issue.

Bill McKibben, an environmental writer for *Grist Magazine*, clearly identifies this central tension when he suggests that "It's always been hard to get people to take

global warming serious because it happens too slowly" (McKibben, 2004). But McKibben argues that while the film may focus attention to global warming and properly illustrate some of the effects of global warming, its depiction of the effects of global warming might set expectations too high. He argues that "if the reason we're supposed to worry about global warming is that it will first send a tidal wave over the Statue of Liberty and then lock it forever in an ice cube, anything less will seem... not so bad" (McKibben, 2004).

Third, and perhaps most rhetorically compelling, some fear that the overt political message of the film taints global warming science as politically motivated and not adhering to the "objectivity" good science requires (Bowles, 2004). These fears are quite evident in the rhetoric critics use to dismiss the film as liberal propaganda. Paul Dreissen, a senior fellow with the Committee For A Constructive Tomorrow and Center for the Defense of Free Enterprise, argues *The Day After Tomorrow* "breaks new ground in combining horror, propaganda and manipulation of history and science to serve political agendas" (Driessen, 2004). Dreissen recasts global warming scientists as doing everything in their power to promote a "fright night" scenario, instilling irrational and scare tactics that oversell the potential impacts of global warming. This rhetoric of irrationality attempts to recast the boundaries between fact and fiction by suggesting that because the film is fictional, everything depicted in the film is therefore fictional. This metonymic argumentative strategy is reflected in the strongest criticisms of the film.

Although some scientists who support efforts to combat global warming disagree over whether *The Day After Tomorrow* is a useful tool in drawing public attention to warming, most scientists treat *The Day After Tomorrow* like a deductive argument where the conclusion is correct but the premises are at worst false and at best suspect. When scientists are adjudicating the factuality and falsity of the film's depiction of global warming, they are supplying the scientifically valid premises without expunging the rhetorical residue of the film's effect. In other words, this rearticulation of the climate science behind the film maintains the dramatic and visual effect of global warming at the same time substantiates the real scientific argument. This rhetorical fungibility enables these scientific arguments to circulate in public discussions of global warming where the divisions between fact and fiction are more porous without sacrificing scientific credibility. Even though some scientists balk at using the film as a topos for generating public action on global warming, those scientists who do embrace the

film do so by adopting a rhetorical posture that distances themselves from the obvious narrative conventions of a fictional film while offering minor correctives to depictions of global warming. In the end, the visual devastation of global warming, even if it does not occur at such a rapid rate or have that extreme of an effect as depicted in the film, remains relatively intact within the public discourse.

5. *Conclusion: The Rhetorical Force of Facts and Fictions*
As often the case with many summer blockbusters, stunning visuals and spectacular special effects often eclipse insightful commentary. Outside of demonstrating the competing discourses between scientists and skeptical politicians, the film possesses few philosophical moments. *The Day After Tomorrow*, by most accounts, is not a very good *film*: the human drama is trite, the script has numerous plot holes, and the characters are flat. Unlike more contemplative science fiction films that ruminate on our relationship with science and technology (*2001: A Space Odyssey, GATTACA, Blade Runner*), the most notable narrative aspects of *The Day After Tomorrow* are its story of a scientist's attempt to convince reluctant policymakers of future environmental catastrophes and powerful visuals of the effects of global warming.

The rhetoric surrounding *The Day After Tomorrow* and the global warming debate demonstrates that a film's impact on public scientific discourse is determined by a complex negotiation between fact and fiction. As many science rhetors suggest, the film blends some scientific fact with a heavy dose of Hollywood fiction. For environmentally concerned advocates, the rhetorical struggle is to liberate the factual elements of the film, such as illustrating the dangers of global warming, from the unscientific elements while maintaining the dramatic force of the movie. My analysis reveals that advocates negotiate this rhetorical struggle by simultaneously calling attention to the need to address global warming while distancing themselves from the patently Hollywood aspects of the film. In other words, each reference to the film is highly qualified with statements that delineate scientific fact from its fictionalization. I suggest there are oppositional qualities to this argumentative approach in that the fictional text, and not just the rational scientific arguments, functions as the rhetorical force behind the global warming arguments. I argue that the scientific commentary on the "factual" nature of the film leaves a rhetorical residue that helps validate future attempts to promote global warming efforts.

Warming skeptics assume a similar rhetorical stance, focusing on the factual and fictional elements of the film to come to the "truth" about global warming.

However, their comments emphasize the fictional elements of the film as reflective of what scientists believe. According to warming skeptics, when science rhetors adopt *The Day After Tomorrow* as evidence of dangerous global warming, these climate advocates are only promoting alarmists fears that are based in scientific fictions. Both rhetorical strategies suggest that the lines between fact and fiction are porous rhetorical constructions. And as rhetorical constructions, they are subject to movement and rearticulation. This idiom of fact versus fiction is particularly salient in public discussions of global warming science. Within specialized scientific circles, warming skeptics remain on the margins. However, in media coverage of global warming science, skeptics receive equal attention from journalists who seek balanced reporting. Since decisions on if and how we combat global warming are products of public deliberation and are not the sole province of specialized scientific spheres, arguments either for or against action must be put into publicly accessible terms.

Because global warming is likely to unfold gradually, where its impacts are difficult to understand in contrast to the more localized and immediate economic effects, *The Day After Tomorrow* presents an attractive commonplace for science rhetors to promote public discussion. The film's dramatic depictions of the impacts of global warming are visually spectacular, thus giving a visual analog to the impacts of global warming. However, this presents the inherent risk that endorsement of the film as evidence of global warming effects exposes anti-warming arguments to charges of alarmism. Therefore, it is important to understand how scientists rhetorically negotiate this double bind as a way of shaping public discussions on global warming and promoting policy change.

REFERENCES

Aldridge, A. (1983). Science fiction and emerging values. In: R. E. Myers (Ed.), *The Intersection of Science Fiction and Philosophy* (pp. 15-27). Westport, Connecticut: Greenwood Press.

Alley, R. B., Marotzke, J., Nordhaus, W. D., Overpeck, J. T., Peteet, D. M., Pielke, R. A., et al. (2003). *Review: abrupt climate change. Science*, 299, 2005-2010.

Barollier, P. (2004, May 26). Disaster flick puts spotlight on global warming. *iafrica.com* Retrieved May 27, 2004, from http://entertainment.iafrica.com/features/324967.htm

Booth, W. (2004, May 27). Turning up the hype. *Washington Post*, p. C1.

Bowles, S. (2004, May 26). The Day After Tomorrow heats up a political debate. *USA Today,* pp. 1A-2A.

Bowles, S., & Vergano, D. (2004, May 26). Killer weather, or not? *USA Today*, p. 8D.

Boykoff, M. T., & Boykoff, J. M. (2004). Balance as bias: Global warming and the US prestige press. *Global Environmental Change,* 14, 125-136.

Bridges, A. (2004, May 4). Scientists embrace plot for *The Day After Tomorrow*. Retrieved May 5, 2004, from http://www.usatoday.com/tech/news/2004-05-04-day-after-next-debate_x.htm

Broecker, W. S. (2003). Does the trigger for abrupt climate change reside in the ocean or in the atmosphere? *Science*, (5625), 1519-1523.

Calvin, W. H. (1998). The great climate flip-flop. Atlantic Monthly, 281(1), 47-60.

Corbett, J. B., & Durfee, J. L. (2004). Testing public (un)certainty of science: media representations of global warming. *Science Communication*, 26(2), 129-151.

Coren, M. (2004, May 28). Climate flick favors fantasy over fact. Retrieved May 28, 2004, from http://www.cnn.com/2004/TECH/science/05/27/weather.movie/

Dayton, L. (2004, May 26). The end is not quite nigh. *The Australian*, from http://www.theaustralian.news.com.au/printpage/0,5942,9662198,00.html

Driessen, P. K. (2004, April 22). The day after The Day After Tomorrow. *TCS Daily* Retrieved April 27, 2004, from http://www.techcentralstation.com/042204D.html

Farrell, T. B., & Goodnight, G. T. (1981). Accidental Rhetoric: The root metaphors of Three Mile Island. *Communication Monographs*, 48.

Frank, S. (2003). Reel reality: Science consultants in Hollywood. *Science as Culture*, 12(4), 427-469.

Gieryn, T. F. (1999). *Cultural Boundaries of Science: Credibility on the Line.* Chicago: University of Chicago Press.

Goodnight, G. T. (1992). Habermas, the public sphere, and controversy. *International Journal of Public Opinion Research*, 4(3), 243-255.

Gregory, J., & Miller, S. (1998). *Science in Public: Communication, Culture, and Credibility*. Cambridge: Perseus Publishing.

Griscom, A. (2004, June 3). The Day After Tomorrow never dies: Film plot rings true as NOAA runs up against White House. *Grist Magazine.*

Habermas, J. (1987). *The Theory of Communicative Action, Volume Two* (T. McCarthy, Trans.). Boston: Beacon Press.

Hager, R. (2004, May 27). The science and fiction of The Day After Tomorrow. *MSNBC.com* Retrieved May 27, 2004, from http://msnbc.msn.id/id/50548474

Hopey, D. (2004, May 27). Scientist doubts such drastic results. *Pittsburgh Post Gazette*, pp. C1-C2.

IPCC. (2001). Climate change 2001: The scientific basis, contribution of Working Group I to the Third Scientific Assessment Report of the Intergovernmental Panel on Climate Change: Cambridge University Press.

Kirby, D. A. (2000). The new eugenics in cinema: Genetic determinism and gene therapy in GATTACA. *Science Fiction Studies*, 27(2), 193-215.

Kirby, D. A. (2003a). Science advisors, representation, and Hollywood films. *Molecular Interventions*, 3(2), 54-60.

Kirby, D. A. (2003b). Science consultants, fictional films, and scientific practice. *Social Studies of Science*, 33(2), 231-268.

Kuhn, A. (Ed.). (1999). *Alien Zone II: The Spaces of Science Fiction Cinema* (First ed.). New York: Verso.

Kuhn, A. (Ed.). (2000). *Alien Zone: Cultural Theory and Contemporary Science Fiction Cinema* (Sixth ed.). New York: Verso.

Lewenstein, B. V. (1995). Science and the media. In: S. Jasanoff, G. E. Markle, J. C. Peterson & T. Pinch (Eds.), *Handbook of Science and Technology Studies* (pp. 343-360). Thousand Oaks: Sage Publications.

Lovgren, S. (2004a, May 27). Day After Tomorrow ice age "impossible," expert says. *National Geographic News* Retrieved May 30, 2004, from http://news.nationalgeographic.com/news/2004/05/0527_040527_DayAfter.html

Lovgren, S. (2004b, May 18). Day After Tomorrow: could ice age occur overnight? *National Geographic News* Retrieved May 30, 2004, from http://news.nationalgeographic.com/news/2004/05/0518_040518_dayafter.html

McCright, A. M., & Dunlap, R. E. (2000). Challenging global warming as a social problem: An analysis of the conservative movement's counter-claims. *Social Problems*, 47(4), 499-522.

McGuire, B. (2003, November 13). Will global warming trigger a new ice age? *The Guardian* Retrieved May 27, 2004, from http://www.guardian.co.uk/print/0,3858,4795614-110970,00.html

McKibben, B. (2004, May 4). The big picture: Climate change too slow for Hollywood, too fast for the rest of us. *Grist Magazine* Retrieved May 27, 2004, from http://www.grist.org/comments/soapbox/2004/05/04/mckibben-climate/

Michaels, P. J. (2004a, May 16). Apocalypse Soon? No, But This Movie (and Democrats) Hope You'll Think So. *The Washington Post*, p. B1.

Michaels, P. J. (2004b, May 24). Day After Tomorrow: A Lot of Hot Air. USA Today.

Munoz, L. (2004, April 30). Global warming run amok: Activists say the disasters depicted in the coming movie Day After Tomorrow are possible. Others say relax,

it's just a movie. *Los Angeles Times*, p. E2.

Nelkin, D. (1987). *Selling Science: How the Press Covers Science and Technology.* New York: W.H. Freeman and Company.

Nisbet, M. (2004, June 16). Evaluating the impact of The Day After Tomorrow: Can a blockbuster film shape the public's understanding of a science controversy? *CSICOP On-Line: Science and the Media* Retrieved June 16, 2005, from http://www.csicop.org/scienceandmedia/blockbuster/

O'Donnell, T. (2000). Of loaded dice and heated arguments: Putting the Hansen-Michaels global warming debate in context. *Social Epistemology*, 14(2/3), 109-127.

Olson, K. M., & Goodnight, G. T. (1994). Entanglements of consumption, cruelty, privacy, and fashion: The social controversy over fur. *The Quarterly Journal of Speech*, 80(3), 249-276.

Schwartz, P., & Randall, D. (2003). An abrupt climate change scenario and its implications for United States national security. In D. o. Defense (Ed.).

Sennott, S. (2004, May 27). We have to think of the future. *Newsweek* Retrieved May 27, 2004, from http://msnbc.msn.com/id/5068952/site/newsweek

Silverstone, R. (1991). Communicating science to the public. *Science, Technology, & Human Values,* 16(1), 106-110.

Stork, D. G. (1997). *HAL's Legacy: 2001's Computer as Dream and Reality.* Cambridge, Mass.: MIT Press.

Suvin, D. (1979). *Metamorphoses of Science Fiction*. New Haven: Yale University Press.

Suvin, D. (1988). *Positions and Presuppositions in Science Fiction*. Kent: Kent State University Press.

Taylor, C. A. (1996). *Defining Science: A Rhetoric of Demarcation*. Madison: University of Wisconsin Press.

Ton, T. (2004, December 29). Is The Day After Tomorrow coming? *The Epoch Times* Retrieved June 10, 2006, from http://www.theepochtimes.com/news/4-12-29/25286.html

Vancheri, B. (2004, May 27). With spectacular effects and multiple catastrophes, Day After Tomorrow updates a classic genre. *Pittsburgh Post Gazette*, pp. C1-C2.

Vieth, E. (2001). *Screening Science: Contexts, Texts, and Science in Fifties Science Fiction Film.* Lanham: Scarecrow Press.

Weaver, A. J., & Hillaire-Marcel, C. (2004, April 16). Global warming and the next ice age. *Science*, 304, 400-402.

Whipple, D. (2004, April 19). Climate: Maybe several days after tomorrow.

Spacedaily.com Retrieved April 27, 2004, from http://www.spacedaily.com/upi/20040419-10200000.html

Wynne, B. E. (1995). The public understanding of science. In: S. Jasanoff, G. E. Markle, J. C. Peterson & T. Pinch (Eds.), *Handbook of Science and Technology* (pp. 361-388). Thousand Oaks: Sage.

ISSA Proceedings 2006 – Reading Direct-To-Consumer Advertising Of Prescription Medicine. A Qualitative Study From Argumentation Theory On Its Dialectical And Rhetorical Features

1. *Introduction*

The expression Direct-to-Consumer Advertising (thereafter DTCA) refers to "any promotional effort by a pharmaceutical company to present prescription drug information to the general public in the lay media" (Huh et al. 2004, p. 569). Currently, DTCA is allowed only in the United States and New Zealand. Yet, its introduction in the early 1980's has inflamed a debate that today seems to have assumed a seemingly chronic non-conclusive orientation both at an academic and institutional level (Areni 2002; Tanne 1999; Raven 2004).

The core of the debate on DTCA essentially concerns the identification of DTCA either as a beneficial procedure to be promoted or as a damaging procedure to be abolished and consequently not introduced in other countries. Promoters of DTCA

present several arguments supporting its positive educational influence on people's health literacy. DTCA is here seen as a way to provide people with adequate information for them to have a safe use of medication, as well as a way to create effective knowledge for evaluating the benefits and risks of drug products, and generally managing health autonomously and appropriately. For promoters of DTCA, pharmaceutical companies can provide more accurate, balanced and scientifically based information than any other sources. Opponents of DTCA emphasise the financial gains of the pharmaceutical industries and the fact that DTCA enhances medicalization of normal human experience. In this last perspective, DTCA is depicted as being devoid of any effective educational value insofar as it does not give adequate information on side effects and non-pharmacological options for treatment and prevention. To cut a long story short, prescription drug advertising generally contains some information about diseases or treatment options, but according to a conspicuous part of the literature, its primary aim is to create name and brand recognition with a view to enhancing the use of the products advertised (Murray et al. 2004; Bonaccorso & Sturchio 2003; Lexchin & Mintzes 2002; Calfee 2002).

The literature on DTCA suggests that the debate over DTCA is getting bogged down in chains of arguments pro and con, yet the issue *per se* is surely of crucial social importance, especially because there is strenuous lobbying in many countries to relax national restrictions on DTCA (Raven 2004). In addition, *de facto* DTCA in the form of unbranded advertising about specific diseases and conditions increasingly occurs outside the United States and New Zealand (Raven 2004). As some scholars have pointed out, not a lot is known about the effect of DTCA of prescription drugs (Calfee 2003; Areni 2002; Jones & Garlick 2003). Consumer surveys, in particular those by the U.S. Food and Drug Administration (FDA), which has regulatory responsibility for DTCA in the United States, and *Prevention* magazine (Calfee 2002) show that consumers are generally aware of DTCA and that they find it useful. Nevertheless, such surveys are limited in that they do not permit a definitive determination of the impact of DTCA on people's health (GAO-03-177 (2002).
Recently, a few studies have addressed the issue of how to improve the regulations of the Food and Drug Administration. These studies focus mainly on the comprehension level of the information delivered by the adverts, on the need for a 'fair-balanced disclosure' between information on risks and benefits and for less superficial information (Kaphingst et al. 2005; Spence et al. 2005; Maubach

& Hoek 2005; Huh & Cude 2004; Chao 2005). Although these factors are important for promoting a positive impact on consumers' health literacy, they do not seem to get to the core of the communication problem involved in DTCA, namely that these adverts are not simply informative as claimed by the pharmaceutical industry (Bonaccorso & Sturchio 2003), but they present information framed in potentially misleading argumentative structures (Rubinelli 2006).

Drawing on argumentation theory, we claim that DTCA can lead readers to make wrong inferences and misunderstand the drugs' characteristics as a result of its interplay between dialectical and rhetorical features. In what follows, the nature of this interplay will be explored in detail, with the perspective of investigating the potential tension between practical persuasive success and normative directives about argumentative conduct.

2. *Preliminaries*

These preliminary observations introduce theoretical concepts that will be useful for the analysis of DTCA presented in this paper. In particular, we shall deal with the definition of dialectic and rhetoric, and with the main factors which they involve.

Following the evaluation made by Leff (2006), dialectic and rhetoric have been differently assessed by scholars. Weaver (1953) saw a fundamental distinction between the two disciplines; dialectic consists in winning rational assent for abstract matter, while rhetoric deals with ways of proceeding in individual situations. Contrary to the interpretation of Weaver, recent scholarship – including the authors of this paper – perceives a crucial overlapping between dialectic and rhetoric; the same overlapping that, we add, Aristotle saw in the *Rhetoric* while stressing in the opening lines of the treatise that dialectic is the counterpart (*antistrophos*) of rhetoric. As Wenzel (1990) claims, dialectic is a way of settling disputes through critical discussion. Rhetoric relates, however, to the persuasive factors of argumentative encounters. The main point stressed by Wenzel is that dialectical and rhetorical perspectives can both appear in concrete arguments.

According to the above perspective, dialectic results in the generation of norms for reasonable conduct. In particular, there are three broad principles – among those representing the asset of a critical discussion as codified by pragma-dialectics – which become relevant for our context: that arguers make clear what overall claim is being advanced, present support for the claim, and defend their

views against objections (O'Keefe 2003; 2006). Let us discuss these principles in more detail.

a. *Articulation of conclusion*

For normatively sound dialectical argumentation arguers must show clearly what standpoint is advanced. An obligation to be clear in this respect is embodied in a section of rule 10 of pragma dialectics where we read 'A party must not use formulations that are insufficiently clear or confusingly ambiguous' (van Eemeren et al. 1993, p. 209; see also O'Keefe 2003, p. 310).

b. *Articulation of support*

Another requirement for a critical discussion is that arguers make explicit their premises in support of the standpoint being advanced. Again, this idea is partly represented by the "obligation to defend" highlighted by rule 2 of pragma-dialectics: 'A party that advances a stand-point is obliged to defend it if asked by the other party to do so' (van Eemeren et al. 1996, p. 283; see also O'Keefe 2003, p. 312-313).

c. *Defence against counterarguments*

Finally, arguers must be willing to defend their views against objections (rule 2 in van Eemeren et al. 1996 p. 283; see also O'Keefe 2003, p. 314; Hansen 2006). Counterarguments, in particular, must be faced and eventually refuted. Rhetoric, in its turn, is linked by Van Eemeren and Houtlosser (2002) to the *strategic manoeuvring* which is designed to support a standpoint – or, according to pragma-dialectics resolving a difference of opinions – in a way favourable to an arguer's position. For these authors, rhetorical efficacy depends on three components: the selection of topic potential, the audience adaptation and the use of presentational devices. As Leff (2006, p. 201) points out, these rhetorical components are used with the intention of promoting one's own standpoint rather than solving an opposition of points of views in a dialectical way.

Van Eemeren and Houtlosser (2002, p. 135) claim that, although dialectic and rhetoric should operate together, dialectic must have a priority which limits the application of rhetorical devices. Indeed, they support a *resolution-oriented* approach to argumentation where the main aim of argumentation is that of conducting a discussion in a way that is considered reasonable. Cases of *audience-oriented argumentation* are, however, spread. According to Tindale (1999), argumentation always involves rhetorical attention. Moreover, in

argumentative practice correct dialectical manoeuvring is shadowed by contexts where the arguer's main intention is that of winning the audience and leading it to adhere to her standpoint (see also Leff 2006).

In the following section, we will show how in DTCA, particularly, the traditional rhetorical goal of winning the adherence of the audience is the main function of these adverts. What is more interesting is that this goal is reached by putting forward a seemingly dialectical framework that rests, however, on persuasion-oriented elements of doubtful nature. In other words, DTCA presents arguments that at a superficial level appear as rational but, on deeper examinations, hide fallacious manoeuvring. We will show that this way of framing contents does generate persuasion, leading one to enquire into the relationship between the quality of the message's argumentation and its outcome and impact.

3. *Dialectical rules in DTCA*

Following our interpretation, DTCA provides its audience with arguments whose rational structure can be easily perceived. We said earlier that the first principle for reasonable conduct is that an argument clearly articulates its standpoint. This is the case with DTCA. Elsewhere (Rubinelli 2006), we hypothesised that the standpoint for DTCA is the proposition "Ask your doctor about X (the medicine advertised)", which explicitly occurs with almost the same wording in all the adverts. Linguistically speaking, this proposition is ambiguous: it could be intended with meanings ranging from simply "Ask your doctor if X is right for you" to the extreme "Ask your doctor to prescribe X" or "Get X, and thus ask your doctor for it". Yet, whatever the meaning is, it is expected to generate some sort of positive response to the product advertised.

We can be sure that this is a proper standpoint because the validity of the proposition "Ask your doctor" is controversial. Since the medicines advertised always have competitors on the market, it is far from being evident why people should ask for that medicine and not for similar ones. In this light, this proposition instantiates an elementary single form of difference of opinions (Van Eemeren et al. 2002, chapter one), in the context of an arguing-as-presentation model of argumentation (Cohen 2003, p. 116).

In Rubinelli et al. (2006a), we showed that this standpoint is recognised as such by readers. We tested this factor in a pilot-study conducted with 36 students from a U.S. university. The students, randomly divided into two groups, were asked to read an advert. Group 1 was given an advert for *Zoloft* – an anti-depressive

medication, while group 2 read an advert for *Allegra180mg* -an allergy medicine. Both were copies of actual print adverts appearing in U.S. magazines. Participants then completed a questionnaire on the advert. In the first part of the questionnaire we obtained data on the perceptions of the argumentative structure of the adverts. Since we could not expect readers to understand argumentation from a technical point of view, we enquired about perceived conclusions of the adverts by posing the general question "What is the advert suggesting that readers do?", with an invitation to leave the space blank in case they did not see any suggestions. Results obtained confirmed our hypothesis. The *Zoloft* ad is perceived by all 36 respondents in group 1 as having an argumentative structure with the standpoint "Ask for/ Get Zolof". Similarly, 35 people out of 36 in group 2 recognized an argumentative structure in the *Allegra180mg* advert with a similar standpoint.

The second principle explained above reads as 'Articulation of support'; rational arguments put forward the premises in support of conclusion explicitly or, in any case, in a way that can be easily made explicit. Again, in DTCA this explicitness appears clearly. We reconstructed the premises of the standpoint "Ask your doctor for *Allegra180mg*" in Rubinelli (2006). There, the claim was that most of DTCA adverts support their claims by rather explicitly stating that the product advertised is better than similar ones on the market. Also, the adverts present what Toulmin (1958) calls the *warrant* of an argument, by giving certain medical information on the characteristics of the product for basing its supposed superiority. For example, in the case of *Allegra180mg* the advert says more or less explicitly that it lasts longer than most OTC allergy medicines. Similarly to before, data from our study (Rubinelli et al. 2006a) confirm that readers recall the premises that appear in the advert. 25/28 answers claim that the advert for *Allegra180mg* advices people on getting the medicine because it lasts longer than the other ones.

Let us now deal with the third principle mentioned earlier, concerning the necessity for a rational argumentation to take into account counter-arguments. In the context of DTCA, what works as one of the main potential counter-arguments is the fact that the medicine in question has side-effects. The perceived quality of a medicine would be diminished in case of significant side-effects. DTCA is legally bound to mention side-effects in detail; all adverts have a back-page explaining components and side-effects. All this information is, however, written in a very small font-size and employs a technical jargon that results unattractive. Indeed,

from our tests it results that readers do not pay attention to this page (Rubinelli et al. 2006a). But DTCA also tackles the issue of side-effects in the front page of the adverts. Apart from legal reasons for doing so, there seems to be an attempt to face or even refute possible counter-arguments of the sort "This medicine is good, but it surely has side-effects". To quote an example, in the front page of the advert for *Cialis* – a medicine for erectile dysfunction – there is a sentence stating that "Most men weren't bothered by side effects enough to stop taking *Cialis*". From our point of view, there seems to be no reason why this sentence appears in the advert other then the intention of refuting potential claims on possible limitations of the medicine.

We now enter in the domain of the relationship between the perceived rationality of an argument and its impact.

4. *Argument Quality and Persuasive Effects*
O'Keefe (2003; see also 2006) has conducted some meta-analytic reviews of experimental studies that compare the effectiveness of messages. Some of these messages include an explicit statement of the advocate's overall point, provide support for their information sources, or are structured as refutational two-sided messages, discussing counter-arguments. Some other messages do not have these characteristics. Results from these studies show that there is a significant persuasive advantage for messages included within the former type as compared to the latter. More specifically, adhering to the normative principles of pragma-dialectics seems to enhance practical persuasive effectiveness. As O'Keefe explains (2003, 311-313):

"Across the 17 studies identified as relevant … a dependable overall effect (corresponding to a correlation of about .10) was observed, such that messages containing an explicit statement of the advocate's overall conclusion were significantly more persuasive than parallel messages omitting such a statement. O'Keefe … reported a meta-analytic review of 13 … studies. Across these studies, a dependable difference (corresponding to a correlation of about .07) was observed such that messages providing citations to information sources were more persuasive than their less explicit counterparts. … a meta-analytic review of 18 … studies reported a significant persuasive advantage (corresponding to a correlation of about .14) for message with more complete supporting arguments. Refutational two-sided messages enjoyed a general persuasive advantage (corresponding to a correlation of .08) over their one-sided counterparts."

As a matter of fact, economical data on DTCA appear to confirm this interpretation. DTCA has an evident dialectical structure and there is strong evidence that it is effective in increasing sales. In 1999, the 25 top-selling medicines promoted directly to consumers accounted for 40.7% of the overall $17.7 billion increase in retail drug spending. The same 25 top-selling drugs had an aggregate one-year sales growth in 1999 of 43.2%. The growth in sales for all other drugs was 13.3%. This coincides with a growth in the number of prescriptions for the 25 DTC-promoted drugs. In 1999 doctors wrote 34.2% more prescriptions than in 1998 for these drugs, while they wrote only 5.1% more prescriptions for all other prescription drugs. In addition, the US General Accounting Office estimates that 8.5 million consumers annually request and receive from their physician a prescription for a particular drug in response to seeing DTCA (Marks 2003).

O'Keefe (2006, p. 238), in discussing his points, raises the issue on whether the same persuasive advantage would obtain if poor-quality sources were to be used or if irrelevant evidence were to be offered. In what follows we will attempt to give an answer to this issue by showing how, indeed, the quality of information offered by DTCA appears to be rather poor despite the level of its effectiveness. Exploring this aspect will lead us investigate into some rhetorical features of DTCA that are in contrast with its superficial dialectical framework.

5. *Dubious arguments in DTCA*

The critical factor that, from a qualitative point of view, dismantles the roots of the dialectical setting of DTCA is the following. In DTCA adverts there is a clear intention to emphasise and support the superiority of a certain medicine comparing to others similar on the market. This need of support seems to push advertisers to select certain information to the detriment of other one which could be more useful for promoting the health literacy of consumers. To exemplify this claim, we report a section of the analysis conducted in Rubinelli (2006).

Allegra180mg is depicted as a medicine that lasts four times longer – 24 hours – than one dose of most OTC allergy medicines. In the advert, three other medicines available on the market are indicated, *Benadryl, Tylenol* and *Chlor Trimeton* which, it is written, only last up to 6 hours. Now, the main point to note here is that *Allegra180mg* is a strong medicine and its long-lasting property is connected to this strength. Nothing about this strength is said in the front page of the advert. The usual recommended starting dosage of *Allegra* – we read from the package insert – is 60mg twice daily. Moreover, nothing is said on the front page

about the other fact that this dosage of *Allegra180mg* is not recommended for people with chronic idiophathic urticaria (CIU) or with decreased renal function. Unless those people who suffer from these two diseases read the package insert, the invitation to ask their doctor about *Allegra180mg* would lead them to ask for a medicament that is not appropriate for them. No doubts, he fact that not everybody can take *Allegra180mg* would surely affect the claim about its superiority, because it is a superiority that is limited in its application.

We are here dealing with a clear *fallacy of omission*, based on a failure to present information which, on one hand, would be relevant for consumers, but on the other hand would limit the number of consumers directly addressed by the advert. In Rubinelli et al. (2006a) we showed how this sort of fallacies goes unnoticed by readers.

The presence of fallacious arguments is not the only critical factor to underline in an attempt to reveal the rhetorical strategies behind DTCA. In Rubinelli et al. (2006b) we illustrated cases where the information presented in these advert is not fallacious *per se*, but is still dubious insofar as it invites readers to make wrong assumptions or invalid inferences. We tested this effect through a questionnaire, where we assessed people's recall of the contents of the adverts. In the questionnaire, we presented sentences that really appear in the adverts (referred to as T = Truth), and statements that did not appear (referred to as F = False), and asked readers to indicate which sentences were/were not in the advert on a scale from -3 to 3 (where -3 = I am sure it is not in the advert; 0 = I do not know; 3 = I am sure it is in the advert). In the false sentences, we inserted contents which would facilitate the identification of readers' processing mistakes. Such mistakes would suggest that implicit premises are picked by individuals in order to ground their conclusions about the drugs, that these premises are implicitly recovered, and that they can be known as such at various degrees of confidence and awareness. To give one glaring example, 60% of the sample (N= 21 out of 35 people) wrongly believed that the *Zoloft* advert contained the sentence "Taking *Zoloft* will make your life happy". The advert only says – more or less explicitly – that if you suffer from depression, life becomes hard. It seems that from this information readers make the following inference:
If you suffer from depression, life becomes hard.
Zoloft will cure your depression.
… *Zoloft* makes your life happy.

Indeed, making life happy is definitely more complicated than simply not being depressed! The inference is logically invalid.

Similarly, the advert contains the sentence "You get one performance. Why do it with depression?". Readers quote this sentence as a reason for wanting *Zoloft*. This means that they probably infer from it a necessary implication between "Taking *Zoloft*" and "Not having depression any more". This implication is, however, only probable: there is no way of knowing exactly what effects the medicine will have on each individual person.

The elements discussed in this section point to the fact that in DTCA strategic manoeuvring has gone wrong.

6. *Conclusion*

As Aristotle emphasises in the *Rhetoric,* persuasion can be reached via qualitatively good or poor contents. DTCA seems to follow under the second group, where fallacious arguments are presented persuasively. In this case, our hypothesis is that what makes these adverts persuasive is the rational way of framing information and which is, indeed, perceived by the audience. Dialectical features prevail at the level of people's perceptions of DTCA, while rhetorically dubious components seem to go unnoticed. The fact that a certain medicine advertised is superior to the similar ones on the market is a rationally compelling factor for generating a favourable attitude toward the medicine itself. Yet, this superiority is supported by poor information selected at the detriment of other information that, from a medical point of view, would be more appropriate.

It is difficult for us not to recognise in this way of presenting DTCA an intentionally designed strategy of argumentation which is applied to drive the audience in the expected direction. Current results in persuasion research are making more and more clear those factors that most affect people's assessment of the contents they deal with. In particular, the elaboration likelihood model (Petty and Cacioppo 1986) show that when a topic is personally relevant people engage in extensive elaboration; in this context the rational framing of the message plays a crucial role. For the audience of DTCA, the products advertised are always relevant. We can surely generalise that people who are interested in DTCA are either those who are affected by a certain illness or have relative or friend for whom the medicine advertised would be of some importance. In this sense, the audience of DTCA expects a minimum level of dialectical scrutiny that these adverts do offer. Despite the fact that the topic is relevant, people who read DTCA

do not seem to be critical enough to detach the poor strategic manoeuvring behind the superficial dialectical setting. Possibly, the critical skills required to conduct an adequate assessment depends on people's level of health literacy and on their ability to generally process information. In any case, the main problem is that DTCA seems to contain elements that surely do not help people in making this assessment. We even dare to say that the way DTCA is currently designed seems to affect people's ability to process certain contents, and invite its audience to make incorrect inference. In this light, a fundamental question arises is on whether DTCA would produce the same persuasion if its current rhetorical setting were taken away, and substituted by an exclusive informative framework based on the most medically relevant contents. We did some preliminary investigations of this point (Rubinelli 2006b) where we showed that when a medicine is presented for just its effective characteristics and in a less rhetorical fashion, it seems to be less clear to the audience why it should be chosen.

Enough to say, at this stage, that there is a lot at stake in the field of DTCA! Argumentation theory offers a powerful analytical tool that is rather unexplored by scholars interested in field of DTCA. We propose to explore all the factors underlined in this paper with further investigations where next to the theoretical interest of analysing the impact of real-life arguments, there is a fundamental need to enhance a qualitative improvement of a form of advertisement which is nowadays considered among the most critically powerful.

REFERENCES

Areni, C.S. (2002). The proposition-probability model of argument structure and message acceptance. Journal of Consumer Research 29, 168-187.

Aristotle (1996). Rhetorik. Ed. R. Kassel. Berlin: De Gruyter.

Bonaccorso, S. & Sturchio, J.L. (2003). Perspectives from the pharmaceutical industry. British Medical Journal 327, 863-864.

Calfee, J.E. (2002). Public policy issues in direct-to-consumer advertising of prescription drugs. Journal of Public Policy and Marketing 21 (Fall), 174-194.

Calfee, J.E. (2002). What do we know about direct-to-consumer advertising of prescription drugs? Health Affairs 10.1377/hlthaff.w3.116.

Chao, B.A. (2005). Evaluating the education content of direct-to-consumer fulfilment materials. American Journal of Health-System Pharmacy 62/6, 620-625.

Cohen, D.H. (2003). Logical fallacies, dialectical transgressions, rhetorical sins, and other failures of rationality in argumentation. In: F.H. van Eemeren, A. Blair, C. A. Willard & A. F. Snoeck Henkemans (Eds.), Anyone Who Has a View: Studies

in Argumentation (pp. 109-121), Dordrecht: Kluwer Academic Publishers.

Eemeren, F. H. van, Grootendorst, R., Jackson, S. & Jacobs, S. (1993). Reconstructing Argumentative Discourse. Tuscaloosa, AL: University of Alabama Press.

Eemeren, F.H. van, Grootendorst, R., Henkemans, F.S., Blair, J.A., Johnson, R.H., Krabbe, E.C.W., Plantin, C., Walton, D.N., Willard, C.A., Woods, J. & Zarefsky, D. (1996). Fundamentals of Argumentation Theory: A Handbook of Historical Backgrounds and Contemporary Developments. Mahwah, NJ: Lawrence Erlbaum Associates.

Eemeren, F.H. van & Houtolsser, P. (2002). Strategic maneuvering: Maintaining a delicate balance. In: F.H. van Eemeren & P. Houtolsser (Eds.), Dialectic and Rhetoric: the Warp and Woof of Argumentation Analysis (pp. 131-160). Dordrecht: Kluwer Academic Publishers.

Eemeren, F. H. van, Grootendorst, R. & Snoeck Henkemans F. (2002). Argumentation: Analysis, Evaluation, Presentation. Mahwah, NJ: Lawrence Erlbaum Associates, Publishers GAO-03-177 (2002). FDA oversight of direct-to-consumer advertising has limitations. Report to Congressional Requesters. US General Accounting Office (October).

Hansen, H. V. (2006). Mill and Pragma-Dialectics. In: Houtlosser, P. & van Rees, A. (Eds.), Considering Prgma-Dialectics (pp. 97-107), Mahwah, NJ: Lawrence Erlbaum Associates.

Huh, J., Delorme, D.E. & Reid, L.N. (2004). The third-person effect and its influence on behavioural outcomes in a product advertising context. Communication Research 31/5, 568-599.

Jones, T. & Garlick, W. (2003). Should drug companies be allowed to talk directly to patients? British Medical Journal 326, 1302-1303.

Kaphingst, K.A. & DeJong, W. (2004). The educational potential of direct-to-consumer prescription drug advertising. Health Affairs 23/4, 143-150.

Leff, M. (2006). Rhetoric, dialectic, and the functions of argument. In: Houtlosser, P. & van Rees, A. (Eds.), Considering Pragma-Dialectics (pp. 199-209), Mahwah, NJ: Lawrence Erlbaum Associates.

Lexchin, J. & Mintzes, B. (2002). Direct-to-consumer advertising of prescription drugs: the evidence says no. Journal of Public Policy & Marketing 21/2, 194-201.

Marks, J.H. (2003). The price of seduction: direct-to-consumer advertising of prescription drugs in the US. North Carolina Medical Journal 64, 292-295.

Maubach, N. & Hoek, J. (2005). New Zealand general practitioners' views on direct-to-consumer advertising of prescription medicines: a qualitative analysis.

New Zealand Medical Journal 118/1215, U1461.

Murray, E., Lo, B., Pollack, L., Donelan, K. & Len, K. (2004). Direct-to-consumer advertising: public perceptions of its effects on health behaviours, health care, and the doctor-patient relationship. The Journal of the American Board of Family Practice 17/1, 6-18.

O'Keefe, D.J. (2003).The potential conflict between normatively-good argumentative practice and persuasive success. In: F.H van Eemeren, J.A. Blair, C.A.Willard & A. F.S. Henkemans (Eds.), Anyone Who Has a View (pp. 308-318), Dordrecht: Kluwer Academic Publishers.

O'Keefe, D.J. (2006). Pragma-Dialectics and persuasion effects research. In: Houtlosser, P. & van Rees, A. (Eds.), Considering Pragma-Dialectics (pp. 235-243), Mahwah, NJ: Lawrence Erlbaum Associates.

Petty, R.E. & Cacioppo, J.T. (1986). The Elaboration Likelihood Model of persuasion. New York: Academic Press.

Raven, M. (2004). Direct-to-consumer advertising: healthy education or corporate spin? Healthy Skepticism International News 22, 9.

Rubinelli, S. (2006). 'Ask your doctor'. Argumentation in advertising of prescription medicines. Studies in Communication Sciences. Special Issue on Health Literacy 5, 75-98.

Rubinelli, S., Nakamoto, K., Schulz, P.J. & de Saussure, L. (2006a). What are we to think about consumer advertising? A case-study in the field of misinterpreted argumentation, Studies in Communication Sciences. Under revision.

Rubinelli, S., Nakamoto, K. & Schulz, P.J. (2006b). The rabbit in the Hat: Why is direct-to consumer advertising convincing? (Forthcoming).

Spence, M.M., Teleki, S.S., Cheetham, T.C., Schweitzer, S.O. & Millares, M. (2005). Direct-to-consumer advertising of COX-2 inhibitors: effect on appropriateness of prescribing. Medical Care Research & Review 62, 544-559.

Tanne, J.H. (1999). Direct to consumer drug advertising is billion dollar business in US. British Medical Journal 319, 805.

Tindale, C.W. (1999). Acts of Arguing: a Rhetorical Model of Argument. Albany: SUNY Press.

Weaver, R.M. (1953). Rhetoric and dialectic in Dayton, Tennessee. In: R.M. Weaver, The ethics of rhetoric (pp. 27-54). Chicago: Regnery.

Toulmin, S.E. (1958). The Uses of Argument. Dordrecht: Kluwer Academic Publishers.

Wenzel, J. (1990). Three perspectives on argument. In: R. Trapp & J. Schuetz (Eds.), Perspectives on Argumentation: Essays in Honor of Wayne Brockriede (pp.

27-54). Denver: Waveland.

ISSA Proceedings 2006 – What Is The KKK: Metonymy And Synecdoche In Arguments About Racism

1. *The War on Terror*
Debates about whether Afghanistan and Iraq are two faces of the same Global War on Terror (GWOT) or two different wars linked by a common thread mark the contemporary American political scene. Not only do they have to do with the colors used for military decorations, but this question also goes to the heart of the legitimacy of both endeavors. The centerpiece of this distinction lies with whether one is willing to collapse the techniques of terrorism with the individuals who perpetuate terrorist acts. While the Reagan administration had modest success in defining international terrorism as largely "state-sponsored", opening up the way for acts of terrorism to dovetail with diplomatic considerations, terrorism has more often been treated as individual acts by responsible persons. Therefore, it has been classified as part of the criminal justice system. Only after 9/11 did the American public open to the idea that terrorists and acts of terror were unified and integrated multinational entities. As such, terrorists should be fought as though they were a coherent nation-state. While this argument has faded since the point where 57 percent of the American public thought that Saddam Hussein had aided the 9/11 hijackers, questions whether there is a Global War on Terror persist (Berman, 2003).

Here I am interested in the finite traditions that govern the ways we articulate coincident events. In particular, I am interested in the ways that synecdoche and metonymy open up coincident events to competitive interpretation. As rhetorical

tropes, synecdoche and metonymy perform as cultural frames and strategies of argument. Taking discussions surrounding Ku Klux Klan activities at the University of Louisville as a text, I examine the ways that these two argumentative strategies set the stage for cultural antagonism. As synecdoche, the strategy adopted by those who sought to ban the Klan, it stands as an essential representation for a whole range of racist attitudes and behaviors illustrated in a material experience of struggle. As metonymy, the concept of racism reduces to the historical and material action of the Klan as a distinctive object. As such, those who view the issue as a matter of the freedom of speech seem unconcerned about the material threat of the Klan.

2. *Tropes and the Study of Argument*

Tropes are important to the study of argument. They are fundamentally enthymematic in that they grant their ground as a consequence of a habit and context of thought. In addition, they direct focus and function to suppress particular elements of argument (Vico, 1996; Birdsell, 1993; Parson, 1994). As tropes, they invite participation by invoking pre-existing habits of interpretation or argumentative frames of reference. This has been widely appreciated in the study of rhetoric, particularly as related to the study of metaphor (Fritch and Leeper, 1993; Moore, 1996; Eubanks and Schaeffer, 2004). However, in addition to their expressive function, they are also important to understanding how people construct their symbolic world. In this way, rhetoric and cognitive linguistics share a common path.

Recent works by George Lakoff and Mark Johnson (1980) have documented how tropes, particularly metaphors, help to map out the world of thing, words and concepts. Focusing primarily in the area of political discourse, the two have identified how dominant metaphors help identify important features on politics' symbolic terrain. Lakoff (1996), in particular has argued that metaphors having to do with the proper functioning of a family help to explain seemingly incommensurate arguments that under-gird American conservative and liberal political rhetorics and worldviews.

While metaphors are the most widely studied trope, four master tropes have been recognized since the 16th century when Peter Ramus identified, in addition to metaphor, metonymy, synecdoche and irony. This four-part typology of coincidental relationships was mirrored in the work of Giambisto Vico (1968) in the 18th century who sought to differentiate the stages of consciousness characterizing human progress. More recently, Kenneth Burke (1968) broke with

the linguistic theory of the post-war period which tended to reduce linguistic behaviors to either metaphor or metonymy and reconstituted the "master tropes" as four possible styles of thought (pp. 503-517; White, 1975). For Burke, as for modern cognitive linguists, the styles of thought were important because they provided a frame for both interpretation and understanding. As Burke notes, they play a "role in the discovery and description of 'the truth'"(p. 503).

I am limiting my discussion to two of the four tropes: synecdoche and metonymy. Of the four, the two are the most similar and easily confused and are the most likely to "shade into one another," This is so much so, that they have often been reduced to one another (p. 503). Burke likens metonymy to reduction and synecdoche to representation. While both deal with issues of contiguous or sign relationships, they do so in subtly different ways. This narrow distinction is an issue of some controversy, but the fundamental difference has to do with the ways that a term is related to the thing that it represents.

Gunter Radden and Zoltan Kovecses (1999) regard metonymy as a "cognitive process in which once conceptual entity, the vehicle, provides mental access to another conceptual entity, the target, within the same cognitive model" (p. 21). More simply, Ken-ichi Seto (1999) defines metonymy as a "referential transfer phenomenon based on the spatio-temporal contiguity as conceived by the speaker between and entity and another in the (real world)" (p. 91). In short, "metonymy is an entity-related transfer." Hayden White (1975) describe succinctly how this plays out in the rhetorical realm, "through metonymy (literally 'name change'), the name of a part of a thing may be substituted for the name of the whole, as in the phrase 'fifty sail' when what is indicated is 'fifty ships'" (p. 34).

On the contrary, synecdoche typically deals with the nature of the whole as indicated in a quality of one of its parts. Seto (1999) defines it as "a conceptual transfer phenomenon based on the semantic inclusion between a more comprehensive and a less comprehensive category." As such, it represents a category related transfer" (p. 92). White (1975) notes that by synecdoche a "phenomenon can be characterized by using the part to symbolize some quality presumed to inhere in the totality, as the expression, 'He is all heart'" (p. 34). As such, the whole is reduced to an essential quality that inheres in one or more of the parts.

This discussion yields a few key points:

1. synecdoche and metonymy are closely related expressive practices that rely on

a similar logic of contiguity between parts and wholes

2. the two tropes may be easily confused, but that they intend to draw parallels to different sets of similarities; between a part and a category in cases of synecdoche and between conceptually related entities in the case of metonymy

3. they are fundamentally argumentative in that they try to relate different ideas together utilizing a common cultural logic. In this sense they are enthymematic.

One final point I would like to make regarding these expressive strategies is that they make a difference in the way an issue is framed and offer separate prospects for interpretation. Because both rely on a habit of association that are bound in cultural concerns, that is, contiguity is as often a matter of real, conceptual and linguistic association rather than just one (Lakoff 1987). As such, communities define differently the degree of relationship between entities and concepts.

3. *Context*

Most generally associate the Ku Klux Klan with the Old South and the period of reconstruction after the American Civil War. However, its heyday as a national organization stretched from 1915 until World War II when, at one point, it claimed nearly 4 million members, or 20 percent of the adult white male population. The Klan's focus on anti-semitism, anti-Catholicism, nativism and race segregation had a particular appeal in Indiana where Edward Jackson, the Grand Dragon of the Indiana Klan served as governor from 1924 – 1929. However, this rule was short and by 1944 the organization declared bankruptcy and officially disbanded. In its place, several other organizations attempted to take up the mantle of the original Klan, particularly during the desegregation era of the 1950s and 1960s, creating a patchwork of similarly motivated, but decentralized, organizations. While these groups took responsibility for several high-profile racial incidents, they had little success regaining a significant membership. After several lawsuits in the 1980's and relentless pressure from federal authorities, Klan membership bottomed out. The Anti-Defamation League now estimates that there are no more than 2,500 – 3,000 members splintered into more than 150 different and competing organizations.

Despite their small size, the Klan maintains a powerful legacy. Their reputation for organizational secrecy, coupled with a penchant for publicity and terrorism magnified the effect of their modest membership. They are nearly synonymous with all acts and symbols of hatred, actively competing with Nazis as ubiquitous paradigms of racial hatred. While they had a dominating influence in the first half

of the Twentieth Century, they have consistently waned in influence into the Twenty-first. They are largely in official disrepute; so much that nearly all of the states of the Old South have been forced to repudiate their official use of the Confederate battle flag because of its association with the Klan.

The University of Louisville is a public, urban research university located in Louisville, Kentucky. Founded on the banks of the Ohio River, Louisville's metropolitan area stretches well into southern Indiana. While Kentucky is not in the heart of the Old South and was free of much of the public strife associated with desegregation, the University of Louisville is a place that is uniquely sensitive to race issues. Nearly one third of the city of Louisville identify themselves as African-American, nearly half of Kentucky's African-American population. While the urban center is ethnically diverse, southern Indiana is largely rural, agrarian and white. Despite the diversity of its physical location, the University population is only 11% African American and has one of the lowest minority graduation rates in the country for a university of its type and size.

The university is keenly aware of this dissonance and has made several attempts to remedy the situation. In 2002, Louisville's President James Ramsey inaugurated a University diversity plan. In addition to initiatives seeking to hire additional minority faculty and direct administrative resources to increasing minority recruitment and retention, the President began a speaker's series to help bring attention to issues of diversity on the Louisville campus.

4. *The Klan Comes to Louisville*

In November 2003 in response to an incident involving racially insensitive t-shirts, the University invited Sistah Souljah to speak on the campus. A graduate of Rutgers University and famous for her role as Minister of Information for the Rap Group Public Enemy, she became infamous when in a 1992 *Washington Post* interview she quipped regarding the L.A. riots: "If black people kill black people every day, why not have a week and kill white people?" Instantly, she became a media celebrity as Democrats repudiated her extremism and Republicans used it as evidence for the culture war. Both of her videos were immediately banned from MTV. However, the indent was isolated. Subsequently, she has written two books and become and activist for the third world and children's rights.

The University of Louisville (U of L) spent $ 11,000.00 on the presentation. And while Souljah's talk was largely heralded as uplifting by students who attended, WHAS radio talk-show host Francene Cuncinello took the event as an opportunity

to comment on Sistah Souljah's controversial past and to question the benefits of the diversity program overall (Frazier 2003). Subsequently, two members of the International Keystone Knights of the Ku Klux Klan appeared at the office of Provost for Diversity and Equal Opportunity, Dr. Taylor-Archer, on 1 December 2003 demanding that the university pay Barry E. Black, Imperial Wizard of the International Keystone Knights of the Ku Klux Klan (IKKKK), an equal amount of money to speak as part of the diversity forum. They also demanded that the University dismantle the diversity program. Regarding the tone of their demands, the *Louisville Courier-Journal* quoted the IKKK Kentucky Spokesman, James D. Kennedy's letter: "Such statements as blacks are at war with whites onley (sic) promotes racism in the black communitys (sic)." Kennedy went on to write, "Sister Soldier (sic) had also stated that blacks are being killed in alarming rates, so we need a 'Kill Whitey Week.'" These remarks onley (sic) instigate rage & encourage the black populous (sic) to commit violent acts against European-Americans based on thier (sic) ethnicity." The University denied their demands.

The U of L Debate Society instantly sponsored a program as a public response to the critics of Sistah Souljah. Dr. Ricky Jones of the Pan-African Studies Department noted that the KKK was a particular threat. He distinguished the KKK from Sistah Souljah: "The KKK has a history of lynching, terrorizing and killing African Americans. Has Sister Souljah (sic) ever burned a cross in your front yard" (Abner, 2003).

The controversy continued into the second semester. A kiosk at U of L's Belknap campus, about two miles away from the main campus, was spray painted with racial epithets and fliers were found outside a residence hall and classroom building. In March, more than 100 students rallied to ban the Klan from campus. And in April, campus safety received a call that two people were placing IKKKK recruiting material on University kiosks. When campus safety arrived, they found that the two had placed materials on a "campus map" which was considered campus property and were declared "persona non grata" and permanently banned from the campus. At the end of the school year the University administration removed the public information kiosks from the campuses. Klan spokesman Jim Kennedy threatened to contest the ban in court with the help of the Kentucky ACLU (A.P., 2004). As part of their protests, Klan members applied to hold a march on 1 May 2004, Derby Day. Local officials denied the permit request saying that the police would already be stretched too thin to provide adequate security (Bowman, 2004).

In the fall of 2004, the IKKKK petitioned the university to meet at one of the university's "free speech" areas to hand out materials. Despite publicly asking twice and re-raising the issue on the campus in September and in November, they failed to show up at the requested time. Since then, they have periodically requested the opportunity to use the "free speech" areas.

The University offered multi-pronged response. Relying on a theory of free speech as a centerpiece of a modern university, the President acknowledged that, while he found the Klan personally odious, he was powerless to do anything to stop them beyond the measures already taken. In a series of "closed door" meetings and letters to the campus community, President Ramsey sought to assure the community that they understood the gravity of the situation and that they sympathized with student and minority concerns, but that there was little that the institution could do to stop the group from using the "free speech" zones. As a general premise, he acknowledged that the University's commitment to diversity means that it is committed to listening to all voices wishing to address the university community and that the best response to offensive speech is counter-speech. He says in his 11 February letter: "However, even if we do not welcome or agree with them, we have an obligation to allow them to exercise their rights to free speech just as we would any other individual or group who comes to our campus and abides by our guidelines. This does not mean we have to listen to what they say, and it does not mean we cannot respond with additional free speech expressing differing views."
However, he acknowledges that the KKK represents a threat to the community. He interprets this as physical and in response notes that he is empowering the Public Safety department to take measures to protect the campus community. He characterizes the threat to the community as intellectual discomfort, given "the history of the organization and the views it espouses (Ramsey, 11 February).

In subsequent meetings with faculty and student groups, the President's claim that he was hamstrung by the Constitution was met with suspicion. In a letter after a 2 March campus forum, Ramsey lamented that despite all of the time discussing the issue, that "many of the issues are being mischaracterized. This is absolutely not about preferring hate groups over our African American community. It is not about the university administration vs. those who care about diversity. It is not about choosing the U.S. Constitution over campus safety. Those characterizations are not true" (Ramsey, 4 March). Instead, he framed an issue

regarding the strength of the university community; whether it was prepared to deal with the issue in a unified or divisive way. Rather than a purely physical threat, he now characterizes the threat as one located in "the history of these groups and the values they hold" rather than the situation presented. However, his solution, again, is to increase the role of the Department of Public Safety to insure campus safety as a primary concern.

In defense of engaging the Klan "diplomatically", Ramsey takes a more defensive tone and again avers to the obligations of an educational community to "work to improve our understanding of the issues we face and how they relate to the larger society. As an educational community, we have a responsibility to share information and talk openly about issues while respecting that we bring different perspectives that cannot be characterized as either right or wrong to the discussion." He also notes: "The difficulty is that to protect our own voices, our own hard-earned rights, we cannot selectively exclude the voices of others, no matter how distasteful they may be, as long as the individuals expressing those views abide by the law and by our own long-established practices."

However, when the issue moved from placing pamphlets and making demands on administrators and to a threat to actually showing up in the "free speech" zone, Ramsey changes his tone once more. Rather than embracing counter-speech or supporting the open and free exchange of ideas and the importance of engaging difficult and controversial topics in an overt way, he asks that the community shun those ideas. In a 3 September letter, he notes that his only rationale for allowing the Klan on the campus is external, located in the Constitutional obligation and that the University "must comply with state and federal laws that guarantee freedom of speech." Gone are the earlier references to the fact that some ideas were not "right or wrong." In response to the Klan's request, he offers that the University should, "choose to deny these two individuals what they most want: Our attention. They want to disrupt our campus, distract us from our mission, and harm the reputation of our institution and its students, faculty and staff."

Ramsey acknowledges the double edge of the liberal tradition. Speech is paramount to a university community in theory, but in practice should be selective. The Klan represents a threat, but it is largely historical or can be dealt with by using modest and immediate resources. While there may be long-term threats, they are insufficiently linked to the actual group on campus on warrant

attention. Attempts to acknowledge the problem only give them more than they deserve. All the while, Ramsey carefully distinguishes the Klan from any greater meaning or significance on the campus. They are outsiders, their ideas are aberrant and can be easily ignored without much harm. Their real threat is not material, it is historical or social, a consequence of their name and the response that they provoke.

On the contrary, the U of L and greater African American community were not conciliatory. Rather than viewing the Klan's attempts as the isolated actions of a couple of activists who wanted to pass out pamphlets for of the IKKKK, they viewed the Klan in a clearly elaborated historical context. Viewed from this context, they sought to ban the Klan and all who took the name, not just the couple of activists or the IKKKK, from the campus. They also sought to sever ties between the University and the radio station that stoked the issue. Debate coach, Ede Warner was a public face in regard to the Klan on campus. Following, Pan-African studies professor Ricky Jones' characterization, he articulated a link between the activists, the Klan and terrorism in general. In a BET interview (Scott, 2005), Warner said: "Their [terrorists'] moves are moves of intimidation. Why is this any different?. . . It's very subtle. It's not direct. It's not 'we're gonna hurt you. It's 'we're going to send you some fliers to remind you what we're about.They've put me on some Web sites."

An element of secrecy magnifies the Klan's power and lends credence to conspiratorial claims about them. They are not overt, they are not what they seem and they hide for a range of activities that defy classification along a simple continuum of actions. As such, they are indistinguishable from racism. Rather, they are the embodiment of it. In this sense, the posting of fliers and attempts to use the "free speech" zone are simple fronts for more nefarious activities that fall under the same rubric. Posters to a BET chat forum dedicated to the Louisville incident demonstrate this synecdochal reduction, where a quality of part of an entity is taken as a characterization of the entity as a whole, more clearly. There are three interesting elements of this conflation: first, allowing the KKK shows a fundamentally racist division between threats to whites and threats to African Americans. Second, the notion that the Global War on terrorism should include the Klan for their use of forces as a means of intimidation and, third, a conflation of the historical Klan with the work of independent members that appropriate its name and tradition or the IKKK as an independent body from the whole history of

the Klan.

The first theme that becomes evident is that the separate treatment of the Klan and Al Quaeda points toward a particularly racist view and a litmus test of racism. One blogger commented: "The history of the KKK speaks for itself, if you are unaware of their history, then 'Google' it (yes it is 2004). We refuse to act like this is at the forefront of our agenda; however we cannot simply ignore this type of action. If you disagree with us, it is your right. We will not argue or plea with you to understand where Black folk are coming from. Either you feel us or you don't... One question we will ask, if Al Queda came on campus passing out literature and recruiting, then what would you say?" (SOULution, 2004). More to the point, a poster to BET's messageboard linked the difference to larger issues dealing with systematic racism[i]. They said:

[T]here are currently two classes of terrorist organizations, those who threaten the us and those who threaten a portion of the population. only the first group is taken seriously. the us has a bloody history of persecution of minorities, and i daresay that most americans know nothing about it. crimes by the klan are rarely prosecuted, for most americans think as they do. to compare black criminal activity to klan history is stupid. in the current climate, it would not be surprising to discover that the klan would be given complete absolution by bushwinkle and his nazis. (listen up blackrepublicans, BET Messageboard, 1/15/2005 12:34:05 AM)

In this frame, the free speech justification covers overtly racist activity. Any rationale that defends any part, is a defense of the whole of racism because all racism is the same. Another poster said: "it's just like the whole terrorist thing.... you arrest terrorists that are against the white people so far.... and then the group against black people suddenly their just going what the first amendment tells them they can do...." (bAcArDiMaMi, BET Messageboard, 1/14/2005 10:40:45 AM)

In such a world, white racists and terrorists stand differentiated from minority terrorist groups. While minority groups gain the attention and ire of the government, white racists and radicals exist as part of the accepted fabric. Another poster noted that moral equivalence should link the two: "it should be banned and every KKK member demonstrating needs to the arrested for being a member of a terrorist group. otherwise lets give equal time to the people who hate whites and blow up buildings with whites in them i.e. al qaeda and islamic

jihad. don't allow one terrorist group to demonstrate and ban another. (twocents, BET Messageboard, 1/13/2005 8:49:12 PM)

This sense of contiguity lies in a racial denial of the history and power of the Klan where the Klan is such a vivid representation of racism that it is impossible to disarticulate. Only a system rife with institutional racism would fail to see the equivalence: "… others are trying to keep us from focusing on the real issue here an organize terrorist group being able to speak on a public college campus this is a tactic used always by either people in denial about racism or people who are racist or bigots" (coolchil1, BET Messageboard,1/14/2005 10:33:05 AM). Another notes: "white folk in this nation will not arrest every neo nazi and kkk member and send them to guantanemo bay cuba because deep down inside many white folk sympathize with thier white supremacist ideology"(DART, BET Messageboard, 1/11/2005 2:46:03 PM).

The equivalence lies with the name and not the actions of the two on the campus. Because the activists choose that name, they choose its history. A BET poster observes:
[T]he KKK is nothing but a terrorist organization, but because they are made up of white trash, they are allowed to rein supreme without restraint until they maim or murder someone. but, if this were al-quada, some arab group, or some black group, the police would be called immediately. The KKK is just another of many signs of the degrading of american society, the stagnated social progress amongst all races (Africaspeak, BET Messageboard,1/12/2005 10:44:00 PM)

One other concern that echoes the original letter from the Klan to the U of L and appears throughout the comments against the Klan is that African Americans can not be held accountable for what happens when they engage the Klan. Or, that the violence that will accompany the Klan's appearance will end up hurting the African American community as a whole. In short, that the mere existence of the Klan rises to the level of fighting words. These concerns found their way into President Ramsey's call for the community to ignore the Klan, but they also find their way into Ede Warner's rationale for declaring them a terrorist organization and the BET Messageboard discussions. Warner said: "There have been students who have said if the university won't protect us, we'll protect ourselves, but for the most part students stay away… "If something goes wrong, and some of our students are involved, they will be demonized for being the aggressor… It won't be that it was bad the Klan was on the campus, it will be about the lack of

restraint by our Black students. It's too bad because I think it could be prevented." A subsequent poster also notes: "how can the campus administration let that go on? they are just asking for trouble... the sad thing is, kids might take it in their own hands and will end up in big trouble, because campus authorities act like it's no big deal to begin with. crazy! (what in the hell!, BET Messageboard, 1/11/2005 12:03:41 PM). Because of this, the Klan is an entity whose existence is, by definition, a threat and requires an irrational response. Material threats, such as the threats of racism, transcend the ability of speech to engage them.

Whites responded to the terrorism equation in a predictable form by pointing out the KKK's lack of threat. Mark Potok from the Southern Poverty Law Center noted that: "having the Klan banned as a terrorist organization based on its past would be legally difficult, especially given the Klan's inaction in recent years." Others pointed toward the position of the IKKK. The UCLA Bruin responded by pointing toward the activist's ability to threaten the campus:

At the University of Louisville, the KKK doesn't act as a "terrorist" group. The definition of a terrorist group is one that exerts threatening force or violence for the purpose of intimidation or coercion, usually with political motives. But, in the case of the KKK presence at the university, these descriptions simply don't match. Instead, the group posts signs, writes letters and delivers speeches. The KKK's message is utterly despicable, but so far, its only crimes are blatant ignorance and vile personal beliefs. Because the organization refrains from physical force or coercion, it's not a terrorist group (Ilana, 2004).
The U of L's official website made a similar argument, reducing the threat of the Klan to their means of expression rather than their agenda or history. They write: The courts have recognized the Klan's history in other cases. The Seventh Circuit in 2003 even suggested that the name of the Klan and its paraphernalia might someday be recognized as "fighting words" unprotected by the First Amendment but concluded that, at this time, it has not reached that level"(FAQ sheet).

5. *Discussion*
The Klan's attempts to protest on the Louisville campus distilled two competing interpretations that can be explained with reference to tropic tradition. Whereas the administration viewed the IKKK"s attempts to influence the campus as the work a sad group of misfits and outsiders who, at worst, had little hope of doing any more than raising the ire of some protestors, anti-Klan advocates took the

IKKK as part of a well-worn tradition of racism. It was not that they were misfits appropriating a name. Rather, their appropriation of the name itself was an indication of their intent and their central role in a long tradition of racism. What is important to the synecdocal representation is that the racism of the Klan is not special or unique, but rather part of the fabric that colors all parts of institutional racism. Because the Klan is a paradigmatic example of racism, it serves for some as an apt and visible representation of a whole that is largely invisible. It inheres with the same qualities as all racism, except it is a largely visible but only partially known incantation.

The metonymic representation, on the contrary, establishes racism as part of a continuum of activity. While we should reject all racism in the abstract, we should approach material manifestations in a pragmatic fashion. As such, the Klan represents only one extreme element of racism that is, for most, distant and harmless. Its extremism makes it an object to be ignored or pitied rather than addressed. Within the metonymic frame, the invocation of the Klan as an example of racism is more likely to produce apathy or abstract abhorrence than real action because there is so little connection between them and most others.

While the existence of a single and identifiable material object such as the Klan would normally predict a concrete and finite field of argument, the fact that different groups come at the same object with a different set of interpretive schemes makes conflict more likely. These implicatures open and close meaning. As Burke (1970) notes, every means of articulation is both a way of knowing, seeing or naming and a way of limiting these qualities. Here, the perceived material histories of these events encourage groups to use tropological prefigurations as the starting point for their conversations. Whether the Klan is alive and well, whether they are terrorists that have the support of the official state, whether they are a small group of down and outers or inheritors of a long history of hate and intimidation have to do with the relationship of that part to the whole. Since this exits prior to any actual manifestation of the Klan and it is a premise for argument rather than a subject of it. This is why President Ramsey's claims that they were just another dissonant group or that an increase in public safety officials had little effect on the complaints of anti-Klan protesters. When viewed as a single manifestation of a whole system of racism, these small and focused actions were only placebos to further hide the larger issues. To stop the actual protestors did little to stop racism. While the two groups were bound by a

single vocabulary, they were separated by the relations between terms rooted in a material experience of racism.

For argument, the distinction points toward the enthymematic potential of different tropological structures. White notes that synecdoche tends to support comic interpretations, focusing on the potentials for transcendence while metonymic interpretations tend to find themselves rooted in tragic interpretations, since they tend to ignore the complexity of problems in favor of conceptual coherence. Here, synecdoche brings the Klan to life as a constant and lingering threat intimately related to all forms of racism while metonymy distinguishes them as irrelevant.

However, engaging the "Klan" according to their chosen nomenclature might hold a middle ground. While the tendency is for administration officials to take the Klan in terms of their anemic material threat, that is the threat posed by the obscure IKKKK, this is not the name that they use themselves. Instead, they choose to articulate a link with the while history by choosing to use the larger reference. In this instance, they seek to have their cake and eat it too – to gain the historical reputation of the Klan without carrying any of its negative baggage. This lets them off too easily. If they choose the name, then let them be responsible for it. It is unimaginable that a group on a U.S. campus would call itself Al-Quaeda USA without gaining the critical attention of authorities. The same can be said for the KKK who share a similar history of intimidation and terrorism.

For the study of argument, the lessons are broader. Attention to master tropes helps draw attention to the finite ways that coincident events may be articulated. While we often use a common vocabulary that leads us to believe that we are talking about the same thing, tropological prefigurations (the tendency to aver to one strategy over another) may help to explain some instances where arguments in the same field fail to find resolution. As such, they are one other way that figurative logics can help scholars to map out the terrains of argument and become attuned to unseen potentials for failure.

NOTE
[i] The Messageboard accompany all news reports on the BET website. They ask for audience participation. Because they are not edited and are placed at the discretion of the poster, they tend not to use traditional grammar, spelling or syntax.

REFERENCES

A.P. (2004). New plan to ban klan from campus. *CBSNews.com* (21 May). Retrieved March 5, 2006, from http://www.cbsnews.com/stories/2004/05/21/national/main618911.shtml

Abner, J. (2003). KKK demands equal time, fee in response to Sister Souljah. *Louisville Cardinal* (8 December). Retrieved March 5, 2006, from http://www.louisvillecardinal.com/vnews/display.v/ART/2003/12/08/3fd594020cce4

Berman, A. (2003, 26 March). *Polls suggest media failure in pre-war coverage.* Editor and Publisher.

BET Messageboard (2005). Retrieved March 5, 2006, from http://www.bet.com/News/tlscott_klanoncampus.htm?wbc_purpose=Basic&WBCMODE=PresentationUnpublished&mb=1

Birdsell, D.S. (1993). Keneth Burke at the Nexus of argumentation and trope. *Argumentation & Advocacy* 29, 178-185.

Bowman (2004, 23 March). Klan plans march to campus. *Louisville Cardinal.* Retireved March 5 2006, from http://www.louisvillecardinal.com/vnews/display.v/ART/2004/03/23/4060b8c7e5643

Burke, K. (1969). *A Grammar of Motives.* Berkeley: University of California Press.

Burke, K. (1970). *The Rhetoric of Religion; studies in logology*. Berkeley: University of California Press.

Eubanks, P and J.D. Schaeffer (2004). A dialogue between traditional and cognitive rhetoric: Reading of figuration in George W. bush's "Axis of Evil" address. *Rhetoric Society Quarterly* 34 (pp. 53-70).

Eubanks, P. (2000). *A War of Words in the Discourse of Trade: the Rhetorical Constitution of Metaphor.* Carbondale: Southern Illinois University Press.

FAQ (2004). *Frequently asked questions.* Retrieved March 5, 2006, from http://www.louisville.edu/dialogue/faq.html

Frazier, S. (2003). Hack journalism to blame for Souljah discord. *The Louisville Cardinal* (15 December). Retrieved 5 March 2006, from Academic Universe.

Fritch J.E. and K. Leeper (1993). Poetic logic: the metaphoric form as a foundation for a theory of tropological argument. *Argumentation & Advocacy* 29, 186-195.

Ilana, F. (2004). Speak out against hate. *UCLA Bruin* (27 May). Retrieved March 5, 2006, from Academic Universe.

Lakoff, G. (1996). *Moral Politics: How Liberals and Conservatives Think.* Chicago: University of Chicago Press.

Lakoff, G. and M. Johnson (1980). *Metaphors We Live By.* Chicago: University of Chicago Press.

Lovan, D.T. (2004). Activists want KKK banned from University of Louisville campus. *The Associated Press State & Local Newswire* (11 March). Retrieved March 5, 2006, from Academic Universe.

Moore, M.P. (1993). Constructing irrenconcilable conflict: the function of synecdoche in the spotted owl controversy. *Communication Monographs* 60, 258-274.

Moore, M.P. (1996). The cigarette as representational ideograph in the debate over environmental tobacco smoke. *Communication Monographs* 64, 47-64.

Parson, D.W. (1994). Kenneth Burke and argument: a perspective through the master tropes. In: F.H. van Eemeren, R. Grootendorst, J.A. Blair and CA Willard (Eds.), *Proceedings of the Third ISSA Conference on Argumentation* (pp. 345-350, Vol. I).

Potok, M. (2004). "Louisivelle, colleges across U.S. Face similar free speech debate. *Associated Press State & Local Wire* (21 May). Retrieved March 5, 2006, from Academic Universe.

Radden, G. & Z. Kovecses (1999). Toward a theory of metonymy. In: K. Panther and G. Radden, (Eds.) *Metonymy in Language and Thought.* (pp. 17-59), Amsterdam/Philadelphia: John Benjamins Publishing.

Ramsey, J. (2004, 11 February) *Message from President Ramsey.* Retrieved March 5, 2006, from http://www.louisville.edu/dialogue/communications/021104.html

Ramsey, J. (2004, 2 March). *Opening remarks.* Retrieved March 5, 2006, from http://www.louisville.edu/dialogue/communications/030204.html

Ramsey, J. (2004, 2 September). *To the campus community.* Retrieved March 5, 2006, from http://www.louisville.edu/dialogue/communications/090304.html

Ramsey, J. (2004, 4 March). *Message from President Ramsey.* Retrieved March 5, 2006, from http://www.louisville.edu/dialogue/communications/030404.html

Scott, T.L. (2005, 11 January). Klansmen rally on Louisville college campus. *BET.com,* archived at http://www.bet.com/News/tlscott_klanoncampus.htm?wbc_purpose=Basic&WBCMODE=PresentationUnpublished&mb=1

Seto, K. (1999). Distinguishing metonymy from synecdoche. In: K. Panther and G. Radden (Eds.) *Metonymy in Language and Thought.* (pp. 91-120), Amsterdam/Philadelphia: John Benjamins Publishing.

SOULution (2004, 8 September) *A letter from the editorial board of THE*

SOULution. Retrieved March 5 2006, from http://www.the-soulution.com/id80.html

Vico, G. B. (1968). *The New Science of Giambattista Vico.* Trans. T.G. Bergin and M.H. Fisch. Ithaca: Cornell University Press.

Vico, G. B. (1996). *The Art of Rhetoric.* Trans. Georgia A Pinton and Arthur Shippee. Amsterdam/Atlanta: Rodopi Press.

White, H. (1975). *Metahistory: the Historical Imagination in Nineteenth-Century Europe.* Baltimore: Johns Hopkins University Press.

ISSA Proceedings 2006 – Theory And Practice: A Metatheoretical Contribution

1. *Introduction*

It is well known that all professions have what is generally termed a theory-practice problem. The problem view often takes one of two shapes. The first is the theoreticians' complaint that practitioners do not use available scientific, research-based knowledge in their work, but rather rely on common sense and old bags of tricks. The second is the practitioners' complaint that research-based knowledge is too abstract and general to be of any use in practical contexts; not infrequently with the added complaint that research-based theory is not relevant, it simply does not address the issues that practitioners are interested in. Sometimes it is claimed that practice is self-sufficient, it does not need theory.

Even a discipline such as argumentation has a theory-practice problem. As a prelude, let us take a brief look at argumentation theorists say about their theory-practice problem, before we delve into selected aspects in greater detail. Robert Pinto, in reflective hindsight, takes a somewhat skeptical position (Pinto 2001). Once he saw himself as engaged in theory-building, but makes the judgment that while his ideas were both valid and important, they did not "add up to the

elaboration of a theory" (p.128); rather they were fragmented and incomplete. More recently his view of the whole enterprise has changed: " ... I now hold that our judgments about arguments and inference are guided by a *tradition of critical practice* rather than by an over-arching theory" (p.129). And here is where Pinto's skepticism comes in; he doubts whether it is at all possible to construct a theory that might ground critical practice, but he grants that a theory might illuminate it. So what could the argumentation enterprise be? Pinto applies his views to his own work. He denies that it will yield "a set of propositions about argument inference whose truth is proved and which constitutes a theory of inference or argument"; rather what he settles for is "an altered way of looking at the phenomena this paper discusses – an alteration induced by observations and reminders set forth in them" (p.129).

Ralph Johnson (2005) takes issue with Pinto's views, especially his skepticism concerning the possibility of a theory for the practice. In fact, Pinto problematizes whether various proposed theories are theories at all. In turn, Johnson problematizes Pinto's assumptions that a theory would have to be complete and systematic, and that the job of any theory worth the name is to provide a foundation for practice. In *Manifest Rationality* (2000) Johnson diagnoses the overall problem as a gap between theory and practice, and suggests that "gap can only be bridged by significant alterations to the theory" (p.358). In his 2005 OSSA paper, he suggests that the relationship better be viewed as reciprocal, in a Deweyan fashion.

There are many things here that are worthy of analysis, and regrettably I cannot treat them. I shall organize my discussion along three major lines. First, there is the question about the concept of a theory; of what sort of entities "theory" refers to. This section will introduce a metatheory and a conception of (scientific) theories. Second, what does it mean to say that there is a "gap" between theory and practice, and what may a "bridge" possibly look like? Finally, my third theme is the relation between theory and practice and how to conceive of it.

2. *What is a theory?*
Despite the fact that *theory* is the most frequently used form of representation in science (but not the only one), the concept is used rather loosely about a number of conceptual structures. Sylvain Bromberger (1963) identifies two main ways of using the concept of theory. First, we have concrete, empirical theories like the electromagnetic theory of light or Skinner's theory of learning; theories which can

be "accepted, rejected, believed, remembered, stated, granted, confirmed, refuted, have authors" (p.83). Second, we have theories which "include contributions from many sources; they have founders and perhaps foundations; they are academic subjects" (p.83). Examples are "psychological theory", "social scientific theory" or "argumentation theory".

This is an important distinction to make. Bromberger's second sense of theory refers to a kind of supra-theoretical entity that is sometimes also called realm, field or domain. Such domains are large, often not well circumscribed, and they contain a number of concrete theories of Bromberger's first sense. For example, the educational domain contains curriculum theory, evaluation theory and motivation theory. These in turn may actually be seen as smaller domains, containing e.g. Atkinson's motivation theory. It is important to note that the metatheory I shall use applies only to theories of Bromberger's first kind; that is, concrete, specific, delimited theories that can be accepted, believed and refuted. In fact, all metatheories (conceptions of theory) deal with concrete theories which in turn deal with some delimited aspect of the world.

A problem that confronts us here is so to speak the location of the theory-practice relationship. Is it at the level of the domain or is it at the level of specific theories? At the outset, I would like to venture the hypothesis that it might be at both levels, but that the relationship may look different according to which level one discusses. If this is true, we shall have to exercise both care and precision in our theory-practice discussions. It may seem, for example, that views about possible over-arching theories may be a confusion of levels; more precisely that the domain could be treated as a theory of Bromberger's first kind. On the other hand, the *grounding* of a practice may most adequately be viewed as a problem for the domain, not for any specific theory.

Let us move from domain to specific level. I shall henceforth reserve the term *theory* for concrete theories of Bromberger's first kind. There are a few competing metatheories; that is, views about what theories are, what they consist of and how they are related to the world. Of these, two are better known, and of the two, one is widely agreed to be inadequate, albeit the source of the inadequacy is not agreed upon.

So what is a theory? I begin my description of theory structure by citing Pinto, who in private correspondence with Johnson (Johnson 2005, footnote 7, p.227) says the following about what a theory is:

A theory of X consists of a set of propositions which purport to offer an account of X which (a) is a systematic account (i.e. it addresses the outstanding features of X and shows how those features are connected with each other) and (b) is an account that has been defended by argument and the appeal to evidence.

What particularly interests me about Pinto's view, is its reminiscence of what has come to be called the Received View of theories; the logical positivists' conception of theory. On this view, theories are partially interpreted axiomatic systems consisting of two main parts. The first part is a logical calculus, typically consisting of sentences, propositions (statements of laws) and the logical connections between them (deductions). The second part of a theory is a set of correspondence rules C which has two jobs: it partially assigns empirical content to the logical calculus (this is usually cashed out as defining theoretical terms) and it specifies the admissible procedures for applying a theory to phenomena (e.g. Carnap 1956, Hempel 1965, 1966).

For various reasons, this conception of theories has been found inadequate. I will not go into them in any detail; readers are referred to Frederick Suppe (1989) for a thorough critique of the Received View. I turn now to the semantic conception of theories, which was largely developed as a criticism of and an alternative to the Received View. The short version of the semantic view is as follows: Theories do not describe the phenomenon within their scope in all its complexity. Instead, they attempt to characterize phenomena in terms of a few selected parameters which are abstracted from the phenomenon (Suppe 1989). Ronald Giere (1979) invokes the analogy of a map as a heuristic device to illustrate that many features, factors, causes and details are left out in the process of representing a landscape on paper. The parameters together make up what might be called a model or a replica of the phenomenon; it follows that in its nature the model is a simplification of the phenomenon. This may sound discouraging, but it gives good intuitive sense and is quickly evidenced when looking at examples of theories. The kinetic theory of gas characterizes the behavior of (ideal) gases in terms of the parameters pressure, temperature and volume. Classical behaviorism characterizes human behavior (learning) in terms of two parameters, stimulus and response. Skinnerian behaviorism characterizes human behavior (learning) in terms of three parameters, stimulus, operant and reinforcement. Unlike in the Received view, this is a dynamic portrait. As values of parameters change, the state of the model changes over time. The theory may have what is technically called a theoretical law to describe how this change happens, what states the

model assumes over time.

This account of theories has the seemingly paradoxical implication that the relation between a theory and the phenomenon within its scope is indirect. The theory deals directly with the model, and hence only indirectly with the real phenomenon. In Suppe's framework, this amounts to treating the phenomenon *as if* it only involved the selected parameters. In effect, he says, "one assumes the fiction that no other … parameters exert an influence on (these n bodies') behaviors" (1989, p.95). Concerning actual phenomena, however, situations in which no other parameters exert any influence are extremely rare, if existing at all. Typically, the fiction is not realized. In actual student populations learning behavior is not just a function of stimulus and response parameters. Evidently a number of factors fall outside the scope of the theory of classical behaviorism; e.g. motivation, interests, classroom climate – factors which will have an impact on the relation between stimulus and response in a concrete situation. The indirect relationship of a theory to the phenomenon within its scope clearly has thoroughgoing implications for the use of theory and the theory-practice relationship. I shall return to this issue in a subsequent section.

3. *Gaps and bridges*

As suggested above, Johnson (2000) diagnoses a gap between theory and practice. He is by no means the only one. Stephen Toulmin (1958) claimed that a "radical re-ordering of logical theory is needed in order to bring it more nearly into line with critical practice …" (p.253), to which Johnson remarks that a possible remedy might also be to bring practice in line with theory. However, his own proposed remedy is very similar to Toulmin's: "… the gap can only be bridged by significant alterations to the theory" (2000, p.358).

My business here is not to discuss what sort of alterations should be done. Rather, I wish to ask what it means to claim that there exists a *gap* between theory and practice. What does this tell us about the conceptions of theory and practice that are at play? At the outset, metaphors such as *gap* and *bridge* make theory and practice seem like two completely separated entities. Do they indicate that theory is theoretical and that practice is theory-free? And what might a *bridge* be? A third kind of entity, unlike theory and practice, that is needed to build connections between them? I shall argue that the picture suggested by gaps and bridges is both unfortunate and unwarranted.

The unfortunate connotation of the *gap/bridge* metaphor can be illuminated by

another important distinction concerning the use of *theory*; a distinction which, despite not being perfect, has a significant bearing on the theory-practice problems. This is the distinction between strong and weak notions of the theoretical. To a certain extent it overlaps with the domain-specific distinction outlined above, but has an even wider area of application. A strong use of theory or theoretical would be to insist that it is a well articulated theory dealing with a carefully delimited aspect of the world. A weaker sense of theory or theoretical is what we find in claims, views and beliefs that clearly go beyond the observational, both concerning terms and assumptions of connections, but fall short of explicit articulation. Most claims about everyday events and happenings are of this kind. Theory in the weak sense is of vital importance in the theory-practice debate. In the philosophy of science this view has found its most famous expression in Norwood Hanson's thesis that all observation is theory-laden (Hanson 1958). There is no such thing as theory-free observation; all observation is shaped by the purposes and the prior knowledge of the observer. Philosopher of education Wilfred Carr, in his discussion of practice as theory-laden, relies on exactly the same weak sense of theory (Carr 1995). Educational practice, he says, is full of more or less implicit assumptions and beliefs concerning unobservable entities and connections of various kinds. Hanson's thesis enjoys wide agreement. On this understanding of theory, there is no gap between theory and practice because practice is never theory-free. So why diagnose a gap? Several explanations are possible. Those who diagnose a gap may rather want to argue that the theory with which practice is laden is inadequate. If that is the case, then there is a gap in the sense that the theories which inform practice are not the theories that we want to inform practice. The bridging of such a gap amounts to replacing old theories with better ones; thereby also changing practice. Alternatively, the same argument can be made, but without normative overtones: the theories we advocate are out of sync with practice as it is; that is, our theories are misleading as descriptions of existing practice. Johnson claims that the gap between theory and practice can only be bridged by significant alterations to the theory, and he makes it clear what alterations he believes are needed in great detail. It is not entirely clear to me whether he thinks that theory alterations are bridge-building because the revised theory will be more descriptively correct, or because old theory should be replaced. Quite possibly he thinks both – these are by no means incompatible. One more point needs to be made here. Practice is (probably) laden with theory both in the strong sense and in the weak sense. Some parts of practice will be informed by carefully argued and delimited theories of

argument(ation). But there will always also be theory in the weak sense: preconceptions, prior knowledge, misunderstandings, prejudices and unarticulated assumptions that shape what we see, perceive, think and do. Johnson's theory, or the theories of any informal logician for that matter, will be a well articulated theory in the strong sense. My hypothesis is that theory in the strong sense cannot hope to replace all theory in the weak sense in a theory-laden practice. There will always be a "residue".

Let me close this section by putting a slightly more curious twist to the problem of what a bridge might be. I find the nature of a bridge (or bridging) rather elusive. If we diagnose a gap between theory and practice, are we then left with three different entities in the proposed remedy? Theory, practice + bridge? The twist comes from the observation that theory, practice and bridge may have some affinity to Johnson's discussion of argument structure (Johnson 2002). He maintains that the nature of an argument is not well represented by the Premises + Inference model, because it may confuse inference with argument. To evaluate an argument structure, it is sufficient to ask whether reasons given provide rational support for the conclusion in question. There is no need to mention the inference from reasons to thesis. So is it necessary to invoke a bridge between theory and practice?

4. *Theory and practice: the relation*
It might be instructive to begin our foray into the relationship problem by looking at Wilfred Carr's overview of various conceptions of the theory-practice relationship in education (Carr 1995). The most common way of understanding the relationship is, he says, as a dichotomy. On such a view, practice is everything that theory is not. While theory deals in abstract ideas and universal, context-free generalizations, practice deals in particular instances and concrete realities. Carr concludes his discussion as follows:
In short, by making the twin assumptions that all practice is non-theoretical and all theory is non-practical, this approach always underestimates the extent to which those who engage in educational practices have to reflect upon, and hence theorize about, what, in general, they are trying to do (1995, p.62).

The gap metaphor may be guilty of this kind of opposition. The oppositional view clearly hinges upon a certain view of what theory is, but so does Carr's judgment of it. But first, let us have a look at the reactions to the dichotomy. Predictably, Carr says, these are views which focus on the dependence of practice on theory.

Practice is seen as theory-laden; it is not opposed to theory, but rather governed by theoretical frameworks which range from explicit to implicit and tacit. But practice cannot be reduced to theory, Carr maintains, because it is never guided by theory alone but also by norms and specific knowledge of particular students; non-generalized knowledge is necessary, he argues. But neither can theorizing be reduced to a form of practice, as Gilbert Ryle once suggested (Ryle 1980), because Ryle equates practice with knowing how, and that yields a concept of practice that is too narrow and restricted to be adequate in educational contexts. The same, we might argue, holds for critical practice in the argumentation field. Carr's approach to the theory-practice relationship is by no means the only one. Peter Reid distinguishes between three different types of relationship (Reid 1991). First, it can be conceived of as dialectical. This view is generally favored by those who emphasize the exchange between theory and practice, in the sense that both are continually revised in the light of each other. Second, the relationship can be conceived of as operational. Strictly speaking, this is no relationship since practice is seen as self-sufficient. Practice is understood as performance of certain activities, and theory is neither necessary nor sufficient for this performance. Theory is not sufficient because the essential skills are learned in practice; it is not necessary because one can learn to perform these actions without recourse to theory at all. Third, the relationship can be conceived of as logistic. This view maintains that practice can be completely guided by theory; theory is both necessary and sufficient for practice.

At this point we need to look at the concept of practice. Educationalists who discuss theory-practice relations tend to take both for granted; furthermore there is a tendency to assume that educational practice is tantamount to the teacher's actions. The theory-laden character of practice is then taken to refer to the teacher's beliefs, knowledge, values, perceptions and judgments. On my part, I have come to think that the concept of practice is even more difficult than the concept of theory. Johnson, on his part, relies on Alasdair MacIntyre's concept of practice:

By a 'practice' I am going to mean any coherent and complex form of socially established cooperative human activity through which goods internal to that form of activity are realized in the course of trying to achieve those standards of excellence which are appropriate to, and partially definitive of, that form of activity, with the result that human powers to achieve excellence, and human conceptions of the ends and goods involved, are systematically extended

(MacIntyre 1996, p.187).

Incidentally, this concept of practice in turn relies on an Aristotelian concept of praxis, where there are no external goals and the activity is done for its own sake. That may not be exactly what Johnson wants from a concept of practice, but I shall not pursue that line of investigation. Let us, for the sake of the argument, accept this as an adequate view of practice and go on to explore some of the consequences for the present discussion.

What we have here, is a wide, complex concept with a focus on human activity with internal goods accessible through participation. This conception is much broader than ordinary conceptions found in the domain of education, with their focus on individual actors. It is also much more comprehensive than Ryle's rather narrow concept of practice.

Let me return briefly to Peter Reid's typology. He does not say what he takes theory to be, nor what he takes practice to be. It does seem, though, that theory is endowed with different meanings. Can practice in a MacIntyrean sense stand in a dialectical relationship to practice? Sure it can. But this is a very noncommittal view unless one can specify to some degree what aspects in practice in revised in the light of what aspects of theory, and vice versa. Theory in the weak sense will contain many beliefs that might be changed pretty easily, whereas revision of an articulated and well evidenced (scientific) theory is much more demanding. Can the relationship be operational? Not if we by theory mean theory in the weak sense, but practice without well articulated, delimited theories is certainly conceivable. Can the relationship be logistic? Hardly – there will always be elements in practice that are not covered by theory, especially if theory is given a strong interpretation.

Some general problems emerge from this discussion. First, there is the question whether there is one theory-practice relationship or many. There is a tendency to speak of the relationship (sic) in singular, as if there is something called *the* theory-practice relationship. This is unfortunate. As we have seen, both concepts are comprehensive, rather vague and complex and the relation between them may take different forms and be of many kinds. Attempts at generalized descriptions, exemplified by the ones above, often mean a reduction. Even one and the same theory (in the strong sense) may exhibit several forms of relationship to practice. This is simply because users of a theory may have different purposes. Theories are constructed to e.g. describe, predict, explain, modify, influence, understand,

ground, justify, be tested, revised and falsified by some phenomenon, and there is no reason why a theory should only perform one of these functions. Second, there is a question of how the influence flows: is it unidirectional or bidirectional? My description above betrays my inclination to think of it as a two-way relationship. However, if we think it is the job of the theory to ground practice or guide practice, we may have unidirectional relations in mind – the influence goes from theory to practice. Johnson (2005) understands Pinto to at least lean in the direction of such a view, whereas he himself holds a more Deweyan view that insists on a continual exchange between theory and practice, much like Reid's dialectical type. But which level of theory is meant here? And which parts of practice? I think it is reasonable to hypothesize that some elements in practice may change fairly easily and quickly (such as use of technology), whereas other elements (such as standards and goods) are much less amenable to change. Or more precisely, they may change but slowly and over time; their change is not up to one or two individuals since practice is a socially established human activity. Third, there is the question of plurality of theories. Is there one theory that is related to practice, or are there many? Is it possible to have one systematic, over-arching theory that stands in some kind of specified relationship to practice? My answer to this is no. Practice, on MacIntyre's definition, is by far too complex for any one theory to cover it all. But then, there is no reason why several theories cannot be used at the same time, complicated though as it may be.

It is time to return to the semantic conception of theories and have a look at its implications for the theory-practice debate. But first, let us briefly revisit the Received View of theories. On this view, there is a direct, one-step relation between a theory and the phenomenon it treats. The correspondence rules, a finite set C which is an integral part of the theory, comprise admissible procedures for applying a theory to observable phenomena. They determine, so to speak, how the laws of the theory (the logical calculus) manifest themselves in the phenomenon. Perhaps one might say that the correspondence rules provide a direct bridge between theory and phenomenon? However that may be, the theory itself determines its own use. By contrast, the semantic conception makes a sharp distinction between a theory and the method of its use. This is because the theory is one step removed from the phenomenon, there is so to speak a two-step relation between them due to the intermediary model. As Suppe puts it:

[A scientific theory] does not deal with phenomena in all of their complexity; rather it is concerned with certain kinds of phenomena only insofar as their

behavior is determined by, or characteristic of, a small number of parameters abstracted from those phenomena (1989, p.65).

The theory, in effect, with its postulates and theoretical laws, describes and explains the behavior of the model thus constructed and only indirectly the phenomenon. No theory can therefore be applied directly to observable phenomena, practice, or what one may wish to apply them to. While this may seem odd and perhaps counter-intuitive, it opens for great flexibility in theory use: the same theory can be used in different ways in different circumstances, and different people may use it differently.

So what happens to the bridge? What happens when a highly abstract, simplified theory that is far removed from the phenomenon, is used? Theory use, advocates of the semantic conception insist, necessitates the use of a body of auxiliary hypotheses. Imagine Skinner's theory of operant behavior to be applied to understand students' behavior in classrooms. The theory characterizes behavior in terms of three parameters; stimulus, operant (behavior) and reinforcement (consequence). But the behavior of actual students, as we know, is not limited to being a function of these parameters only. So when the theory is used, auxiliary hypotheses are used in conjunction with it, to adjust or accommodate the theory to the present context. Such auxiliary hypotheses would, among other things, consist of working knowledge of the students in question; their preferences, motivation, relationship with friends etc. – what the theory user judges to be relevant and important. And since contexts vary, auxiliary hypotheses will vary (to what degree is a contentious question). This means that uses of theory in practice is never a straightforward procedure; it requires knowledge not only of the theory but also of the context in which the theory is used. On the other hand, this divorce of a theory and the method of its use makes possible a large degree of flexibility in theory use; and hence, I would argue, increases the value and usability of the theory. Thus, theories in the strong sense for their use also rely on theory in the weak sense.

Two observations need to be made here. First, the semantic conception of theories has been developed with scientific, empirical theories in mind. But I would venture the hypothesis that this is an adequate view of theories within any fields. This includes argumentation, where a good many theories are normative in character. I think that one will find the same elements in normative theories as in other theories (I have myself employed it to analyze normative educational

theories); you look for parameters and you find them. But of course, the generality of the semantic conception is in principle open to dispute. Second, is it reasonable to conceive of auxiliary hypotheses as a bridge between theory and practice? At any rate, on this view they are necessary when a theory is used, simply because theories have the nature that they do have.

5. *Conclusion*

I have in this paper addressed the theory-practice problem in argumentation. The point of departure was Ralph Johnson's (and earlier Stephen Toulmin's) diagnosis of a gap between theory and practice. Johnson laments the lack of a clear concept of theory, and my business in this paper has been to provide precisely that and investigate what it may lead to.

To the best of my knowledge, all metatheories (conceptions of theory) provide definitions of concrete, delimited (scientific) theories that deal with a specific phenomenon or aspect of the world. For example, the electromagnetic theory of light and neo-behaviorist learning theory, or for that matter, Johnson's theory of argument. This focus then forces one to make a distinction between various uses of the concept of theory; I have followed Bromberger in distinguishing between larger domains and concrete theories. I believe that the theory-practice problem may apply on both levels, but that it takes on different shapes. My own discussion of the implications of the semantic conception of theory, seems to focus more on theory application. Theory use is but one part of what the theory-practice relationship can be, so my metatheory of choice does not solve all problems (that may not be a reasonable expectation anyway).

The *gap* diagnosis itself is a matter of some contention, and so is the remedy described metaphorically as a *bridge*. As they stand, the give the impression that practice is theory-free. But much criticism and many good arguments have been raised against this idea, both within the field of education and in the philosophy of science. Again, a lot hinges on what one takes a theory to be. A distinction between strong and weak senses of *theory* and *theoretical* is then made; it is indirectly connected to a metatheory since metatheories deal with theories in the strong sense of articulated, delimited theories. If such theories do not inform practice, practice is still not theory-free but rather infused with theory in the weak sense of prior knowledge and preconceptions. This in turn problematizes the notion of a *gap*. So what adherents to the gap diagnosis may want, I speculate, is to replace the theory that does inform practice with other and better theories.

My treatment of the concept of practice has been admittedly stepmotherly; this is a concept that surely is worthy of much more attention. I have followed Johnson in using MacIntyre's concept, and its very complexity shows that the theory-practice problem is manifold, and that no one theory speaks to or informs the whole of practice. And as new theories may contribute to changes is practice, so new theory may grow out of practice.

REFERENCES

Bromberger, Sylvain (1963): A theory about the theory of theory and about the theory of theories. In B. Baumrin (Ed), *Philosophy of science: the Delaware seminar*, Vol. II (79-106). New York: Interscience.

Carnap, Rudolf (1956): The methodological character of theoretical concepts. In H. Feigl & M. Scriven (Eds), *Minnesota Studies in the Philosophy of Science*, Vol. I (33-76). Minneapolis: University of Minnesota Press.

Carr, Wilfred (1995)*: For education. Towards critical educational enquiry.* Buckingham: Open University Press.

Giere, Ronald N. (1979)*: Understanding scientific reasoning.* New York: Holt, Rinehart and Winston.

Hanson, Norwood R. (1958): *Patterns of discovery*. Cambridge: Cambridge University Press.

Hempel, Carl G. (1965): *Aspects of scientific explanation and other essays in the philosophy of science*. New York: Free Press.

Hempel, Carl G. (1966): *Philosophy of natural science*. Englewood Cliffs: Prentice-Hall Johnson.

Ralph (2000): *Manifest rationality. A pragmatic theory of argument*. Mahwah, NJ: Lawrence Erlbaum Associates.

Johnson, Ralph (2005): Theory and practice again: Challenges from Pinto and Toulmin. In D. Hitchcock (Ed), *The uses of argument: Proceedings of a conference at McMaster University* (222-231). Hamilton: Ontario Society for the Study of Argumentation.

MacIntyre, Alasdair C. (1996): *After Virtue. A study in moral theory.* London: Duckworth Pinto.

Robert C. (2001): *Argument, inference and dialectic.* Dordrecht: Kluwer Academic Publishers.

Reid, Peter (1991): The idea of the practical. In B. Gundem, B. Engelsen & B. Karseth (Eds), *Curriculum work and curriculum content. Theory and practice. Contemporary and historical perspectives* (12-23). Report No. 5, Institute of

Educational Research, University of Oslo.

Ryle, Gilbert (1980): *The concept of mind.* Harmondsworth: Penguin Books

Suppe, Frederick (1989): *The semantic conception of theories and scientific realism.* Urbana. University of Illinois Press.

Toulmin, Stephen E. (1958): *The uses of argument*. Cambridge: Cambridge University Press.

ISSA Proceedings 2006 – Arguments Across Symbolic Forms: An Analysis Of Presidential Popularity

Abstract:

This project embraces a visual turn in argumentation studies by analyzing visual arguments alongside their print-based companions. The paper works to understand how images make arguments in the news, specifically focusing on images of President George W. Bush as they relate to public opinion polls. The analysis spans five years of the Bush presidency by examining 125 articles and accompanying images illustrating job approval ratings. The findings suggest that images are performing a variety of argumentative functions especially during a national crisis. However, often images project arguments that are incongruent with the articles they accompany.

Key Words: visual argument, images, opinion polls, crisis

1. *Introduction*
Sometime between the debut of the USA Today newspaper and the emergence of a commercial internet people begin consuming news laden with visuals. This reading of photographs, charts and caricatures is not a new phenomenon as comics and children's books, for example, have employed a similar literacy;

however, the generic shift from literature to news marks a significant literacy shift. This turn occurs while argumentation scholars are writing about discursive forms of argument, the aestheticians are dedicated to high art, and media scholars are searching for an effect. Yet, journalists are dressing news like collage art. This trend in the making alters notions of literacy and suggests a fusion of the above mentioned experts.

The technological shifts of the 20th Century cast individuals into an age of secondary orality[i] (Ong, 1982). According to many argumentation theorists, our grounds, warrants, enthymemes, and entire claims are packaged in images (Palczewski, 2001; Birdsell & Groarke, 1996). These conclusions challenge the classification of images as being distinctly separate from words. In a Cartesian world, image and word are conceptually dichotomous; the image as argument fails to measure up to the stability, transparency and rationality of the word. Adhering to this typically Modern notion of rationality (and argumentation) is no longer tenable considering the reality of a communicative environment dominated by images (Molwana 1992; Stephens 1998).

This project arises because argumentation, rhetoric and media scholars are beginning to develop the language and methods necessary to critically examine images used in argument (Scott, 1994, 252). An important step in this visual turn is a reexamination of the rigid image/word dichotomy. This split characteristically frames the image as presentational emotive baggage tainting rational discursive claims. In terms of rhetorical appeals, the word is to logos what the image is to pathos. These distinctions are no longer necessary or accurate given the shifting notions of literacy in an era of secondary orality. While challenges to this dichotomy can be traced to 20th century artistic movements[ii], the tension between the presentation of word and image demands further examination by argumentation scholars. In line with art historian Michael Holly, this paper questions "the possibility of ever keeping separate the discursive and the visual" (1996, p. 8).

Embracing a visual turn in argumentation studies assumes that "argument need not be fixed as a category" (Palczewski, 2001, p. 14). Redrawing the lines of argument comes with the burden of rethinking political discourse as it functions in the public sphere. This project builds upon argumentation scholarship that examines the role images play in political arguments (DeLuca, 1999; Lake & Pickering, 1998). In this analysis a significant form of political discourse, opinion polls, are analyzed. Opinion polls are a rich artifact in terms of their symbolic form, as they are commonly presented in both visual and word-based forms, and

for their ideological strength – "polls are one of the communicative means by which the collective 'we' of democracy maintains and projects itself" (Lipari, 2000, 98). Opinion polls are symbolically diverse and powerful argument structures that project a consensus of seemingly unrelated citizens.

Opinion polls can be used to analyze how traditionally discursive forms of argument compare and contrast with their visual companions. This analysis hopes to demonstrate the role and relationship between words and images in a manner that challenges the modern word/image schism. A ubiquitous polling question in US political discourse is the Presidential job approval rating. President George W. Bush's job approval ratings are especially telling as major shifts in public support has been reported throughout his five years in office. The shifting approval ratings offer fertile ground to explore the argumentative quality of opinion poll stories. For this paper, images of President Bush are analyzed in relation to the word based descriptions of public opinion poll data.

This paper begins by addressing the theoretical tension between word and image, a tension manifest in secondary orality. It continues by delineating the artifact and method used to analyze news stories. Theory and method are followed by an analysis of images and news articles conveying public opinion data concerning George W. Bush's popularity. Specifically, the articles and images illustrating public opinion polls are examined to determine if they convey congruent arguments. This analysis generates conclusions regarding the presentation of public opinion polls, distinctions between newspapers and magazines, and the relationship of images to words when used in advancing arguments.

2. *Image, Word, and Public Opinion Polls*

Argumentation scholarship and social scientific studies traditionally categorize images similarly, with the former relating them to affect and the latter conjoining them with emotional appeals. According to both positions, images are thought to bypass rational processing in a manner that goes straight to the heart. Linda Scott, detailing the study of images in the sciences, argues that social scientists rooted in the classical conditioning/affective response model assume that "the impact of the picture is passively absorbed; no interpretation activity is invoked." She adds that the image "appears to work in the absence of cultural mediation, cognitive activity, or judgment" (1994, p. 256).

The classical conditioning model concurs with anxiety Habermas reserves for the image-laden mass media. For Habermas, news media "draw the eyes and ears of

the public under their spell but at the same time, by taking away its distance, place it under 'tutelage,' which is to say they deprive it of the opportunity to say something and to disagree" (1998, p. 171). Images pose danger, the argument goes, because they seduce the mind and ultimately block dissent. The culture produced by such media is one of "integration." Habermas is referring to the mixture of debate, journalism, literature, advertising and slogans involved with mass media. These presentational shifts influence the thinking of mass-mediated cultures; they move "from a public critically reflecting on its culture to one that merely consumes it (1998, p. 175)." Habermas' conclusions derive from the assumption that images lack the semantic content necessary to think in a rational manner.

It is beyond the scope of this project to reconfigure the semiotic workings of image processing; however, it is important to understand what is at stake when attempting to understand how images argue. Conducting an investigation on the argumentative quality of news involves analyzing images in a systematic manner. Understanding the function of image-laden media hinges on a view of image processing that runs counter to the affect model and Habermas' anxiety.

A flawed logic has relegated images to an inferior emotional realm. Stephanie Larson debunks a classic example of how positive images of President Ronald Reagan triumphed over a reporter's supposed critical remarks (2000, p. 120-121)**[iii]**. Larson recounts journalist Lesley Stahl's caustic critique of President Reagan's 1984 presidential campaign. Her news program prompted Reagan officials to applaud Stahl for granting the Reagan campaign free press. The Reagan administration held that people would only remember amiable images of the President and ignore verbal criticisms. Stahl was dejected and so were many news personalities who felt their reporting was being trumped by seductive images.

Larson dispels the logic of image triumph with a close analysis of the news segment. She finds that Stahl disproportionately weights her news coverage with complimentary words, sounds, and images of President Reagan. Larson writes, "[T]his is a bad example of pictures speak louder than words because in this instance the pictures and sounds were overwhelmingly positive and the voice-over was a confusing mix of explicit compliments and implicit criticisms" (2000, p. 120). The Reagan example fails to support the claim that images necessarily triumph over words by circumventing reason.

Larson's findings illustrate an important move for scholars working to explain

how images argue; it emphasizes the significance of analyzing the relationship between words and images in advancing arguments. Privileging one symbolic form over the other delimits the interpretive possibilities of a given argument and ignores the presentational form of new media.

News stories produced by "new media" are immersed in the workings of secondary orality – using images, sounds, and animation to accompany the printed or spoken word. Delli-Carpini and Williams contend that today's media are "leading to a convergence" of types and genres of media (2001, p.166). With the rise of new media, traditional news sources, even daily newspapers, have been using more image-oriented techniques to convey the news. Shifting to a more visual format is significant when considering the significant impact news media have on the outcome of political races and public policy (Jamieson & Capella, 1998, p.129).

A common topic tied to national politics is presidential popularity. News sources commonly illustrate the President's job performance in the form of photos, drawings and graphs/charts. Research has found that these images can, and do, influence the way a President is perceived (Waldman and Devitt, 1996, p. 303). Impressions of candidates are molded by how they appear in visual form.

Beyond extensive use of images, journalists and their readers look to opinion polls as sources of information (McLeod, 1996, p. 401). Reporting the voice of the American public through polling data has become such a common practice that it serves as news in and of itself. Every year since 1935 the number of polling questions asked has increased from 1880 questions in 1945 to 13,297 questions in 1995 (Lipari, 2000, p. 2). Public opinion polls have become the dominant tool to measure-up Presidents. Lipari contends that polls have become a "cultural symbolic form" that are a modernized form of ritual communication (2000, p. 7).

While polling methods are an important area of inquiry, the manner in which the poll results are presented to the public is most significant for this project. Polling has become such an integral part of campaigns that it has developed a language specific to its practices (Bauman & Herbst, 1994, p. 133). The language of Presidential job approval polls is conveyed through word (news articles), and images (photographs and graphs/charts). This paper works to better understand the fundamental structure of this language as it is presented to readers, specifically through the traditional mediums of newspapers and magazines.

There has been much focus on the power, bias, and effectiveness of opinion polls

(D'Alessio and Allen, 2000, McLeod, 1996), yet, little has been done to determine the congruity between the stories and images that illustrate polling data. Concurring with Lipari, scholars need to approach polls as if they were a distinct form of discourse (2000, p.8)**[iv]**. "Researchers have refined methods for measuring opinion, but still do not know how the products of their efforts are managed in the political arena" (Herbst, 1993, p. 41). There is a need to assess the complete message and minimal work has been done looking at both the images and stories readers are greeted with in newspapers and magazines.

3. *Artifacts and Method*
To assess how images function as argument, this paper analyzes the congruence between three message forms commonly found in news media:
(1) *polling data,*
(2) *articles interpreting and/or incorporating polling data,* and
(3) *images displayed in conjunction with the articles.*

Throughout the paper, any combination of these three forms is referred to as a story. Stories involving George W. Bush's popularity between August 2000 and April 2006 are included in the analysis. News stories were collected from a prominent US daily newspaper, *Washington Post***[iv]** and a US national weekly news magazine, *Newsweek***[vi]**. These publications were chosen because they represent main stream news publications both owned by the Washington Post Company. Assuming like ideological structures guide the production of both publications, more accurate distinctions can be made about these mediums. Furthermore, analyzing two related but distinct mediums illustrates the differences and similarities between media as they relate to visual argument.
The Washington Post Company may provide ideological consistency, but the two mediums draw from separate sources to attain their polling data. The newspaper polls are part of the *Washington Post – ABC poll***[vii]**, while *Newsweek***[viii]** employs Princeton Survey Research to conduct their poll. News stories were chosen for analysis if Bush's popularity, as measured by a poll, was mentioned in the article and the article was accompanied by an image (either photographs or chart/graph).

All news stories in the *Washington Post* and *Newsweek* that met the above two criteria were gathered. The dramatic political flux during these 68 months provides a rich text for analysis. A set of unique situations propelled Bush's popularity through five distinct phases: the accidental President, post 9-11-01

commander in chief, invasion of Iraq, 2004 election victory, and war in Iraq.

(1) The accidental President stems from August 2000 through September of 2001.

(2) The post 9-11-01 commander in chief phase includes the tragic events of 9-11-01 and continues through February 2003 when the invasion of Iraq is imminent.

(3) The invasion of Iraq polling begins in March and continues until November 2003.

(4) The 2004 election victory starts in November 2003 and culminates in November 2004.

(5) The war in Iraq begins after the election and continues through the spring of 2006.

The *Washington Post* search yielded 86 separate news articles and numerous images (more than 50 photographs and over 100 graphs/charts), and *Newsweek* produced 39 news articles incorporating numerous images (64 photographs/drawings and a few graphs/charts). These 125 news stories are analyzed to determine the positive or negative tone derived from the approval rating polls. For instance, if the article reports that Bush's popularity marks are decreasing, the feature is considered "negative" press. In a few occasions, specifically during the campaign for presidency, the articles are labeled "neutral" because the polling data indicates that Bush and Gore are equal in popularity.

The photographs are analyzed to determine the argument they are advancing. Although readers may use idiosyncratic cues to make sense of images, this study assumes certain structural features work to define and give meaning to images. This does not mean that structural features are wholly deterministic. Rather, the structural features are normative in that they delimit the range of interpretation. Thus, analyzing the grammar of an image allows for a probable explanation as to the manner in which a news story functions as a coherent message.

Each photograph is analyzed for structural and nonverbal features. Research by Moriarty provides tested categories to conduct analyses of news photographs. Moriarty & Garramone organize a coding schema that involves 10 key visual attributes significant to how viewers make sense of images (1986, p. 730). A more recent study by Waldman and Levitt analyzes photographs of the 1996 Presidential Campaign using a simplified version of Moriarty's coding variables. The authors found that "expression, activity, and interaction can be particularly illustrative of strategic stories" (1998, p. 310).

For the purpose of this paper, Waldman and Levitt's criteria of expression,

activity, and interaction are used to determine the general tone of each Presidential photograph. *Expression* refers to the facial expression of the primary subject in the photograph. For example, President Bush smiling or looking determined are positive expressions while frowning or awkward poses are negative expressions. Activity involves the action of the speaker. Speaking at a podium or shaking hands is a strong positive action while sitting or resting is inactive. *Interaction* involves the response of those in crowd or background of the picture. Cheering crowds or attentive colleagues suggests a positive message while being alone or inattentive is coded as negative. These criteria directly affect the viewer's perspective, what advertising scholar Paul Messaris deems a significant feature of visual persuasion (1997, p. 34).

Waldman and Levitt do a thorough job of coding and analyzing photographs, but their study does not analyze what these images mean in the context of the entire news story. The authors stop short of examining if images correlate with news articles. They acknowledge that "photos are meant to illustrate stories," but their scope limits their ability to make this claim with sufficient backing (1998, p. 310). An analysis specifically focused on the relationship between actual news articles and the images that accompany these stories is warranted. Furthermore, past research has focused on photographs, but they do not consider other prevalent predominantly visual forms like charts and graphs. This paper incorporates the entire range of symbolic expression involved with news stories.

4. *Analysis*

Phase One: Accidental President

The *Washington Post* combines articles, graphs and photos in a majority of news features that cite election campaign opinion polls. In every story that incorporates images a line/bar graph and/or a pie chart is used. These visuals pertain directly to the article's main argument. However, making sense of these images requires a visual literacy that hinges upon an understanding of the logic at work in graphs and charts. Charts and graphs are filtering mechanisms that locate, for readers, the topos most deserving attention. In each of the graphs, moving from top to bottom, a title summarizes the poll for readers. The titles of extensive reports make a central claim about the data. For example, the poll headline on Sept. 8, 2000 reads, "Tight at Labor Day" (A. 10). This headline functions as an interpreter – it translates the poll numbers into a claim. In addition, headlines serve as filters, guiding readers to certain poll findings. For instance, on August 8, 2000 the poll title reads, "Bush Maintains Lead;" however, only a third of the

poll data confirm this statement. The remaining data argues that Gore's running mate is slightly better than Bush's. The poll headline guides the reader away from the more ambiguous or complicated findings. These interpretive moves of charts/graphs advance arguments of opinion poll stories.

The newspaper graphs and charts tend to portray topics in dichotomies. Largely, the 2000 election is portrayed in graphs/charts as a horse race for votes between Republican George W. Bush and Democrat Al Gore. Surveys ask respondents, "If the election were being held today, whom would you vote for?" (Nov. 6, 2000). Results are illustrated by a line graph that uses two thick lines for both Bush and Gore, while totals for the other candidates are summarized in a small box below the line graph. Visually, the race for President is a dichotomy.

Newspaper graphs and charts tend to portray messages congruent with the news article. This was not the case when comparing accompanying photographs to the articles. From the *Washington Post* articles that were accompanied by photographs during the 2000 election, a third of the stories delivered incongruent messages. For example, the October 30, 2000 poll data indicates that Bush's early lead in the polls has disappeared, while the article emphasizes that Bush is taking Sunday off from the campaign trail. Making the story even more disjointed is a photograph that shows Bush happily greeting potential voters before entering church. When reading these three messages together, one is hard pressed to develop a coherent argument. When the image and word are incongruent, readers are likely to read this article in line with their previously held opinions. When images and articles send mixed messages, readers will likely choose the message that aligns their expectations. Presenting incongruent arguments works only to further support existing opinions.

During the election, the photographs of Bush largely are staged events depicting activities on the campaign trail. In terms of expression, positive features dominate. Other than shaking hands with supporters, levels of activity and interaction are minimal with only one photo showing an audience. The photos tend to be cropped so that waste-up or headshots are the norm. This supports the conclusions of an audience reception study that associated politicians with upper-body photographs (Adams 1980). Absent in every newspaper photograph are Bush's feet, indicating the norm in newspaper visuals is inactivity. These images function more as appeals to ethos, visuals building credibility and interest for the story.

From Nov. 16, 2000, through September 11, 2001, Bush's approval ratings range from 50%-60%. These approval ratings are historically low for a President's first year in office. While the graphs/charts tend to compliment the articles, the photographs tell another story. In five of the eight stories, the photograph and article convey incongruent messages. On November 27, 2000, for instance, an article proclaims Bush the winner of the election with 60% of Americans agreeing that Gore should concede the election. Accompanying this article is an upper-body photo of Bush with an awkward and ambiguous facial expression captured during a speech. If there was ever a time to show Bush as confident, smiling, and interacting with a host of supporters, it was then. Yet, the photograph fails to produce a message that reflects the general theme of the article.

In contrast to the newspaper, *Newsweek* stories use images to illustrate action. Charts are nearly obsolete with only one used to depict key swing states. However, photographs dominate Newsweek's stories. In the four stories discussing the election and opinion polls, 10 photographs, each taking up at least half a page, are used instrumentally. For Newsweek, the photograph functions as more than ethos building, it displays a certain manner of being active in the world.

The August 7, 2000, *Newsweek* uses a shaded box with large typed font to announce, "Bush has gained in the *NEWSWEEK Poll*, leading Gore by 47% to 40%, the widest margin since February." Three photos in this article all positively show why Bush is leading the polls. One photo shows Bush and Cheney with their wives posing in a room that looks similar to the White House. Heuristically, this is a powerful image because the setting provides legitimacy to the Bush ticket. The other two photographs are body shots; these show Bush and Cheney interacting with one another in a schoolroom and Bush with his wife posing at their ranch. These photographs provide readers with pertinent aesthetic information about George W. Bush. The image places the full body in the world, a more immediate, lively and informative space compared to the stale rhetoric of campaign stump speeches.

Of the 15 photographs in *Newsweek* printed after Bush wins the election, 13 are full body shots revealing a great deal of aesthetic information. The May 7, 2001 focus on Bush's first 100 days uses seven photographs (six are full-body shots) to show the President in action. We see Bush meeting with advisors, talking with assistants over coffee, reading policy papers with Dick Cheney, and walking down a corridor with his back to the camera. These photos illustrate "activity;" the

President is doing executive committee duties in executive committee confines. More importantly they show us a body.

If we read bodies as having aesthetic qualities, these images have the potential to reveal something about acting properly. Robert Hariman (1995), writing about political style, suggests that images work to shape our "aesthetic sensibility." Aesthetic sensibility is the unique and indirect relationship human beings have with reality (p. 186). The image can function as a teacher of how one should act in the world, a manner of being decorous. This accounts for using one third of a page to show Bush walking down a corridor with his back to the camera. The photographs in *Newsweek*, like the photograph of Bush sleeping on his wife's shoulder (Nov. 20, 2000), provide a candid and full-body aesthetic of the President. These photographs reveal a Presidential aesthetic typically not accessible to the public.

Phase two: Post 9-11-01 Commander and Chief
The *Washington Post* greets readers on the morning of 9-11-01 with poll data showing George Bush losing favor with the American people as the economy is lagging. The approval rating of 55% soars more than 30 points in the next 48 hours. On Sept. 14, 2001, the *Washington Post* reports that 86% of Americans approve of the job the President was doing (and the full-body photograph included Bush's feet). Here, in a time of crisis, the full-body aesthetic is necessary to describe the actions of a President.

These two occurrences – overwhelming support and full-body photographs – are commonplace after the attacks of 9-11-01. Seven stories between September 14 and November 8 use photographs to accompany opinion poll data. Four of these are full-body shots, something omitted in the first eight months of coverage. These photographs provide the reader with contextual and aesthetic information. This information provides readers with a visual sense of how President Bush is acting. This shift illuminates the nature of reporting a national crisis. Times of crisis are filled with ambiguity and call for certainty; the full-body image answers this call. Photographs compared to words, in this case, are more concrete and interpretively certain. They are sound evidence that brings a reality before our eyes.
Another shift in coverage is Bush's facial expressions. During this phase, Bush is never smiling; his expression is consistently firm and/or stoic. Each of these pictures works with the article in a coherent and unified manner to create a

strategic story. These unified stories provide certainty for readers in all too uncertain times. The September 14, 2001 *Washington Post* headline declares, "Crisis brings shift in Presidential Style." The crisis not only spawns a shift in presidential style, it alters reporting styles. Stories make unified arguments and images play a primary role in news stories.

The shift in *Newsweek's* coverage is less dramatic. Each of the five articles reports highly supportive poll numbers illustrated with seven photographs of President Bush. In each frame his face and body reflect the act of doing. The September 24, 2001, *Newsweek* states, "A President finds his voice" and the photographs show Bush participating in a church service and speaking on the phone. His "real" voice is reflected in the polls, where 82% of people approve of the President's job performance. After 9-11-01 Bush is never pictured in a posed frame, this active President has little time to be still.

Newsweek makes another significant argumentative move by juxtaposing competing photographs. The Oct 8, 2001 story displays suit-wearing Bush walking over the White House plush grounds. Next to this photograph is an equally large panoramic image of a shabbily dressed man walking toward a village down a dirt road. The headline reads, "Bush's Reality Check." The photograph illustrates the material tension between the US and Afghanistan. Although *Newsweek* stops short of questioning what the US gains by attacking a country already pummeled by past wars, they offer the impetus for critique – a jumping off point – through their presentation of contrasting images. These images can introduce marginalized or dissident voices into the realm of argument.

Phase Three: Invasion of Iraq
Like the crisis of September 11, 2001 the invasion of Iraq enhances Bush's job approval ratings (77% during the fall of Baghdad). However, unlike the 9-11-01 stories, the *Washington Post* articles do not include photographs of George W. Bush. From 11 *Washington Post* stories that focus on approval rating data only two include images of Bush. The other nine stories during this phase advance public opinion arguments using charts/graphs. In each of these stories a pie chart dichotomously labels those "for" and "against" the President's decisions concerning Iraq. The lack of photographs indicates a categorical difference between 9-11-01 and the invasion of Iraq. It is this difference that the Bush administration has tried to erase in effort to argue that the two events are part of the larger "War on Terror."

Newsweek also covers the invasion of Iraq with less attention tied to Bush's job approval ratings. While the magazine dedicates much space to the details of the invasion, the connection back to opinion poll data is largely absent. Only four articles mention the approval ratings with two of these stories presenting words and images that are incongruent. For example, on March 28, 2003 Bush is shown actively hitting tennis balls to his dog with a golf club, while the story focuses on his high approval ratings. Yet, the following photograph shows a passive Bush staring out a White House window. Neither photograph is attuned the argument that the news article advances.

Phase Four: 2004 Election Victory
During the 2004 election victory phase the *Washington Post* continues to present incongruent verbal and visual arguments concerning President Bush's approval ratings. In seven of the eleven photographs, images do not correlate with opinion poll data. In most cases, images are positive while the opinion polls indicate that President Bush is trailing John Kerry. In all but one instance, the photograph of Bush is generally positive. Unlike the stock photographs cropped around the face, the newspaper includes multiple action photographs with interactive backgrounds. Also, Bush gets his smile back, a gesture largely absent since 9-11-01. Similar to the election of 2000, charts/graphs present the horse race for President in dichotomous images.

Newsweek presents the President in a more ambiguous manner mixing both positive and negative photographs. This pattern mirrors the fluctuation found in the opinion poll results. One photograph makes an especially powerful argument as the camera looks up to a towering and smiling Bush. The semiotic connection between camera angles and power are well documented. This image further demonstrates that photographs are not mere representations of reality but rather arguments concerning the pictured person/thing.

Phase Five: War in Iraq
The final phase is the most lackluster phase of Bush's job approval ratings. The *Washington Post* reports ratings of 55% after the 2004 reelection to a dismal 38% in April of 2006. While numerous national events (i.e. Hurricane Katrina) contribute to the decline, the ongoing war in Iraq is the dominant theme throughout the polling questions. Even though most of the news articles demonstrate slumping approval ratings, over half of the images are positive. Again, a pattern of incongruity between word and image is evident.

In addition to photographs, the line graph becomes a prevalent tool of longitudinal comparison. With over five years of data, a graph filled with peaks and valleys presents a clear argument as to the dramatic shifts in job approval ratings. The sliding line from 92% after 9-11-01 to a paltry 38% makes a powerful and concise argument.

As with previous phases, *Newsweek* presents photographs of the President that more closely match the tone of the article. There is a mixed bag of positive, neutral, and negative images. Taken as whole, this is congruent with the ups and downs associated with this phase of the Bush Presidency.

5. *Conclusion*

This paper attempts to understand how images function alongside their word-based companions. The *Washington Post* and *Newsweek* stories pertaining to George W. Bush's popularity reveal that often images are not projecting messages congruent with the articles they accompany. The incongruity between word and image emphasizes the theoretical issue of separating these two symbolic forms by function and effect. Furthermore, the analysis illustrates how images can perform a variety of argumentative functions traditionally reserved for printed words. The newspaper tends to use photographs for ethos building and attention seeking; whereas, the magazine uses photographs as a form of evidence.

The most significant trend discovered is that distinctions between mediums of image use diminish after 9-11-01. Both newspaper and magazine rely upon full-body photographs to illustrate their stories. This finding suggests that times of crisis call for stories that concretely describe a President's actions. Full-body photographs answer the call by providing an aesthetic sensibility of presidential behavior. Ambiguous times call for a brand of certainty that images can provide.

Another finding that deserves further study is the relationship between images and the representation of marginalized voices. Images could be an effective way to open up an argumentative space of dissent. Lance Bennett writes, "Moments of license to report politically sensitive or challenging material are generally triggered by events that contain powerful images, or new icons, that authenticate the politically volatile content. Because such images appear to be both spontaneous and credible, they provide authority to construct narratives that may challenge official definitions of political reality" (1996, p.379-380). Future studies could work to explore images that are most effective in articulating dissenting views.

Immersed in secondary orality, argumentation scholars play a significant role in

the process of building and shaping a visually literate population. The study of argument benefits by collapsing the typical Cartesian distinction between word and image, as opinion polls suggest that images are doing the work typically reserved for the printed word. This analysis reveals that when images and words are conceived of as distinct and separate forms, incongruity results. This incongruity renders an argument null as it allows readers to simply maintain their given point of view.

NOTES

[i] A term employed by Walter Ong to characterize the technological environment where modes of communication borrow and reinvent an ancient oral tradition (Orality and Literacy, 1982).

[ii] Futurists and Dadaists challenged the transparency of the word in the early to mid 20th century. See Richard Lanham The Electronic Word. University of Chicago, 1993.

[iii] Lesley Stahl did a news piece on Ronald Reagan's 1984 campaign for President. She alleged that Reagan was misleading the public with staged photo opportunities that ran counter to his policy agenda. During a news segment on CBS she showed the positive footage of Reagan while critically commentating on the footage. After the segment aired, Reagan's chief of staff, Richard Darman, phoned Stahl and thanked her for five free minutes of airtime. The logic being that the "pictures are powerful and emotional" to the point that they will "override if not completely drown out the sound" (Larson 2000, 116).

[iv] Admittedly, readers can (and do) approach texts with degrees of individuality; however, these subjective readings do not thwart an analysis locating the structural patterns of discourse at work. This initial study would be best complimented with audience analysis research.

[v] Washington Post Stories Analyzed (86) 08-12-00, 09-8-00, 10-17-00, 10-27-00, 10-30-00, 11-02-00, 11-06-00, 11-16-00, 11-27-00, 12-18-00, 02-27-01, 03-27-01, 04-24-01, 06-05-01, 06-01-01, 09-11-01, 09-14-01, 09-15-01, 09-20-01 , 10-14-01, 11-07-01, 11-08-01, 11-29-01, 12-21-01,1-27-02, 3-11-02, 5-17-02, 5-21-02, 7-17-02, 9-29-02, 1-19-03, 1-22-03, 3-4-03, 3-21-03, 3-25-03, 3-29-03, 4-11-03, 5-2-03, 7-12-03, 8-13-03, 9-14-03, 9-20-03, 10-15-03, 11-2-03, 11-5-03, 11-18-03, 12-23-03, 3-9-04, 3-31-04, 4-4-04, 4-20-04, 5-14-04, 5-25-04, 6-22-04, 7-22-04, 7-27-04, 8-1-04, 8-19-04, 8-23-04, 8-29-04, 9-10-04, 9-28-04, 9-29-04, 10-19-04, 12-21-04,1-18-05, 1-22-05, 1-16-05, 4-26-05, 5-31-05, 6-8-05, 6-12-05, 6-30-05, 8-31-05, 9-13-05,10-30-05, 11-4-05, 11-12-05, 12-20-05, 1-3-06, 1-11-06, 3-5-06,

3-7-06, 4-11-06, 4-17-06

[vi] Newsweek Stories Analyzed (39) 08-07-00, 08-14-00, 10-09-00, 10-23-00, 11-20-00, 12-11-00, 02-19-01, 04-23-01, 05-07-01, 07-09-01, 09-24-01, 10-01-01, 10-08-01, 10-15-01, 10-22-01, 7-29-02, 8-02, 9-9-02, 11-18-02, 2-3-03, 4-21-03, 4-28-03, 9-1-03, 1-5-04, 1-19-04, 3-23-04, 5-23-04, 9-6-04, 9-20-04, 10-11-04,10-18-04, 10-25-04, 1-24-05, 2-14-05, 3-28-05, 6-27-05, 9-19-05, 10-10-05, 11-28-05

[vii] The Washington Post – ABC poll, conducted by TNS Intersearch, tracks public sentiment for George W. Bush. The poll surveys 500-1200 registered voters randomly, asking a series of questions relating to Bush's job popularity. The number of respondents is adjusted to determine "likely voters". The polls conducted during the 2000 & 2004 election campaigns ask voters who they intend to vote for in the Presidential election. After each election, the opinion polls shift to focus on the President's job approval rating, a tradition in political news reporting for the past 70 years. The standard question reads: "Do you approve or disapprove of the way George W. Bush is handling his job as President" (Washington Post, Sept. 11, 2001). The campaign and post-election surveys have a 3-4% margin of error and often are motivated by newsworthy issues.

[viii] The Newsweek poll, conducted by Princeton Survey Research Associates, surveys between 700-1200 registered voters. The margin of error tends to be between 3 and 4% according to their disclaimer (Newsweek, Aug. 7, 2000).

REFERENCES

Adams, S.C, Copeland, M, Fish, M, & Hughes, M. (1980). "The Effect of Framing on Photographs of Men and Women." *Journalism Quarterly,* 463-467.

Bennett, Lance. (1996). An Introduction to Journalism Norms and Representations of Politics. *Political Communication* 13, 373-384.

Birdsell, D., & Groarke L. (1996). Toward a Theory of Visual Argument: Special Issues on Visual Argument. *Argumentation and Advocacy* 33, 1-10.

Bauman, Sandra and Susan Herbst. (1994). Managing Perceptions of Public Opinion: Candidates' and Journalists' Reactions. *Political Communication* 11, 133-144.

Delli-Carpini, Michael and Bruce Williams. (2001). Let us Infotain you: Politics in the New Media Environment. In Bennett L & Entman R. (Eds.) *Mediated Politics: Communication in the Future of Democracy.* (pp. 160-181). Cambridge: Cambridge University Press, 160-181.

DeLuca, K. (1999). Image Politics. New York: The Guilford Press.

D'Allessio, D. & Allen, M. (2000). Media Bias in Presidential Elections: A Meta-Analysis. *Journal of Communication* 50, 133-156.

Habermas, J. (1998) *The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society*. Trans. Frederick Lawrence. 9th Edition. Cambridge, MA: MIT Press.

Hariman, Robert. (1995). *Political Style: The Artistry of Power.* Chicago: University of Chicago Press.

Holly, M. (1996). *Past Looking: Historical Imagination and the Rhetoric of the Image.* Ithaca, NY: Cornell University Press.

Jamieson, K. and Capella, J. (1998). The Role of the Press in the Health Care Reform Debate of 1993-1994. In Graber, D., McQuail, D., & Norris, P. (Eds.) *The Politics of News, the News of Politics* (pp. 110-131). Washington D.C.: Congressional Quarterly Press.

Lake, R. & Pickering, B. (1998). Argumentation, the Visual, and the Possibility of Refutation: An Exploration. *Argumentation* 12, 79-93.

Larson, S. Debunking a Myth. (2000). *Media Studies Journal* 14, 116-121.

Lipari, L. (1999). Polling as Communication. *Journal of Communication* 49, 83-103.

Lipari, Lisbeth. (2000). Voice, Polling and the Public Sphere. *Paper presented at the University of Texas*, Austin. 1-33.

McLeaod, J., et al. (1996). The impact of traditional and nontraditional media forms in the 1992 U.S. Presidential election. *Journalism and Mass Communication Quarterly*, 73, 401-416.

Messaris, Paul. (1997). *Visual Persuasion: The Role of Images in Advertising.* London: Sage.

Molwana, H., Gerbner, G., & Schiller, H. (1992). *Triumph of the Image.* Boulder, CO: Westview Press.

Moriarty, S. & Garramone, G. (1986). A Study of Newsmagazine Photographs of the 1984 Presidential Campaign. *Journalism Quarterly* 63, 728-734.

Ong, W. (1982). *Orality and Literacy: The Technologizing of the Word.* London: Routledge.

Palczewski, C. (2001). *Argument in an off key: playing with the productive limits of argument.*" Alta Conference – Keynote Address.

Scott, L. (1994). Images in Advertising: The Need for a Theory of Visual Rhetoric. *Journal of Consumer Research* 21, 252-273.

Stephens, M. (1998). *The Rise of the Image, the Fall of the Word.* New York: Oxford UP.

Waldman, P. & Levitt, J. (1998). Newspaper photographs and the 1996 presidential election: The question of bias. *Journalism and Mass Communication Quarterly,* 75, 302-311.