

Towards A Moral Grounding of Social Risk Communication

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ABSTRACT

Towards A Moral Grounding of Social Risk Communication

Sylvie St-Laurent

Risk communication, the specialized practice of publicly communicating the impact of an existing activity or future technology to the public's health or the environment, is largely based on a transmission model of communication. Although its practice originated in the early 20th century in local public warnings about natural disasters, contemporary risk communication covers a multitude of issues from natural, health, industrial hazards to new, controversial technologies, such as genetically modified foods. As discourse aimed at gaining public consent or trust on a contested issue of social values, risk communication is essentially moral in nature, and as such, must proceed from a conception of public discourse that provides a moral grounding. I argue that the transmission model of communication, governed by norms of efficiency, is incapable of providing a vocabulary or conceptual framework for the moral nature of these debates, particularly broad social risks. Such a conception, I argue, can be accomplished by viewing risk communication through the lens of rhetorical theory, which finds its justification as moral discourse in the definition of the public as citizens engaged in social decision-making and meaning formation. Viewed from the perspective of rhetorical theory, risk communication functions as ethical public discourse, not from the unmotivated perspective of its source, but from the manner in which it makes itself open to public examination and debate.

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What you risk reveals what you value.

Jeannette Winterson

INTRODUCTION

Towards A Moral Grounding of Social Risk Communication

My interest in social risk communication stems from my experience in the Canadian forest industry. In the mid 90s, I worked for five years for what is now the Forest Products Association of Canada as Director, Communication Programs. One of my responsibilities consisted of helping the Association's environmental officer develop a standard company code of practice for managing the risks associated with the industry's main activities, namely forest harvesting and the production of paper at mills. The code was to be a national standard comprised of principles and procedures every member company would adopt to minimize and manage the risks these activities posed to the health of local citizens and the environment. A key component of this code involved communication to the public.

Since over 90% of all forested land in Canada is publicly owned, most of it at the provincial level, forest companies are by law obliged to engage in public communication about their activities. Provincial governments set environmental and forest policy, determine water and air quality standards and attribute harvesting rights to licensed companies. Each province differs in its policies and

standards, but given the public nature of land ownership, most have a requirement for companies to make information related to the impact of their operations publicly available, and to consult with the public on the details of their mill and upcoming harvesting activities. The notion of "consultation" is not specifically defined however, and the differences in provincial laws result in a wide range of practices, with some companies implementing broad public communication activities, while others choosing to define their obligation in the narrowest way possible.

Despite improvements in its overall environmental record in the 90s, the Canadian forest products industry's reputation was hurt by years of high profile disputes over issues such as clear-cutting, old-growth forests and toxins in mill effluents, and the fact that some companies could always be singled out for their minimal environmental protection efforts. Canada also has one of the largest tracts of virgin forests in the world, making it the focus of international forest protection activities. These factors led to a measurable and increasing drop in exports of Canadian forest products to the U.S. and Europe. Many companies were therefore adopting international standards for environmental and forestry management as a means of demonstrating their commitment to environmental protection and improving their reputation with the public at home and abroad. However, the difference in international standards was also controversial, and therefore, the Canadian forest industry sought to resolve the issue of "norms" by developing a made-in-Canada national code based on international "best practices" and with the input of a public advisory

panel.¹

The advisory panel was comprised of approximately a dozen Canadians from various backgrounds, most of whom did not depend directly on the paper and forest industry, but in some way interacted with it. They included environmental activists, recycling operators, hunters, teachers, foresters, natives, municipal economic development officers, mill town residents and unionized employees. The panel met three or four times a year, and was facilitated by an external consultant. Its mandate was to provide guidance to the industry on how it could improve its environmental and forestry practice, and what should be included in the national standard.

Animosity and a clear absence of trust between most of the panel members and the industry created a difficult environment for discussion. Several members lived near mills and forestry operations and had in the past been misled or felt betrayed by individual companies. In fact, most participants would not have accepted to participate in the panel had it not been for the fact that the external facilitator was a former director of a respected environmental organization. It was understood that the role of the panel was advisory, and while the industry committed to listening, evaluating and responding to advice, it did not commit to implementing recommendations. There were many areas of disagreement and sometimes acrimonious disputes over what the goals of the standard should be and how to define a company's obligations. One major area of controversy involved a company's legal obligation to "consult" communities on

¹ Forest Products Association of Canada, *Environmental Progress Report 2000-2001* (Montreal: Forest Products Association of Canada, 2001), 3.

its operations and planned harvesting activities, so that the public's views and values could in principle be integrated to the greatest extent possible.

Much of this discussion centered on the definitions of "public" and "communication". Which "publics" and what "form" of communication. Panel members were replete with stories of company spokespeople who refused to answer their questions or provided incomplete information on mill water contamination, forgot to advise the local native band of a "spill" that quickly contaminated their fishing area, undertook clear-cuts on traditional native hunting grounds without notice, or ruined streams and top soil during harvesting. Based on these experiences, the panel tended to want the code regarding public communication to be as prescriptive as possible. The dilemma, which everyone recognized, was that a prescriptive national code could not take into account the regional and cultural values of the different communities affected by mill or forestry operations. Not only would communications to townspeople be different than those within native communities, those between native communities could also be very different from one region to the next.

From the industry's perspective, a prescriptive code was also undesirable. While it recognized that more open communication was needed, the Association did not want to force companies to commit to activities that did not make sense in their surroundings, or have a code that was so detailed that it was virtually impossible to implement. In the end, the standard was organized around the principle of public participation and obliged companies to not only communicate their environmental objectives and activities, but also seek and respond to public

input on acceptable levels of risks and benefits, particularly from aboriginal and employee groups.

There are four elements of this situation that are important in the upcoming discussion about risk communication:

- First, the obligation to communicate to the public as citizens involved in value-setting was explicit given the public nature of land ownership;
- Second, the concepts of “risks” and “benefits” were considered in terms of health, environmental and economic impacts;
- Third, the concept of “public” was considered in terms of cultural, regional and national communities affected by the industry’s activities;
- Lastly, the meaning of “communication” was determined through a process of deliberation by a dedicated public.

Using this experience, the focus of my thesis is to explore the theoretical framework for social risk communication and how its practice can be guided by a model that views the public as citizens engaged in decision-making around the common good.

Risk, Rhetoric and GMOs

“Risk communication”, the specialized practice of publicly communicating the impact of an existing activity or future technology to the public’s well-being or the environment has become a corporate requirement for most commercial organizations in North America. Whether it involves a paper mill explaining to

local residents the estimated toxicity of pollutants being released into the community's water system, or a global pharmaceutical company conveying the relative risk of developing breast cancer to North American women using hormone replacement therapy, most businesses engage in some form of public risk communication as part of their license to operate. In certain cases, such as the dangers of cigarette smoking, Canadian norms for public risk communication are highly regulated, and companies are obliged by law to adhere to a very precise format. In many cases however, the form of institutional risk communication is largely undefined, and organizations themselves determine the appropriate type and process of communication they should undertake with the public. Should the paper mill make water toxicity tests available to the public or will this just create alarm and confusion? Should an interpretative summary be mailed out, or should there be a town hall meeting to discuss the significance?

When the form of communication is undefined by law, the principles of risk communication theory help provide practical guidance to institutions on how to conduct effective public risk communication. By and large, this theory is informed by a transmission model of communication and a rational view of risk. This view tends to encourage communication practice that is exclusively functional in its approach and norms. In other words, risk communication is considered effective if the information has been transmitted and received, or is appropriately convincing. In my thesis, I argue that this model is insufficient for risk communication, particularly for broad social risks, because it lacks a moral dimension by which public interest communication must operate and be judged.

Borrowing from Thomas B. Farrell's work on rhetorical culture, I suggest that risk communication, as discourse aimed at gaining public consent or trust on a contested social issue, is essentially moral in nature, and as such, must proceed from a conception of public discourse that provides a moral grounding. Such a conception, I argue, can be accomplished by viewing risk communication through the lens of rhetorical theory, which finds its justification as moral discourse in the definition of the public as citizens engaged in social decision-making and meaning formation.

The purpose of this examination is not to develop a prescriptive guide to risk communication, which as a practice, encompasses a wide variety of objectives and deals with a range of situations, unique in their own right. As such, this examination does not deal with the practical considerations that risk communicators must address in any local controversy over risk. Rather my intent is to provide an alternative conceptual framework for risk communication as public discourse, and understand how the question of "ethics" can be viewed in the context of risk advocacy.

In the last chapter, I will examine the global communication efforts of the Council of Biotechnology Information (CBI), a North American industry-led initiative created to dispel the notion of risk associated with genetically modified organisms (GMOs) and to promote their world-wide commercialization. As risk communication, I will examine the CBI's messages in terms of its framing of the safety and risk of GMOs as a scientific debate. From the perspective of rhetorical performance, I will examine its communication efforts in terms its

enactment of institutional credibility or “ethos”, its view of publics, and its emotional appeal to the needs of developing nations. In summary, I will argue that the form and content of the CBI’s communication, as public moral discourse, does not constitute ethical rhetorical practice because its persuasive strength and narrative coherence improperly relies on the obfuscation of the Council’s authors and commercial interests. In the global debate on the environmental, health and economic value of GMOs, the rhetorical performance of the CBI effectively limits its public deliberation on social values by artificially isolating the discussion on their impact. In democratic societies where the public plays a role in setting policy around issues such as the commercialization of genetically modified foods, and where rhetorical exchanges are the means by which the public determines truth, this obfuscation prevents the public from evaluating the credibility of the CBI and understanding the economic ideology that underpins its claims of the global humanitarian benefits of genetically modified foods.

Facts and truth really don't have much to do with each other.

William Faulkner

CHAPTER ONE

Why Risk Communication?

In the 1950s, the United States government launched what is considered in risk communication literature as one of the first social risk communication initiatives, "Atoms for Peace". Its aim was to overcome strong public resistance to the introduction of nuclear energy for civil use in the United States. Although the practice of risk communication was not new, the "Atoms for Peace" campaign was fairly unique in terms of its use of mass media to educate the general public on the merits of this new, broad and controversial technology.¹ A contemporary example of this type of risk communication is the Council for Biotechnology Information's multi-media campaign, "Why Biotechnology", on the safety and desirability of genetically modified foods. In the fifty years that separate these two campaigns, a great deal has changed. Not only has the field of risk communication expanded to include a variety of objectives, but the global development of real time communication technologies and the international impact of new industrial technologies have significantly enlarged its geographical scope of activity. In terms of communication channels, the internet has created

¹ Roger E. Kasperson and Pieter Jan M. Stallen, eds., introduction to *Communicating Risks to the Public* (Dordrecht: Kluwer Academic Publications, 1991), 2.

the possibility of disseminating a global public discourse on socially contested issues of risk, for both proponents and critics. Moreover, the increased interdependency of nations, engendered by new international rules of free trade, has made possible the more or less immediate introduction of new technologies on a global scale. The cumulative effect of these changes has facilitated the production of global risk discourses which do not fall neatly into the traditional view of risk communication. However, as discourse structured around the risks and benefits of a new controversial technology, the CBI's communication is fundamentally similar in nature, if not in scope, to the "Atoms for Peace" initiative. As such, its discourse can be understood and examined as a form of social risk communication.

The Roots of Risk Communication

Although the practice of North American risk communication dates back to the beginnings of the 20th century in local public warnings about natural disasters, such as hurricanes and floods, the specialized discipline of risk communication is relatively new. Today, risk communication covers a multitude of issues from natural, health, industrial to technological hazards. This evolution is relatively recent, and the result of a number of historical and political events that have not only expanded the scope of risk communication, but have precipitated its development as a field of institutional practice and academic research. As a result, there is no shortage of manuals on how to conduct "effective" risk communication. However, there continues to be considerable

debate and reflection on what constitutes “effectiveness” and whether the current theoretical framework adequately addresses the nature of risk communication as a value-setting, social process. Roger Kasperson and Pieter Jan M. Stallen have identified one major gap in risk communication theory today, that of the invested role of the communicator. “Since all such prescriptions assume the altruistic communicator, the public and the media are invariably identified as the central problem.”² This gap is central to my examination of the dominant theoretical framework that underpins current risk communication practice and my criticism of the Council for Biotechnology Information’s communication campaign. The first claim that I will develop here is that risk communication geared towards gaining the social acceptance of new technologies constitutes public moral discourse. The second claim is that the model of information transmission that structures current risk communication is inadequate to deal with the moral dimension of such debates.

Problematizing Risk Communication

From a historical perspective, Kasperson and Stallen distinguish two major traditions of risk communication; one that is expert driven, rationally-based and focused on the informational component of the communication process, and the other that is guided by a psycho-social understanding of risk and focused on the persuasive strength of communication tactics. Despite representing radically different approaches to public discourse, both operate from the same basic

² Ibid., 10.

principle, namely the view of risk communication as “transmission” or “product delivery”. The result for Kasperson and Stallen is two equally deficient models for effective and ethical risk communication.

In the first, information flow is both separated from and elevated over other types of social interactions. Accordingly, the risk communication literature is filled with attention to the types of information to be presented (what data on risk probability or consequences are appropriate?), its processing potential (what level of technical detail should be included?), its potential affective impact (will it reassure? will it arouse?), and preferred means of cultural rationality (will the risks be compared with other risks?) . . .

The second type of separation takes risk communication out of its broader risk context. . . . Particularly worrisome, as risk communication becomes institutionalized in government and industry, is the division of labor that produces a more specialized communication function and group of practitioners. These are often individuals with backgrounds drawn from public relations and advertising rather than risk analysis or health protection and who have little experience or depth of understanding of the scientific assessment of risk.³

Since neither model critically examines the question of communication motives, the solution, according to the authors, resides in redefining the role of the risk communicator.

The Social Arena of Risk Communication

While the topics of individual risk communication activities vary, most if not all are concerned with risk either to human health or the environment. In many cases, they involve both. The most widely accepted definition of risk communication is provided by V.T. Covello, “any purposeful exchange of

³ Ibid., 7-8.

information about health or environmental risks between interested parties”.⁴ In terms of risk communication goals, risk researchers have identified a number of different functions:

- a) *enlightenment function* (to improve understanding among target groups);
- b) *right-to-know function* (to disclose information about hazards to potential victims);
- c) *attitude change function* (to legitimate risk related decisions, to improve the acceptance of a specific risk source, or to challenge such decisions and reject specific risk sources);
- d) *legitimation function* (to explain and justify risk management routines and to enhance trust in the competence and fairness of the management process);
- e) *risk reduction function* (to enhance public protection through information about individual risk reduction measures);
- f) *behavioral function* (to encourage protective behavior or supportive actions toward the communicating agency);
- g) *emergency preparedness function* (to provide guidelines for emergencies or behavioral advice during emergencies);
- h) *public involvement function* (to educate decision-makers about public concerns and perceptions);
- i) *participation function* (to assist in reconciling conflicts about risk-related controversies)⁵

While useful to clarifying the terrain of risk communication, this definition and classification is problematic in at least one way. It is based on the notion of communication as information and implies a risk communication process that can be successfully applied to a variety of objectives. In contrast, William Cannell and Harry Otway argue that such a perspective under-emphasizes the political dimension of certain risk debates by treating the goal of informing the public and

⁴ V.T. Covello, D. von Winterfeldt, and P. Slovic, “Risk Communication: A Review of the Literature,” *Risk Abstracts* 4, no.3 (1986) : 172.

⁵ Ortwin Renn and Debra Levine, “Credibility and Trust in Risk Communication,” in *Communicating Risks to the Public* eds. Roger E. Kasperson and Pieter Jan M Stallen (Dordrecht: Kluwer Academic Publications, 1991), 178.

gaining consent in the same way. In essence, they argue that risk communication, defined as information transmission, is incapable of resolving the problem of contested social values and positions. The goal of gaining public consent for broad social risks is fundamentally political, and requires not only a political solution but a view of risk communication as an essentially ethical practice.⁶ For Kasperson and Stallen, Cannell and Otway, the problem with the current approach to risk communication is attributable to the fact its goals have consistently been defined from the perspective of the risk communicator. Since this has implications for the public's understanding and acceptance of risk claims, they view neutrality as a key quality of the risk communicator.

From Risk-Alert to Risk-Reassurance

Generally speaking, risk communication seeks to either alert or reassure the public to a potential hazard or danger. According to Peter Sandman, alerting the public to a hazardous situation (versus reassuring it) can in practice be the more difficult of the two risk communication goals.⁷ To be sure, this generalization needs some qualifications. The challenge of provoking a response and action on the part of the public is often directly related to the type of hazard at issue. A number of research studies in risk perception have

⁶ William Cannell, and Harry Otway, "Audience Perspectives in the Communication of Technological Risks," *Futures* (October 1988) : 521.

⁷ Peter M. Sandman, *Responding to Community Outrage: Strategies for Effective Risk Communication* (Fairfax: American Hygiene Association, 1993), 2.

demonstrated that risks which are perceived to be voluntary in nature, socially distributed, and are neither immediate nor visible constitute the greatest challenges for engaging the public. Some well-known examples include public health campaigns against the dangers of smoking, not wearing seatbelts or the risks involved in unprotected sex in the transmission of AIDS. The more remote and the more individual control associated with the risk, the more apathetic the public response is likely to be.⁸

All forms of risk communication entail publicly communicating information about a level of danger associated with an event, behaviour or activity. However, risk-reassurance communication almost exclusively involves industrial or technological risks that are not voluntary, and ultimately seek public acceptance through changes in attitudes, rather than individual changes in behaviour. This type of risk communication is inherently more controversial because the risks and benefits of an industrial or technological hazard tend to be unequally shared between the technology sponsors and the risk bearers, and as a result, radicalize the moral nature of risk communication. For the purpose of this discussion, I intend to focus on risk-reassurance communication for which the introduction of a technological risk is in principle open to public debate and decision-making.

Defining Risk as Rationally-Based

The first major period of risk communication developed in the 40s out of the need to deal with the growing number of accidents at large industrial

⁸ Ibid., 13.

complexes in North America. During this time, the theoretical framework for both the process of communication and the nature of risk was driven by a scientific interpretation of knowledge and human behaviour. In the case of "risk", its definition and determination was the exclusive domain of the risk analyst who provided expert advice to industry managers, using statistical probability models, on what constituted the most likely sources of potential accidents and disruptions to production, and hence the greatest threat to loss of profitability.

Organizationally and materially, risk communication was treated as a subset of risk analysis (the economic quantification of potential accident scenarios) and was a function of the broader organizational goal of risk management (the institutional processes and procedures to reduce the likelihood of an accident).

The view of risk as rationally-based was conceptually linked to several assumptions regarding the desirability of technological progress, the nature of communication and the functioning of society. As Douglas Crawford-Brown and Jeffrey Arnold explain, social acceptance for industrial risks was largely assumed. "The rationality adopted by such technical communities is one focused on epistemology since their goal is to produce the most truthful picture of any probabilities and severities underlying risk. These probabilities and severities as depicted in the risk analysis are measured from the perspective of an ethical stance taken as a given from the larger policy community concerned with risk management."⁹ These assumptions all rest on the same theoretical framework

⁹ Douglas J. Crawford-Brown, and Jeffrey Arnold, "The Cardinal Virtues of Risk Analysis: Science at the Intersection of Ethics, Rationality, and Culture," in *Handbook for Environmental Risk Decision Making* ed. C. Richard Cothorn (Boca Raton: Lewis Publishers, 1996), 280.

of scientific rationalism. In other words, the belief in a single objective reality, physical and social, that is at once measurable, causal and controllable.

Both risk analysis and risk management were off-springs of a new organizational philosophy termed scientific management, where “efficiency” was considered to be the operational ideal of industry. Based on Frederick Winslow Taylor’s theory of “time and motion”, which quantified and reduced work processes to their most basic movements, scientific management emphasized the need to ensure the maintenance of a stable environment through the control of all the different parts of an organization.¹⁰ Moreover, it provided organizations with a “systematic” view of their world, where disruptions to production were conceptualized as crisis, and where control was seen as the ultimate solution to ensure stability, growth and survival. As Virginia Sharpe notes, social benefits were considered in the context of the utilitarian benefits of efficiency. “Risk evaluation is guided by the values of efficiency and equality in the reduction of harms. Utilitarianism is often the moral theory believed to be operational in meeting these goals.”¹¹

¹⁰ James Beniger, *The Control Revolution: Technological and Economic Origins of the Information Society* (Boston: Harvard University Press, 1986), 219.

¹¹ Virginia A. Sharpe, “Ethical Theory and the Demands of Sustainability,” in *Handbook for Environmental Risk Decision Making* ed. C. Richard Cothorn (Boca Raton: Lewis Publishers, 1996), 272.

Communication as Transmission

James Beniger argues that the effect of rapid industrialization during this period initiated a series of “communication crisis” during which communication technologies lagged behind those of energy, manufacturing and transportation. To deal with this situation, scientific management inspired an important development - the informational component of the control response. For the first time in organizational history, frequent and regular information reports formed the basis of management control over production, distribution and workforces. Increased use of information in various forms, whether in safety, transportation or organizational management, emerged as the common control response to active and potential crises. Similar to the division of labour, this scientific perspective subdivided the process of communication into what was deemed its essential components: the source, the channel, the content, the target and the desired effect. This model, conceived by Harold Lasswell and dubbed the transmission model of communication, privileges the notion of communication as the delivery of a controlled message between messenger and receivers. As Ortwin Renn notes, this conception of communication forms the basis of current rational risk communication today. “The traditional model (information transfer between sources, transmitters and receivers) was basically developed in the late 40s (Shannon and Weaver 1949, Lasswell 1948).

It is still the most popular framework for communication studies to date.”¹²

From Communication Systems to Social Theory

The application of Lasswell’s communication model was not limited to industrial organizations. It is an inherent part of the broader social theory of functionalism, which viewed society as an even larger system made up of interdependent institutions, including government, industry, media and the public. “At the risk of calling up false analogies, we can gain perspective on human societies when we note the degree to which communication is a feature of life at every level. A vital entity, whether relatively isolated or in association, has specialized ways of receiving stimuli from the environment. The single-celled organism or the many-membered group tends to maintain an internal equilibrium and to respond to changes in the environment in a way that maintains this equilibrium.”¹³ Much like the goal of industrial organizations, the functionalist perspective argued that the overall objective of society was ultimately survival, and in any given situation, humans invariably select the environmental conditions that provide stability and best ensure their collective well-being. All choices could be linked to this principle. “Utilitarian theory is based on a psychology of human

¹² Ortwin Renn, “Risk Communication and the Social Amplification of Risk,” in *Communicating Risks to the Public* eds. Roger E. Kasperson and Pieter Jan M. Stallen (Dordrecht: Kluwer Academic Publications, 1991), 295.

¹³ Harold D. Lasswell, “The Structure and Function of Communication and Society,” *The Communication of Ideas* (New York: Institute for Religious and Social Studies, 1948), 203.

choice and action. According to a utilitarian analysis, humans are identified with our interests. In individual decision making, we attempt to maximize those things we prefer and minimize those things we eschew. Given human psychology and the fact of social collective social existence, the job of morality, then, according to utilitarianism, is to aggregate interests to produce the best overall outcome. In other words, to produce the 'greatest happiness' or 'greatest good for the greatest number'.¹⁴ From this perspective, even the notion of racial tolerance, introduced as a progressive social development, was characterized as a response by society to avoid negative conflicts and establish a stable environment for its survival and development.

Human Affairs as Rationally-Based

Lasswell's social theory is grounded in a behaviourist interpretation of humanity, one that limits the understanding of all human affairs to measurable, observable actions. What is not observable, such as thoughts and emotions, belongs to the lesser category of subjective, relative truth, sometimes referred to as myth. In behaviourist terms, human actions are understood as a response to either a negative or positive stimuli in relation to a physical environment. This reliance on external behaviours allowed for the view that human affairs and social progress could be understood in terms of cause and effect. Individual and social activity, as measured by the scientific yardstick of behaviourism, is therefore seen as inherently rational and controllable.

¹⁴ Sharpe, 272.

Within the functionalist perspective, social conflicts and discords are synonymous with dysfunction. As Beniger argues, the solution therefore resides in control. "The answer must be sought in the nature of all living systems – ultimately in the relationship between information and control. Life itself implies control, after all, in individual cells and organisms no less than in national economies or any other purposive system."¹⁵ For functionalist proponents, conflicts stem from differing representations and understanding (rational and irrational) of the world, and are reinforced by a less than efficient communication system. The belief in one objective reality necessarily implies that certain interpretations of reality are deemed true and others, false. Since truth is considered to be scientifically-based and rational, contradictory opinions are seen as subjective and irrational, and consequently deviant. This functionalist notion of dominant and marginal world views continues to be reflected in the rational approach to risk communication when dealing with conflicts over risk. "Furthermore, in spite of the newness of the new risk paradigm in society, two opposing camps have evolved: one supporting and promoting large technologies and further economic growth, and the other opposing large-scale technologies, supporting conservation efforts, and favoring a zero or low growth economy. In the cultural theory of risk these two groups have been labeled as center and periphery (Douglas and Wildavski 1982) or entrepreneurial and sectarian

¹⁵ Beniger, vi.

(Rayner and Cantor 1987)."¹⁶ Although Lasswell acknowledged "social values" as sources of differing opinions and views, they were not conceived as morally based, but simply objects of gratification, like power, that corresponded to negative or positive stimuli. "Since human beings exhibit speech reactions, we can investigate many more relationships than non-human species. Allowing for the data furnished by speech (and other communicative acts), we can investigate human society in terms of values; that is, in reference to categories of relationships that are recognized categories of gratification."¹⁷ The solution resided in bringing about a scientific ordering of reality through the unfettered transmission of objective information to the public.

Rational Risk Communication

Against this interpretative backdrop, according to Sandman, emerged the notion of risk communication as a one-way process to transfer objective information from risk experts to the public. "The second stage, the Missionary Stage, begins with the discovery that stonewalling backfires, this it is important to 'educate' the public about risk. This move from stonewalling to educating is real progress but is incomplete because it views education as a one-way process.

¹⁶ Renn and Levine, 175, quoting M. Douglas and A. Wildavski, *Risk and Culture* (Berkeley: University of California Press, 1982) and S. Rayner and R. Cantor, "How fair is safe enough? The cultural approach to societal technology choice," *Risk Analysis* 7 (1987) : 3-10.

¹⁷ Lasswell, 223.

The company or agency teaches; the public shuts up and learns.”¹⁸

Moreover, social values were viewed as non-scientific aspects of risk. “The characteristics of risk that are central to professional risk managers are the ones they define into the term itself. The characteristics they do not care so much about, they define out; these neglected factors thus become the public’s ‘misperceptions’.”¹⁹ Based on the belief that all risks are measurable, true risk is deemed to be quantitative in nature and therefore predictable. Consistent with the functionalist perspective, proponents of the rational theory of risk communication view values as qualitative, secondary and often the cause of distortions in the perception of risk.

Overcoming Barriers to Transmission

The challenge of risk communication therefore consisted of overcoming the social barriers to transmission, one of which was deemed to be the education of a lay public. To address this problem, rational risk communication was geared towards finding ways to translate quantitative risk assessment data into information that the public would understand. The strategy consisted of providing the public with “comparative risk information” that demonstrated and confirmed the expert’s view of the low risk potential of any given situation. And by and large, these comparisons were based on an accounting model of cost and

¹⁸ Sandman, 118.

¹⁹ Ibid., 8.

benefits. As rational risk communication continued to be challenged by public skepticism, new methods of comparative analysis became the focus of risk communication theory, as exemplified by Alexander Walker's recommendation. "Decision strategies for public health most often hinge on risk differences rather than on risk ratios. In coping with linear decision problems, an analogy to linear scale in widespread use may be more effective than discussions of risk per se: calculation of financial rather than health costs may be the clearest way to address high risk options in a public and rational manner."²⁰

In addition to the problem of an uneducated public was also the issue of public communication systems themselves. Mass media, which was acknowledged as one of the primary sources of public information, was often viewed as an obstacle to effective transmission. Risk agencies regularly blamed the media for over-sensationalizing risk controversies and playing into the public's irrational fears. In functionalist terms, the view that media somehow served as the source of controversy is characterized as "social amplification", as exemplified by Ortwin Renn's view of risk communication. "The main theme of the social amplification concept is that events pertaining to hazards interact with psychological, social, institutional and cultural process in ways that can heighten or attenuate public perception of risk and shape risk behaviour."²¹ As a result,

²⁰ Alexander M. Walker, "Risk and Relative Risk: Perception and Communication," in *Managing Environmental Risks: Proceedings of the A&WMA International Specialty Conference in Quebec City, Quebec, October 1989*, by the Risk Assessment/Management Committee of the Air & Waste Management Association (Pittsburgh: Air & Waste Management Association, 1990), 1.

²¹ Renn, 287.

risk communication research tended to focus on how media, motivated by private interest, interfered with the risk communication process. "Deciding what is newsworthy and the 'reality' is that news reporting ought to capture is intrinsically difficult and controversial. Reporting about technological and environmental risks, no less than the risks themselves, is politically fraught. The media are part of the social and political processes they cover and not simply detached transmitters of messages. Sources of risk information who regret that their messages do not reach the public as they intended should realize that, ironically, to the extent that the media are simply transmitters they easily become the tools of politically interested parties."²² Since the objective nature of risk was assumed, this analysis provided risk agencies with explanations on why the public continued to be outraged over seemingly low risk situations.

Criticism of Rational Risk Communication

From a theoretical perspective, the transmission model of communication has been roundly criticized for its steadfast commitment to scientific rationalism. Although the functionalists believe that an increased rational society will reduce conflicts, enhance democracy and by extension generate greater social justice and harmony, its coherence is ultimately dependent on a mechanistic view of human communication and the exclusion of a discussion on "meaning".

²² Judith Lichtenberg, and Douglas MacLean, "The Role of the Media in Risk Communication," in *Communicating Risks to the Public* eds. Roger E. Kasperson and Pieter Jan M. Stallen (Dordrecht: Kluwer Academic Publications, 1991), 170.

The functionalist operates by reducing the human experience to a rational entity and by ignoring or subsuming the role of “values” in the construction of social knowledge and meaning. Moreover, this view of society as a closed system of behaviours based on the principle of mere survival produces an a-historical view of social change, which further invalidates any consideration of human agency in the determination of social progress.

In terms of risk communication theory, researchers are also critical of the rational approach’s assumption of scientific objectivity and the dismissal of value-based perceptions of risk as irrational. Critics, like Donald Brown, point to the bias in the risk assessment process that implicitly extrapolates risk analysis to risk acceptability.

Additionally, a risk manager may have to choose between protecting people from contaminated soil by leaving some soil behind a fence or requiring that all the contaminated soil be completely removed or otherwise eliminated. These kinds of decisions are often made in the course of quantifying the risk, although the non-scientific nature of these policy judgments is rarely disclosed in the quantification of the risk. These quantifications appear to be scientifically based, yet they depend on answering a question that cannot be answered by science alone. Because the nature of such a question is inherently prescriptive, rather than descriptive, it should be understood to be a question of ethics or norms. However, because it is embedded in the risk assessment calculation, it mistakenly appears to be a scientifically compelled consideration.²³

These criticisms have opened up the debate over how risk communication can account for issues of social values in the introduction of technological risk. As Sandman argues, for risk communication to function as moral public

²³ Donald A. Brown, “The Urgent Need to Integrate Ethical Considerations into Risk Assessment Procedures,” in *Handbook for Environmental Risk Decision Making* ed. C. Richard Cothorn (Boca Raton: Lewis Publishers, 1996), 124.

discourse, it must first begin by acknowledging the role of the public in risk decision-making. "Risk assessment experts tend to see risk communication as the last step in the risk management process: First you assess the risk, then you figure out what to do about it, and then you communicate the answers. The notion that this natural process should flow in reverse as well, that the public is entitled to help decide what to do about the risk and even help decide how to assess it, is understandably offensive and threatening to many risk assessors."²⁴

Despite this, the model for effective risk communication did not substantially change and continued to be structured as transmission. The focus simply moved from the informational component of communication to the study of public risk perception and the need to develop an approach more finely tuned to qualitative (in other words value-based) public interpretations of risk.

Public Relations and Risk Communication

The second tradition of risk communication, which Kasperson and Stallen see as driven primarily by marketing techniques and an emphasis on public opinion formation, began with the "Atoms for Peace" campaign of the 1950s. However, it would not be until the 80s, when a series of catastrophic industrial accidents and legislative reforms in the U.S. raised the profile of risk communication as a public legal requirement, that the focus on public relations would shape more day-to-day risk communication practice.

²⁴ Sandman, 119.

With the continued public resistance to nuclear energy in the background, industry and government faced on-going challenges in maintaining public confidence in risk management controls as the number of industrial accidents continued to climb, including the world's largest chemical disaster in Bhopal, India and the nuclear plant failure at Love Canal.²⁵ As a result, explain Kasperson and Stallen, the United States began to include the notion of "communication" as part of the regulatory framework for protecting and preparing the public for industrial accidents. ". . . as the United States discovered the limits of regulatory control over the seemingly unending parade of technological hazards, it became apparent that regulation was not a panacea for public and worker protection."²⁶

The first type of regulatory reform that drove an increase in risk communication practice was centered on worker protection. In 1983, the United States passed the Occupational Safety Act's Hazard Communication law which required companies to inform and provide formal safety measures to protect employees against the dangers of dealing with hazardous materials at work sites. This was followed in 1987 with the "Right to Know" legislation that further required companies to communicate with the public on the hazards associated with their production facilities. According to Kasperson and Stallen, these developments stimulated the new era of public relations-based risk

²⁵ In 1984, the Union Carbide plant in Bhopal, India released several tons of toxic fumes, immediately killing 3,000 nearby residents, and contributing to the death and injury of 15,000 more. In 1987, the failure of the Love Canal nuclear reactor in New Jersey resulted in a major release of nuclear fuel emissions into the atmosphere.

²⁶ Kasperson and Stallen, 1.

communication as industries quickly recognized the potential to avoid increased regulations and financial liabilities by conforming to the new communication-based legislation. "In the United States, risk communication has fit the temper of the times; it has been a preferred strategy for a political conservatism during the Reagan years that has sought to minimize safety and health regulation during the 1980s. A number of government and industry bench-marks indicate the rapid emergence of risk communication as preferred form of risk management during this decade."²⁷

From Relative Risk to the Construction of Credibility

From a theoretical perspective, the focus of risk communication shifted from the dogmatic insistence of risk as rationally based to a better understanding of how the public viewed risk and what the public deemed to be credible sources of risk information. This shift was accompanied by an increased emphasis on risk perception research and the skills required of the risk communicator. From this perspective, the challenge of risk communication resided in designing discourses that were publicly persuasive. This view is echoed in Renn's position on how risk communicators can better engage the public in a credible way. "Risk communicators who are familiar with the persuasion literature have assured us, however, that many of the findings from persuasion research match very well their personal experience with risk communication. So these studies

²⁷ Ibid., 3.

provide some helpful clues of how to design a more effective communication program and may serve as a starting point to conduct more specific research projects on trust in risk communication.”²⁸ For risk agencies, this new public relations approach was seen as a better, more effective way to educate the public about the objective nature of industrial and technological risk. What did not change however was the purpose of risk communication; namely risk acceptance. The goal of risk communication remained one of persuasion and the construction of credibility became a key factor in this new approach to risk communication.

One of the first industries to develop broad public risk communications was the chemical industry, which after Bhopal, created a comprehensive voluntary code of practice entitled “Responsible Care”. The focus of the code was around the public dissemination of the chemical industry’s public health and safety measures and an acknowledgement of a certain participatory role of the public in the determination and management of risk.

An example of the public relations approach to risk communication is reflected in Proctor and Gamble’s interpretation of public communication and participation.

Actual input from the public can come from the type of research noted above, or from the use of focus groups, examination of information gathered from consumer test questionnaires or market research interviews and eventually from letters or phone calls (e.g. many companies now have toll-free telephone numbers consumers can use to call companies to ask questions, praise a product or to express concerns). Public participation is a key component of the Chemical Manufacturers Association’s Responsible Care initiative, which requires each member to continuously improve its performance in health, safety and environmental quality and to speak openly with the public about any

²⁸ Renn and Levine, 187.

concerns. . . . Public participation via consumer feedback will help confirm the judgments of company experts about the effectiveness of package design and label wording, with changes made to packing and labeling if judged to be needed.²⁹

For Kasperson and Stallen, this approach did nothing to address the question of public acceptance and the ethical dimension of risk communication. Risk communication theory remains embedded with the notion that the challenge resides in changing or managing public opinion.

Similarly, Louis Gwin, who studied the history of the nuclear industry's communication activities, sees the dilemma facing contemporary risk communication as one of motivation. The inability of the nuclear industry's risk communicators to be seen as credible in a crisis and provide the public with safety information regarding necessary protective behaviours stems from their historic and longer-term goal of risk acceptance. "If we are serious about creating an environment in which critical nuclear risk messages can be heard and understood as essential and authentic information that can save lives, we must start by removing the elements of the historical promotional heritage of nuclear power from modern risk communication programs."³⁰ The distinction that Gwin makes is between risk-alert communication in times of immediate danger, and social risk communication that seeks to control public opinion and social acceptance over the long-term.

²⁹ P.J. Hakkinen and Carolyn J. Leep, "Industry's Use of Risk Values, Perceptions, and Ethics in Decision Making" in *Handbook for Environmental Risk Decision Making* ed. C. Richard Cothorn (Boca Raton: Lewis Publishers, 1996), 76-77.

³⁰ Louis Gwin, *Speak No Evil: The Promotional Heritage of Nuclear Risk Communication*, (New York: Praeger, 1990), 147.

Summary

Since its emergence as a specialized field of practice, risk communication has been geared towards the task of communicating risk information to the public based on an analytical assessment of “true” risk and a presumed or desired social acceptability of risk, particularly technological risk. However, this interpretation of risk and the understanding of risk communication as unexamined persuasion has been the focus of increased criticism, in part because of the acknowledged uncertainty of scientific claims and the moral implications this has for public discourses on risk acceptability.

This loss of objective truth with respect to risk analysis has opened up a discussion on the ethical norms of risk communication. This has led to the questioning of risk communication as transmission, alternatively focused on data dissemination and the management of public opinion. Specifically, risk communication researchers are increasingly challenged by the notion of the invested role of the communicator and how this bias shapes and blindly encourages public risk acceptance. Similar to a neutral source of public policy information proposed by Walter Lippman³¹, some critics argue in favour of an independent, objective source of risk information as a means of resolving the apparent conflict of interest of the risk communicator. However, this solution, even if theoretically achievable, raises issues of social agency and choice, and indirectly undermines the democratic principle of a participatory public. As an

³¹ Walter Lippman, *Public Opinion*, (Toronto: Collier-MacMillan, 1922), 251.

alternative to the transmission model of risk communication, I propose to reframe the discussion of risk communication from the perspective of rhetorical theory.

By doing so, I hope to show how rhetorical theory can provide a better vocabulary for risk communication regarding the concepts of social conflict, public opinion and judgment as they relate to the question of risk acceptance.

The reasonable man adapts himself to the world; the unreasonable one persists in trying to adapt the world to himself. Therefore, all progress depends on the unreasonable man.

George Bernard Shaw

CHAPTER TWO

Why Rhetoric?

In the previous chapter, we looked at how risk communication evolved as an institutional response to public outrage and debate over the introduction of industrial and technological risks, such as the commercialization of nuclear energy for civil use. The first claim that I make is that these controversies are the “stuff” of rhetorical discourse proper. As Thomas Farrell explains, rhetorical situations emerge as the result of a conflict over what constitutes the “greater good”. “The core of a rhetorical occasion may be a disturbance, an issue, or a contested perspective.”¹ Rhetorical theory speaks to the discursive means by which the public is able to judge opposing claims. Are the dangers of nuclear energy manageable and acceptable or do they outweigh the benefits? In the absence of objective certainty, this question engages the norms and values of society for its resolution, and requires a set of conditions that enable the public to form an opinion. Debates over the desirability of future technologies that carry

¹ Thomas B. Farrell, *Norms of Rhetorical Culture*, (New Haven: Yale University, 1993), 287.

an element of risk to the public and require a public judgment on their social value are therefore rhetorical in nature.

The second claim that I make is that the failure of risk communication to achieve a public consensus on the benefits of controversial technologies is not limited to the failure to recognize the distinctive nature of its rhetorical subjects but equally an insufficiency of its communication model and the implications this has for public deliberation and judgment. The question at the heart of risk communication today is whether its form of discursive practice helps the public make judgments about the relative benefits and disadvantages of various risks. This entails an understanding of risk debates as fundamentally different from scientific ones, and requires that they be open to public assessments on the social acceptability of risk. In the following chapter, I will examine how risk communication can more adequately address the question of motivation by framing social risk communication in terms of rhetorical inquiry and discourse. Further, I want to distinguish the “moral” warrant of rhetorical discursive technique from that of ethical norms that regulate public discourse, and how this distinction can clarify the perspective of the communicator in the construction of civically-minded rhetorical discourse.

Contingency and Probable Truths

I am arguing that “risk” gives rise in part to what Bitzer has called a “rhetorical situation”.² In what follows, I will argue how rhetorical situations deserve a particular form of reasoning and public communication. Unlike risk communication theory which has overlaid scientific rationalism on its understanding of human knowledge and communication, Farrell reminds us of the Aristotelian distinction between different modes of inquiry based on different fields of knowledge. Scientific or analytic thinking is seen as only one of three valid modes of human reasoning, the other two being dialectics (contemplative thinking) and rhetoric (practical reasoning). Analytics is unique in its discovery of absolute principles, from which one can arrive at equally certain conclusions through the operation of deductive reasoning. This mode of reasoning is proper to theoretical domains such as mathematics.³

In contrast, dialectics and rhetoric are considered proper to the world of human relationships where truths are formed through deliberation and are not absolute by virtue of their contingent nature. Their fields of action are subjects related to moral concepts such as the definition of “the good”. Dialectics differs from rhetoric in that its goal is directed to the discovery of general principles, whereas the objective of rhetoric is decision-making in a democratic society.

² Lloyd F. Bitzer, “The Rhetorical Situation,” *Philosophy and Rhetoric* 1 (1968) : 9.

³ Farrell, 25.

Moreover, as enacted speech, rhetoric's specific fields of action are those public matters that deal with undetermined outcomes in the future.

Central to rhetoric's operation is the notion of "contingency". Contingency refers to the under-determinedness of future events. It does not however mean irrationality or chaos. A contingent event or outcome is simply possible, and at best probable. As rhetorical discourse is concerned with determining the greater good, this contingency, as Hariman explains, is dependent on an understanding of the good. "Contingent events cannot be known with certainty, and actions are intelligible only with regard to some idea of what is good."⁴ For example, the question of whether genetically modified organisms (GMOs) will eventually provide greater benefits or irreparable harm to society cannot be answered through logical demonstration. There may be a host of unintended effects that only their introduction will reveal. Moreover, while scientific thinking may provide a descriptive commentary on GMOs, it is outside the realm of scientific rationality to suggest that this technology represents a greater good to society in terms of its impact on socio-economic, health and environmental well-being in the future. This prescriptive evaluation, according to rhetorical theory, rests on the public's judgment about whether perceived and projected benefits of GMOs outweigh any and all disadvantages. ". . . a great deal of our world is not determined by the laws of nature but by the actions of humans. Our laws, our literature, and our economic systems are arbitrary in the sense that they were not foreordained by

⁴ Robert Hariman, ed., "Theory Without Modernity" in *Prudence: Classical Virtue, Postmodern Practice*, (University Park: Pennsylvania State University Press, 2003), 5.

nature but are products of human design. Consequently, when we confront social problems, we usually lack an obviously correct course of action. What we decide to do is contingent on what we want to accomplish, what we value, and what we find intellectually, emotionally and ethically appealing. In a word, such contingent situations are open. They provide the original need for rhetorical communication . . .”⁵

Opposing Views of Social Conflict and Harmony

Unlike the world of scientific inquiry where universal truths are held to an objective standard of logical demonstration, the indeterminate and value-based nature of human affairs necessitates a mode of reasoning that takes into account the particularities of each historical situation and provides an ethical framework for public judgment. One of the main criticisms of the transmission model of communication is that it represents a mechanical, rationally-based process that subsumes values and social relationships under concepts of interference or optimizations of the transmission process.

In addition, rational risk communication theory sets itself apart from rhetorical theory in its treatment of social conflict. Guided by the idealized norm of social harmony (the absence of conflict) and one objective reality, the functionalist perspective inherent in rational risk communication theory conceptualizes social conflict as fundamentally undesirable. Conflicts over risk

⁵ Gerard A. Hauser, *Introduction to Rhetorical Theory* (Prospect Heights: Waveland Press, 2002), 24.

are problematized as a deficiency in the public's knowledge and the by-product of ineffective communication. The solution or solutions reside in conflict reduction or avoidance techniques, including a communication practice that views the elimination of obstacles to transmission as its primary objective.

In contrast, rhetorical theory views social conflict as the junction of social truth and decision-making. Conflict creates the pragmatic need to choose between different courses of action and is neither unproductive nor undesirable. It is a constant fact and figure in human affairs where, in a democratic society, the public is called upon to intercede in the determination of the common good in a deliberative process. As Hariman explains, "Politics is essentially the process that emerges when people have to negotiate a radical plurality of goods. Contrary to a key assumption of realism, politics begins not with scarcity but with abundance."⁶

Uncertainty and Guiding Judgment

Given that contingent events are inherently unknowable in terms of their future impact, all social choices are understood as imperfect with respect to the eventual outcomes. However, this limitation is not unique to public opinion and judgment, and the same can be said of scientific expertise. Rhetorical theory holds that, when confronted with the uncertainty of what represents the common

⁶ Robert Hariman, "Prudence in the Twenty-First Century" in *Prudence: Classical Virtue, Postmodern Practice* (University Park: Pennsylvania State University Press, 2003), 299.

good, society is best served by a discursive practice that encourages good decision-making through the formulation of "best arguments". In this way, society is able to make decisions based on the best available information. Moreover, since debates over values are inherently controversial and at times incommensurable, the public must have the means to examine opposing viewpoints in a way that reveals their underlying values. As rhetorical discourse seeks a public judgment on what constitutes the highest value at stake, it is in this sense considered moral discourse. As Farrell notes, the moral dimension of rhetorical discourse is a function of situations which are open to human agency and public decision-making. "Formally speaking, rhetoric is the collaborative art of addressing and guiding decision and judgment - usually public judgment about matters that cannot be decided by force or expertise."⁷

It is therefore possible, and perhaps even probable that GMOs will provide a tremendous social advantage over traditional approaches to medicine, agriculture and environmental protection. Rhetorical theory holds that this probability can be reasonably argued. Since probabilities are by definition uncertain, it is understood that rhetorical discourse does not claim to represent objective truth. Its goal is to present a point of view that represents the most probable truth. Therefore, rhetorical practice is concerned with determining, not truth, but approximations of truth. To be clear, approximations or verisimilitudes are not sought for their own sake, but as the next best logical possibility regarding matters that are contingent in nature. Since rhetorical claims emerge

⁷ Farrell, 1.

out of the need to make a choice regarding the greater social good on issues of public interest, this deliberation must take the form of public performance.

According to Hariman, such claims must be accomplished through a mode of reasoning that considers possible outcomes and is open to public examination and judgment. "As both such matters (*contingency and what is good*) are always subject to dispute, they can be resolved rationally only through deliberation - that is, through reciprocal exposition, comparison, and evaluation of arguments that represent competing perspectives or purposes."⁸ The mode of reasoning that is appropriate to the contingent world of human affairs and finds its justification in the expression of public judgment is rhetoric, or the art of practical reasoning.

Why Not Rhetoric?

The popular definition of rhetoric is narrowly associated with the notion of persuasion, often in a pejorative sense. Indeed, most references imply a rote type of partisan discourse so biased that it cannot be trusted. If such is the case, then how can this definition be reconciled with the claim that rhetoric represents the legitimate mode of reasoning suitable to public decision-making? Before addressing this question, let us examine why other modes of public communication have garnered more favour with theorists and practitioners, and conversely, why rhetoric has earned such negative tribute.

⁸ Robert Hariman, ed., "Theory Without Modernity", 4-5.

Firstly, the view of rhetoric as mere persuasion is in fact far removed from its original Greek conception as the practical mode of reasoning for guiding ethical social action. Farrell characterizes the popular definition of rhetoric as a derived tradition whose object is language, and whose primary concern is securing power. "Rhetoric understood only as an aesthetics of language readily degenerates into compositional stylistics."⁹ In contrast, rhetoric, as civically-minded discourse, is concerned with the public adjudication over situations that require a decision and involve a choice between conflicting values. This is essentially the task facing social risk communication. The purpose of rhetoric is therefore not perfected language, but perfected action. More specifically, ethical social action, since these choices involve the determination of the social good. Rhetoric for its own sake does not engage the public as reasoning citizens. Rather it operates from the narrow perspective of public influence and seeks to achieve specific outcomes for reasons of individual power and control.

The Techniques of Rhetorical Discursive Practice

In some respects, this utilitarian derivation is understandable. A significant portion of Aristotle's Rhetoric, the original source of rhetorical theory, is devoted to an explanation of the techniques available to speakers on how to

⁹ Farrell, 137.

construct a compelling discourse.¹⁰ Moreover, it makes clear the goal of rhetoric as an art of persuasion. However, this instrumentality is conceived in the context of rhetoric as a mode of inquiry for the resolution of debates in democratic societies. In other words, the ethical tradition of rhetoric, while it seeks to convince, is directed towards the most appropriate means for public moral decision-making. One could compare rhetorical methodology to that of medicine, where physicians are taught the most effective way of conducting surgical procedures based on an understanding of human biology. The ultimate goal of surgical medicine is restore the health of a patient. The act of physically carving into a person's body would have no ethical or legitimate basis if it were not for this purpose. Similarly, the moral grounding of rhetoric is achieved through the recognition of the audience as democratic citizens involved in the determination of the common good.

The Quest for Certainty and the Commitment to Reason

The possible use of rhetorical technique for individual gain rather than public deliberation is however only one source of criticism of rhetorical discourse. Other criticisms focus on its contingent epistemological foundation. Rhetorical theory is premised on the notion that the world of human affairs, both its history and its future, is not reducible to universal principles or truths. Rather, its evolution, in addition to the contingent nature of historical circumstances,

¹⁰ Aristotle *The Art of Rhetoric* (trans. H.C. Lawson-Tancred [London: Penguin Books, 1991]) 185.

proceeds from an equally contingent form of human agency on what constitutes the common or greater good.

On this point, rhetorical theory has had its share of detractors for two main reasons, both of which Herbert W. Simon views as the result of a commitment to different “ideologies of the real”.¹¹ These ideologies include the empiricists’ view of human affairs as synonymous in form to the natural physical world, and modernity’s presumption of rational, scientific demonstration as the only legitimate mode of reasoning.

In the first case, the empiricists’ view considers the world of human affairs as materially rational.

Beginning with Francis Bacon and the first discourses of modernism, a pantheon of Western philosophers began to posit that the ‘orders’ of nature and human nature were based on different, but analogous principles. As the natural order became increasingly secular and depersonalized, the reflection and animism of human nature became increasingly suspect. The interim result, in studies as outwardly disparate as semiotics, neo-Marxism, cybernetics, structuralism, and deconstruction, has been to mark off a view of human nature that sees it as analogous, in varying degrees, to a mechanical, largely calculative vision of the natural world.¹²

In the second case, the truest form of human reasoning is considered theoretical reasoning and truth is seen as a rationality entity. This latter commitment formed the basis of the “Enlightenment project” of modernity. It held that reason could be applied to all aspect of human affairs and its principles were both knowable and universal. Kant brought the full weight of rationality to bear

¹¹ Herbert W. Simons, ed., introduction to *Rhetoric In The Human Sciences* (London: Sage Publications, 1989), 4.

¹² Farrell, 278.

on ethical behaviour through an assertion that the determination of morality could be achieved through rational deduction based on universal principles.¹³

Secondly, rhetorical theory holds that the basis for public judgment relies on the appearance of logic, credibility and identification with the audience. Consequently, rhetorical discourse, to be effective, must operate from these precepts. This view is not an advocacy of artifice. Rather it is an understanding of the constructed nature of discourse and the way in which people in practice assess truthful claims through the performance of discourse. Hardly any one would argue with the fact that the public is unable to determine the absolute veracity or sincerity of arguments made by political actors. The determination of truthfulness is based on what is made available through public discourse. However, the notion that appearance-based public judgment is somehow a legitimate form of practical reasoning has historically raised fears of manipulative truth-making. As Simon notes, this possibility has been the source of rejection of rhetoric and in turn, the impetus for preferring modes of extra-rhetorical reasoning in human affairs. "The chief objection to rhetoric over the ages has been that it deals in appearances which may be bogus or counterfeit. Although the ancient Greeks were aware that the appearances created by rhetoric could help shape or reinforce perceptions of truth, they were also concerned that the persuader or rhetor might bend truth to effectiveness; hence Plato's characterization of sophistic rhetoric as an art of making the worse appear to the

¹³ Peter F. Diamond, "The "Enlightenment Project" Revisited: Common Sense as Prudence in the Philosophy of Thomas Reid," in *Prudence: Classical Virtue, Postmodern Practice* (University Park: Pennsylvania State University Press, 2003), 100.

better reason.”¹⁴

Constructed Discourse and Constructed Power

Rhetorical theory is also criticized by proponents of historical materialism who hold that deliberative reasoning masks the true motives for social action, and causes of social inequality. From this perspective, human history is neither viewed as a history of ideas nor as guided by public deliberation but is determined by economically-based relationships of power. Unlike the empirical or modern perspective, historical materialism’s main criticism resides less with the notion of a constructed social reality, than on rhetorical theory’s reliance on rational deliberation and social knowledge. This argument states that dominant owners of economic power are equally the dominant sources of social knowledge and traditions. Consequently, public deliberation is necessarily enclosed by a set of values that reflect dominant economic interests and power. As John Durham Peters and Eric W. Rothenbuhler argue, the solution to resolving contested issues of social importance resides not in public deliberation, but in changes to these economic structures. “To say that reality is made by humans does not mean that there are no standards of justice. Neither does it mean that one cannot sort out the humane from the inhumane constructions. As John Dewey (1927) seems to imply, once you accept the human-madness of things, democratizing access to the means of reality-production becomes the

¹⁴ Simons, ed., introduction to *Rhetoric In The Human Sciences*, 3.

fundamental political problem.”¹⁵

Peters and Rothenbuhler raise an important issue regarding the material conditions for public judgment, one that cannot be discounted in the world of a globalized economy and the concentrated ownership of mass communication. However, by attributing the creation of meaning to the control of modes of production, historical materialism leaves behind the public as an active agent of social change. Rather than empowering the public, its view delegitimizes the notion of public consciousness and places the locus of meaning and action in the external world of economic structures.

The Rhetorical (Re)turn

Despite these historical criticisms, there has been a renewed interest in rhetorical theory precisely because it acknowledges that all human knowledge is in some way constructed and reflects a partial understanding of the world. Conceding that the human apprehension of reality is partial, and socially constructed through symbols and particularly language, how do we defend any course of action as being “better” or “preferred”?

Rhetorical theory assumes that any course of publicly determined action is not based on a notion of absolute truth, but represents what society has deemed to be the preferred course of action. “There is a stronger and weaker, a better or

¹⁵ John Durham Peters and Eric W. Rothenbuhler, “The Reality of Construction” in *Rhetoric In The Human Sciences* ed. Herbert W. Simons (London: Sage Publications, 1989), 23.

worse, but not necessarily a true or false solution to the problem.”¹⁶ The practical objective of rhetorical discourse is to construct arguments that given over to public judgment are viewed as the preferred. In a similar way, the post-modernist recognition of the partiality of all truths paves the way for understanding human relations outside the strict framework of rationality. This view offers a particularly important challenge to contemporary conceptions of rational risk communication since they consider that ‘true risk’ is objective. To fulfill its function in a process that facilitates public decision-making in an ethical manner, risk communication must first acknowledge the limits of its objective framework. As Simon notes, this challenge is not unique to the field of risk communication. “The popularity of the ‘rhetorical turn’ in the human sciences is due in no small measure, I believe, to a widespread recognition among scholars in diverse disciplines that rhetoric’s disputes are their disputes; that the objectivist presuppositions on which their fields depended on no longer can be defended; that what they are engaged in is more akin to persuasion than to proof; that, as Billig (1987) put it, they rely more upon the ‘open hand’ of enthymematic argument than on the ‘closed fist’ of formal logic.”¹⁷

For Farrell and others, the revisiting of Aristotle’s original work on rhetoric is not simply a scholarly exercise, but a desire to reposition it as a valid approach for validating contemporary public discourse and decision-making. “It has been

¹⁶Hauser, 34.

¹⁷ Simons, ed., introduction to *Rhetoric In The Human Sciences*, 5, quoting M. Billig, *Arguing and Thinking: A Rhetorical Approach to Social Psychology* (Cambridge: Cambridge University Press, 1987).

my contention throughout that the Aristotelian tradition not only offers a basis for understanding the goods internal to rhetorical practice, but also provides a constitutive vocabulary for recognizing, engaging and recreating the worthier qualities of rhetorical conduct today.”¹⁸ Rhetorical theory begins with the acknowledgement of the plurality of cultural meanings based on a world of appearances. It ends not with a presumption of truth, but with the possibility of arriving at meaningful social action despite these differences and limitations.

Why Rhetoric?

How then does rhetoric operate to make meaning explicit and sanctionable through a particular manner of thinking? First of all, it holds both the speaker and the audience accountable for confirming the shared values of society. As practical reasoning, rhetoric is concerned with adjudicating not only future courses of action, but the morality of future actions, or by “what ought to be”. Thus the public is persuaded only to the extent that it affirms the “truthful” nature of a particular rhetorical discourse. In doing so, it validates the moral norms of society based on which course of action represents the greater good.

The art of the rhetor lies in the ability to find the most relevant and truth-approximating arguments to produce the most compelling case. This dimension of “inventiveness” is also the source of the emancipatory dimension of rhetorical discourse. As rhetorical situations involve conflicting views over future

¹⁸ Farrell, 81.

outcomes, rhetorical discourse offers the possibility of social change through the exposition and discovery of alternative meanings.

The Best Arguments

In the Aristotelian tradition, the technique of effective rhetorical discourse is based on three types of warrants or rhetorical proofs enacted by the speaker. Over the years, these three proofs have been elaborated on in more detail, however they remain the essential building blocks of rhetorical discourse today. “Of those proofs that are furnished through the speech there are three kinds. Some reside in the character of the speaker, some in a certain disposition of the audience and some in the speech itself, through its demonstrating or seeming to demonstrate.”¹⁹ In other words, effective rhetorical discourse relies partly on the ability to gain an engaged public's agreement on shared values (pathos), partly on the credibility of the speaker (ethos) and partly on the formulation of logical arguments (logos).

Like a three-legged stool, these proofs represent the basic framework for creating the most compelling argument in favour of a course of action. In contemporary terms, they reflect the “good reasons” of rhetorical discourse. More importantly, they reflect the lay public's touchstones for evaluating claims and confirming the higher moral principles at stake in public matters. “Good reasons theory repositions the test of an argument's strength from formal

¹⁹ Aristotle *The Art of Rhetoric* (trans. H.C. Lawson-Tancred [London: Penguin Books, 1991]) 74.

standards to audience-based standards. It holds that audiences judge public arguments by the standard of reasonableness, not logical validity."²⁰

For example, if the head of Greenpeace Canada wanted to persuade Canadians that GMOs should not be introduced in natural forests, a potential rhetorical discourse would include certain logical arguments based on scientific evidence, as well as appeals to a Canadian love of pristine nature and the knowledge that Greenpeace, as a non-profit organization dedicated to the preservation of the environment, is not suspect by issues of vested interest. The strength of rhetorical theory lies in its understanding of the manner in which reasonable claims to truth are constructed. In addition, it relies on the public's judgment in the assessment of these claims based on notions of credibility and the relative importance of values in conflict.

The Narrative as Rhetoric

Walter Fisher is also drawn to rhetoric as more appropriate framework for understanding human communication. His primary contention however is limited to a view of rhetoric as narrative, as opposed to argument. For Fisher, the history of human communication is above all else a history of narratives. The narrative, as a master metaphor of social knowledge . . . "sets the plot of human

²⁰ Hauser, 184-185.

experience and the others the subplots.”²¹ While both narrative and rational argumentation are fundamental attributes of human communication, he considers the narrative as the more historically and culturally universal form. This is true of all modes of communication, including science and obviously literature. Fisher argues that the historical conception of rhetoric is based on a definition of communication as a rational activity, and this view is largely driven by a linguistic theory of symbolic interaction. The problem, according to Fisher, is that this theory links knowledge to a particular expertise, a specialized language, and in the process, social issues become the domain of experts. For example, rational risk communication approaches the question of whether genetically modified organisms are dangerous to people’s health or the environment as a scientific debate. Framed in this way, the public has no other role than to watch and wait until the specialists arrive at a consensus regarding what constitutes the truth. Because scientific reasoning holds sway over the determination of objective truth and rejects values as being unscientific, rational communication delegitimizes the valuing act of public judgment. This mindset contributes to the inability of the average citizen to take part in debates about social issues. For Fisher, the key to restoring the role of the public in social decision-making is to redefine human rationality in terms of narrative. The way in which people determine the truth is through the judging of the “good reasons” that are offered in narrative form. “The good reasons that are expressed in public moral argument related to issues that

²¹ Walter R. Fisher, “Narration as a Human Communication Paradigm: The Case of Public Moral Argument,” in *Communication Monographs* 51 (March 1984) : 13.

are not accounted for in the rational world paradigm. These issues include the motivations and values of the characters involved in the ongoing narrative . . .”²²

Although Fisher argues for an inclusion of values in public discourse, the difficulty with his theory of narrative is that it evokes a closed sense of reasoning. In other words , it subsumes the deliberative process of rhetorical discourse within a higher order process of judging stories rather than argument. “The narrative paradigm challenges the notions that human communication – if it is to be considered rhetorical – must be an argumentative form, that reason is to be attributed only to discourse marked by clearly identifiable modes of inference and/or implication, and that the norms for evaluation of rhetorical communication must be rational standards taken essentially from informal and formal logic.”²³ While Fisher’s criticism of technical rationality is warranted in a discussion public moral discourse, his narrative theory reduces all forms of rational deliberation, including rhetoric, to this mode of reasoning. Conversely, the narrative paradigm implies a non-reflective mode of public decision-making. The act of public judgment is thus reduced to affirmations of historical social knowledge and story-making, and does not provide an explanation of how the public can transcend social biases or how new narratives can emerge and be accepted.

²² Ibid., 6.

²³ Ibid., 2.

Character and the Construction of Credibility

From the perspective of rhetorical theory, this deliberative process is actualized in the relationship between the communicator and the public. As Farrell notes, "The speaker and the audience are each regarded as moral agents bound together in a relationship of civic friendship in which each party is accountable to the other and to the common good."²⁴

"Ethos", the first rhetorical proof we examine, is the ability of the communicator to represent a credible point of reference for public judgment on what constitutes the moral good in matters of public debate. The speaker's ethos or character, as perceived by the public, is in Aristotle's view, the most important of rhetorical proofs. "Unlike some experts, we do not exclude the speaker's reasonable image from the art as contributing nothing to persuasiveness. On the contrary, character contains almost the strongest proof of all, so to speak."²⁵

Simply put, when opposing views are presented on a contested issue, the ability to persuade often boils down to the question of who the public finds more trustworthy. All other things being equal, it is the perceived virtuous character of the speaker that will determine the persuasiveness of a particular position. This issue is central to the debate in risk communication theory, and is linked to my examination of the rhetorical discourse of the Council for Biotechnology Information.

²⁴ Farrell, 132.

²⁵ Aristotle *The Art of Rhetoric* (trans. H.C. Lawson-Tancred [London: Penguin Books, 1991]) 75.

The major issue being raised in risk communication theory today is that of the less than neutral risk communicator and the implications this has for risk communication as ethical public discourse. The concern is whether the institutional goal of public acceptance undermines the objectivity of the communicator in a way that produces unethical or ineffective practice. For Lawrence Suskind and Patrick Field, this concern is based on the following assessment of American risk communication practice.

A 1987 study of risk communication by the National Research Council found 'almost no success stories' of successful risk communication by industry or government. The typical response to anxious residents worried about the safety of their children involves several time-worn techniques. First, those defending the facility seek to minimize or deny the claims of those who think they, or the public at large, are in danger. Second, they seek endorsements of respected community leaders or famous celebrities to add to the 'credibility' of their counterclaims. Third, they blame the press for stirring up residents unnecessarily, disturbing the peace and threatening the reputation and economy of the community. Fourth, they respond to scientific uncertainty by throwing up their hands and pointing out that even the experts cannot agree among themselves.²⁶

In other words, risk communicators, rather than providing a credible discourse on social risk, have by and large increased public distrust of risk agencies and increased the likelihood of continued resistance. As Suskind and Field point out, this failure is seen by some as linked to the pre-public commitments of the communicator and has therefore been framed as a problem of neutrality. "There have been suggestions that risk assessors should be isolated, free from politics and influence, disturbed only by the hum on their

²⁶ Lawrence Suskind and Patrick Field, *Dealing with an Angry Public*, (New York: The Free Press, 1996), 24.

computers. If trained technicians are left alone with their complex mathematical models, there is a hope (albeit false) that they will find the 'truth'. Others suggest that whatever the technicians discover, it should be our legislative bodies that determine levels of acceptable risk and the appropriate risk-benefit trade-offs."²⁷

Confirming Credibility

The question of how the risk communicator is involved in the operation of rhetorical discourse as moral deliberation is distinct from the question of how risk communicators operate by ethical norms of practice as conditions for public judgment. In an important way, the general failure of risk communication to gain public trust reaffirms the relational nature of moral proofs in as much as the public has refused to accede to authoritative arguments on the definition of acceptable risk.

To understand how the failure of risk communication can be understood as a validation of rhetorical theory, it is important to first understand how the "character" of the speaker operates as a rhetorical moral proof or warrant and how through a model of risk communication as public relations, this notion has been reduced to the construction of credibility. As highlighted earlier, the persuasive strength of any rhetorical discourse is dependent on the "credibility" or degree of "ethos" that a speaker possesses and projects. Generally speaking, "ethos" is related to external characteristics such as the person's reputation, the

²⁷ Ibid., 117-118.

familiarity of the audience with the speaker, the position of authority or the person's status in society. While these external signs provide the basis for credibility, credibility is not a reified good that exists within the speaker. It is a matter of public judgment. In other words, it is the public which affirms or infirms the virtuous nature of the speaker.

For example, Rachel Carson was able to become a voice for environmentalism in the 60s, not solely because of her scientific expertise, but because of the public's knowledge of her through her landmark work, Silent Spring. However, if familiarity or other reputational qualities of the speaker were enough to ensure credibility, it would not explain why reputable risk communicators have failed so miserably in practice. The answer lies in the connection between public judgment about the public good and the attribution of credibility through enacted speech. Unlike other environmental voices, Carson's fame provided her with the (unactualized) potential of becoming a moral agent in the debate regarding the overuse of chemical pesticides. Her power as public figure was initially limited to awareness. As Farrell explains, to enact a moral power required a discursive performance in which her personal virtues were aligned with a moral position commensurate with that of the public. "How is it implemented? In the same way that deliberation is completed: through the adjudication of a reasoning, competent audience that confirms, qualifies, or denies the allegation of virtuous qualities on behalf of some other person, action, or project – thereby ensuring virtue's enactment for itself. This is why it may be

said, without recourse to figurative language, that by judging we help to perform the virtues of public life.”²⁸

Advocacy and Credibility

As a proponent of a particular choice, the speaker’s ethos is publicly tested in the act of advocating a course of action that most resembles the truth about what constitutes the moral good. In this sense, the commitment to a particular outcome is not the source of failure of risk communication as ethical public discourse. Rather, it is how this commitment is revealed in a communicative practice. If risk communication seeks a particular outcome, then this preferred course of action must meet the public’s sense of credibility and the common good. As Hauser notes, rhetorical situations entail competing rhetorical discourses, and the public evaluates the strength of “better or worse” largely on the basis of perceived trustworthiness. “Partisanship is not the culprit so much as are the tactics to which partisans sometimes resort. In the give-and-take of deliberations, the partisan appeals of advocates should balance one another. Where matters are presented on their merits, advocates may be expected to emphasize what they find attractive on their side of the issue. But the question is whether these presentations are truthful and sincere or whether they are attempted seductions.”²⁹ The question that faces risk communication therefore

²⁸ Farrell, 75.

²⁹ Hauser, 159.

is not its commitment to a particular outcome, but rather how its rhetorical performance fails to meet the public's test of credibility.

For industry and government, its past rhetorical performance often forms the basis of public conceptions about their present trustworthiness. As Susskind and Field note, "There is one more reason why the public is often skeptical of expert risk assessments. Both government and business have, in the past, imposed undisclosed risks upon unsuspecting citizens. In the 1950s the U.S. government allowed citizens to be exposed to high levels of radioactive fall-out without their knowledge or consent. In the 1970s the Ford Motor Company sold millions of Pinto automobiles while concealing the risks of gasoline tank exploding from rear-end collisions. . . . The mishandling of risk by major institutions has shaken the public's faith."³⁰ In other words, industry and government have earned the public's mistrust. In order to develop a greater public willingness to accept their positions, risk agencies must first critically examine how their discursive practices have created this distrust and how a new approach can engage an already skeptical public in a meaningful discussion of risk.

The View of Self-Constructed Credibility

In contrast to the performance-based communicator of rhetorical theory, risk communication theory is divided between two conceptions of the ideal

³⁰ Susskind and Field, 115.

communicator. One vision sees the risk communicator as a scientifically knowledgeable source of risk information exemplified by the risk analysis expert. The other sees the risk communicator as a socially astute designer of persuasive communication generally represented by the public relations specialist. For Kasperson and Stallen, the expert communicator is driven by an epistemological bias of scientific truth over values, and thus reduces public debates over risk to an issue of rational truth. And the public relations specialist is driven by the primacy of persuasive communication over public deliberation, thereby reducing risk communication to the goal of winning over the public. As both operate within the confines of institutional organizations which seek public acceptance, risk communication invariably results in unexamined risk-reassurance.

The intentionality of institutional risk communication is therefore seen as the root of risk communication's failure to constitute itself as ethical practice. To follow Kasperson and Stallen's criticism to its logical end would suggest that the onus for ensuring the moral outcome of discourse resides with the risk communicator's ability to provide information from an unmotivated perspective. While motivation is central to a discussion of the constructed nature of risk communication, it is not, from a rhetorical perspective, the basis of the moral proof. Moral proofs are linked to the virtuous character of the speaker and are understood as the completion of reasoning by the public over contested social issues. As Farrell notes, this process of completion involves both the speaker and the audience in that performative moment. "Rather, through the direct participation of a suitably involved audience, this formulation of rhetoric both

justifies and qualifies the conduct of advocates, as well as those who are addressed. Pivotal to Aristotle's understanding of rhetoric, then, is its peculiar inculcation of cognition, ethos, and emotion in the decisions and acts of collectivities."³¹ Moreover, virtue is not automatically given to any speaker. In rhetorical situations, the virtuous character of the speaker is enacted and judged in that moment. This dimension of rhetoric is particularly important for risk agencies which do not enjoy a high level of public trust. Since the assignment of virtue is performance-based, it is possible for industry and government to overcome pre-conceptions of untrustworthiness. This possibility depends on the manner in which they conduct their communication practice, and how its form can engender greater public trust.

Receivers and Targets Versus the Public

In democratic societies, the public is expected to inform public policy through the expression of opinion. Under the transmission model of risk communication theory, this basic tenet has led to the conceptualization of the public as either a fixed entity, or a preoccupation with the means to capture public opinion. The former approach is criticized for its reduction of the public to mere receivers of information and the latter for the temptation to probe public opinion for the purpose of manipulative message development. Here again, rhetorical theory provides an alternate view of the public and how its participatory

³¹ Farrell, 76.

role is accomplished in democratic decision-making.

The rhetorical view is predicated on a functional definition of “public”; one in which the public is not defined a priori, but in terms of its ability to pronounce itself on matters of public policy. This ability does not rest on a specialized knowledge, but rather on an interest and willingness to engage in the act of judging rhetorical claims. Rhetorical theory holds that in order for the public to fulfill its rightful duty in adjudicating matters of public interest, it must possess certain qualities that make it competent to “inform” the decision-making process. Thus, as Farrell observes, “The rhetorical audience escapes such reduction by taking on the responsibility of a social agent in a practice of formulating and adjudicating proofs on difficult, but inescapably public, practical matters.”³²

The qualities of the rhetorical audience are general in nature, but its interest is specific to the issue at hand. For example, the Canadian government has recently completed a series of public forums to gage public opinion on the issue of direct-to-consumer advertising of pharmaceutical products. Canadian legislation currently limits pharmaceutical companies to two types of consumer advertising; one where the name of the company and the product can be mentioned, but not the condition that is being treated, or broad health education advertising where neither a medication nor the company name can appear. Considering that most Canadians are regularly exposed to pharmaceutical advertising through American television and the internet, the pharmaceutical industry is asking the Canadian government to modify its policy to allow an

³² Farrell, 79.

unrestricted approach to consumer advertising.

While this issue has its share of opponents and advocates, it is fair to say that not all Canadians have an interest or an opinion on the matter. From the perspective of rhetorical theory, the public in this case are those members of society who are interested in and affected by this debate, make their opinions known and are open to a persuasive discourse on the issue. In other words, the public is represented by those “who show up”, actively listen and provide their views on whether such a move would lead to better health outcomes through more informed patients or whether increased advertising would result in excessive and unnecessary utilization of medications. As such, “The prudential public is a contingent, provisional, unstable formation. It requires time to develop and is sustained largely by public debate on the specific issues of its formation.”³³ To be a member of such a public entails responsibility. To have this policy decided upon by a group of people that is neither interested nor informed would be to invite poor policy decision-making.

In this sense, “publics” emerge and are tied to a specific, contested matter, and as a result, are neither permanently fixed nor assumed. Moreover, the engaged audience must operate from the perspective of a relatively neutral judge. This implies a willingness to evaluate arguments for and against in terms of the common good, and not from an ideological position that is closed to a possibility. As Hauser puts it: “. . . membership in a public requires rhetorical

³³ Hariman, ed., “Prudence in the Twenty-First Century” in *Prudence: Classical Virtue, Postmodern Practice*, 311.

competence, or a capacity to participate in rhetorical experiences. Since the function of a public is to form an opinion on the basis of the arguments, it is difficult to imagine how a close-minded group can perform its job. . . . These traits (*receptivity, critical listening, open-mindedness, active, inventional skill, contingent thinking, inclusivity*) set members apart from interest-group members, who often proceed on closed-minded assumptions that only support one point of view.”³⁴

Social Knowledge and Action

Beyond defining the prerequisites of the rhetorical audience, rhetorical theory provides the communicator with practical advice on how to effectively construct proposals in a way that reflects the cultural values of an audience (*pathos*). In keeping with rhetoric’s overall objective of decision-making, this dimension is critical to not only producing discourse that is viewed as reasonable, but producing the appropriate emotion that will lead to decision and action. At first glance, this may seem to suggest a tactic akin to “tell them what they want to hear.” However, the rationale for such alignment is based on demonstrating the congruency of a particular course of action with the values of society. For Farrell, this congruency is a necessary part of confirming the values at stake in moral public discourse. “Rhetoric happens in unfinished historical episodes, where in urgent circumstances require that we act, even though we lack complete, reliable

³⁴ Hauser, 86-87.

grounds for determining what the best action might be. For a culture to be rhetorical, we must freely acknowledge the responsibility of civic discourse to unite the appearances of cultural affiliation with the plans and projects of public life."³⁵

Knowledge of the audience therefore provides the communicator with the cultural basis for engaging the public in an act of practical reasoning. The social legitimacy of any rhetorical discourse resides in linking a preferred future course of action to accepted social values. As Farrell notes, social knowledge constitutes the rhetorical material and context for rhetorical arguments. "The norms and conventions of a culture thus find themselves employed as premises of both recognition and inference. The norms of social knowledge that apply to membership of groups are the selfsame norms of enthymemes."³⁶

For example, if the president of an American pharmaceutical company decided to wade into the public debate over direct-to-consumer advertising in Canada by chastising Canadian officials and sermonizing the public on the merits of unfettered market capitalism, it is unlikely that his discourse would have much currency with either group. His view would clash with that of most Canadians on the value of and commitment to socialized public healthcare over private enterprise. Now if the head of a cancer patient group were to argue that direct-to-consumer advertising was desirable because most doctors are two to three years behind in their knowledge of new therapies and as a result fail, through no

³⁵ Farrell, 278.

³⁶ Ibid., 76.

fault of their own, to advise patients of new treatment options and that advertising was a cost-effective way of empowering cancer patients, this argument would likely find a more favorable reception. This is not to say that Canadians would automatically agree with the conclusion, but the credibility of the speaker and the desire to provide healthcare options to people with cancer would probably have the effect of eliciting sympathy for this position. The final judgment would rest on whether the value of preserving a non-commercial environment for drug information dissemination was deemed to be more important than the value of consumer drug advertising to certain groups. Another possibility is that an alternative to consumer advertising might emerge as a solution to improved public medical information and use of new treatment options. Since the nature of truth in rhetorical situations is undetermined, the deliberative process of practical reasoning provides such “openings” for alternative solutions and the possibility for change.

Emotion and the Emancipatory Function of Discourse

The notion of producing an emotional response in the audience is a key rhetorical objective in resolving issues of public interest. It serves to create understanding and a desire to act. Without this effect, an audience is not inclined to identify with a problem that is not directly affecting them. Similar to the “cathartic” moment in dramatic representations when the audience is brought to see an alternative meaning of a social situation, it is the rhetorician’s art and the

deliberative process of rhetoric that allows members of the public to transcend their own interpretations and view the common good beyond their personal interest. This potential to transcend existing meanings through inventiveness and emotion constitutes the emancipatory possibility of rhetorical discourse.

Because this aspect of rhetorical discourse relies on the use of language as “pleasing”, Farrell notes that it is sometimes referred to as the “aesthetic warrant”, and its use is criticized for engaging the audience in a non-rational way. “Gadamer sees the discussion of pathos as trafficking in the excitation of emotions. Ricoeur sees it as the worst sort of manipulation of technique.”³⁷ For Farrell, the appeal to an audience’s values on an emotional level is not only justifiable, it is essential to creating an inter-subjective basis for public decision-making. Without this process, there would be no possibility for connecting the individual to the collectivity. “If larger civic obligations toward the generalized other are to be engendered, we must first see the other in ourselves. To develop such a sense, we need to be drawn out of ourselves. And to enact this phase of moral development, we must employ the only art capable of presenting others to ourselves as both potential victims and potential moral witnesses - that is to say, as audiences.”³⁸

³⁷ Ibid., 69.

³⁸ Ibid., 70.

The Limits of Rational Arguments

The third type of warrant or proof in rhetorical discourse is the argument based on logical reasoning. “Just as in logic we have induction and the real and apparent syllogism, so it is with rhetoric, where example is induction and enthymeme syllogism, apparent enthymeme, being apparent syllogism.”³⁹ The enthymeme resembles deductive reasoning in its form and is a kind of derived demonstration that uses particular or general claims as its premises. Aristotle developed an extensive list of special and common propositions (topics) which constitute generally accepted logical relationships between propositions (lines of arguments), the most familiar being that of the analogy. While Aristotle considered logical argument fundamental to rhetoric, he did not consider it to be incontrovertible. Indeed, the unique assertion of rhetorical theory is that while essential to the construction of a compelling argument, logical arguments ultimately rest on probable or particular claims given the contingent nature of rhetorical situations. Consequently, according to Aristotle, it is always possible to produce diametrically opposed reasonable arguments for any issue.

For example, it is possible to argue that the introduction of GMOs in forestry will in fact preserve the pristine nature of Canadian forests. If one accepts the premise that the greatest threat to the preservation of forests is insect infestation, and that chemical pesticides damage and pollute forests, then the use of biological means of control represents a better method of protection.

³⁹ Aristotle *The Art of Rhetoric* (trans. H.C. Lawson-Tancred [London: Penguin Books, 1991]) 75.

While today environmentalists oppose the use of GMOs in forestry, in the early 60s when GMOs were first developed, Rachel Carson believed they represented a desirable future alternative to chemical pesticides. As Gino Marco observed,

Carson stated that chemical treatment of soils led to the destruction of beneficial biological species, and that such destruction resulted in imbalance to the ecosystem. Also, wildlife that ate chemically killed worms also died. She noted that the long-term persistence of chlorinated hydrocarbons in soil and the possible transfer of chemicals into plants grown in such soils. She stated that government officials had aerielly sprayed areas without notifying the public, and that these officials underestimated the safety problems of chemicals. Carson highly praised the desirability of and great potential of using biological controls in the place of chemicals, as well as use of natural products and less toxic chemicals (e.g., pyrethrins).⁴⁰

Notwithstanding the irony of this turn of events, this case exemplifies the contingent nature of logical arguments in the determination of preferred future courses of action.

Conditions for Public Judgment

So far, we have seen how rhetorical theory, as practical reasoning, operates from the premise that the world of human affairs is contingent in nature and proceeds from the possibility of human choice. In the evaluation of these choices, such as the introduction of new technologies, scientific or theoretical reasoning is of limited use since questions of what constitutes the appropriate future course of action are primarily matters of social values. As such, their

⁴⁰ Gino J. Marco, ed., introduction to *Silent Spring Revisited* (Washington, American Chemical Society, 1987) xvii-xviii.

resolution requires a mode of reasoning and discourse that reveals and confirms these values. In democratic societies, rhetorical exchanges are the means by which these values are made explicit through the exposition of arguments. In other words, rhetorical discourse moves from a particular claim to a more generalized claim of “what ought to be”. Faced with the task of choosing between different meanings of the social good, the public is made accountable in a process of judgment of public discourse through which social norms are confirmed and expressed in public opinion. As an art committed to providing the “best arguments”, rhetorical theory provides the technical framework for effective persuasion based on notions of credibility, an active public and logical argumentation. But as persuasion, rhetorical discourse can degenerate into lesser forms of public discourse if its goal is simply to persuade and not the achievement of good public decision-making. What then are the conditions that must accompany rhetorical discourse in order to allow the public to become active agents in their own social history?

Motivation

From the perspective of Kasperson and Stallen, Cannell and Otway, these conditions are linked to the neutral role of the risk communicator. The dilemma in current risk communication is that, modeled on a process of transmission or product delivery, its measure of success is based on norms of efficiency rather than those of public judgment. This quest for efficiency therefore leaves open the

possibility for rhetorical discourse to become mere persuasion. To avoid this situation, this has led to the suggestion by Cannell and Otway that risk communication, when dealing with new, controversial subjects, should retreat to a view of communication as information transmission.

In our view, the most important reason behind the inadequacy of risk communications is the fact that they are judged against criteria which are inappropriate. Risk communication cannot be expected to resolve the conflicts which inevitably arise in society over the choice and implementation of technologies. . . .

To take a less ambitious approach, and to address the concerns of the audience to which communications are addressed, rather than those of technology sponsors or government agencies (who are typically the initiators of risk communications) requires a distinction between the professional task of communicating risks and the political process of resolving conflict. With the advent of 'right to know' legislation an opportunity has been created for risk experts to take a wider view of their professional role: one that encompasses not just technical assessment of risks but involves a responsibility for the balanced presentation of results. Our arguments suggest that perhaps we should be working towards the establishment of a professional code of practice which requires risk practitioners to address the concerns of all legitimate parties in debate, rather than conducting their assessments to meet the limited needs of a single client."⁴¹

On the one hand, Cannell and Otway acknowledge that risk analysis has limitations and it is incapable of providing a complete picture of the level of risk associated with certain situations or technologies. They see the exposition of these gaps in objective knowledge as central to a "balanced presentation of information" on risk. On the other hand, their recommendation to circumscribe the role of the risk communicator to that of risk expert for the presentation of known "facts" does not advance the discussion of what should be the norms of ethical risk communication. Rather than providing a model for ethical risk

⁴¹ William Cannell and Harry Otway, "Audience Perspectives in the Communication of Technological Risks," *Futures* (October 1988) : 530.

communication, it simply reduces the notion of risk communication to the specialized function of risk assessment, and displaces the problem to other actors in the communication process.

Rhetoric As Civic Discourse

Here again, rhetorical theory provides a different perspective. For Farrell and others, the conditions for public judgment are related to the education of citizens in their role as active participants in the negotiation of meaning. This implies the encouragement of a culture based on practical reasoning. Specifically, it requires material, political and discursive conditions which allow the public to fulfill its participatory role in public debates. From a rhetorical perspective, this means not simply acknowledging the role of the public, but creating forums where public discussion and debate can occur. As Suskind and Field state, the manner in which such debates are organized determines the quality of the deliberative process and the rhetorical audience. "If deliberation, debate, and dialogue are the basis of hope in situations where values collide, then how we operationalize the conversation is absolutely critical. We need to bring all stakeholders together in a joint problem-solving mode that goes beyond polarized rhetoric and rights talk."⁴²

Since public debates over new, controversial technologies are matters of social values, the advocacy and articulation of the "best arguments" for a

⁴² Suskind and Field, 190.

particular position are essential to helping the public choose between different options, however imperfect or uncertain their outcome may be. The public performance of rhetorical discourse in a deliberative process allows the public to engage in practical reasoning and judgment. Therefore, the issue of a motivated perspective is not the source of “unethicalness” in risk communication. In most cases, it is the denial or dissimulation of motivation. Not only does lack of transparency with respect to motives fail to make positions understandable in terms social values, a transmission process of communication discourages and prevents an already skeptical public from engaging in a process of deliberation.

If motivation is not necessarily problematic, what are the conditions for public moral public discourse? Generally speaking, they consist of ways that create the possibility for public discussion and informed decision-making in a democratic society.

Public Performance and Transparency

The first condition for facilitating public judgment is related to its public performance. If risk communication has failed to achieve public trust to date, it is in part due to its false claim or aspiration to neutrality. As many researchers have noted, most risk communication is driven by an invested interest or position. Environmental and health protection laws require technology sponsors to involve the public and make their case for the acceptance of a particular risk. The issue for developing public trust and judgment lies not in the motivated perspective, but

in the false assumption of neutrality or the concealed intent of risk communication. Such uses are exemplified by techniques designed to quantify public opinion and control public debate rather than enhance it. In the worst cases, it results in attempts to manipulate and deceive. "As one tobacco company public-relations manager stated as far back as 1971, 'Doubt is our product, since it is the best means for competing with the 'body of fact' that exists in the mind of the general public'."⁴³ In order to allow the public to make informed decisions about the acceptability of risk in any given situation, the dangers of cigarette smoking for example, the public must have the means to assess relevant information. Communication practice that is based on dissimulation or omits important facts violates a fundamental condition for public judgment. As public discourse, it loses its legitimacy for guiding social action because it prevents the possibility for the public to participate in meaningful, practical reasoning.

In a world of divergent views and the impossibility of controlling all sources of information, claims to neutrality, whether conscious or not, do not go unchallenged. The more risk communication attempts and claims to operate from a neutral position, the more incredulous it appears. Moreover, when simulated ethos or dissimulation is detected, its discovery results in public distrust not only of the message, but of the communicator. Since the test of credibility and acceptance resides with the public, rhetorical discourse must open itself to public examination. In this way, explains Farrell, rhetorical discourse

⁴³ *Ibid.*, 10.

provides the opportunity for public discussion and determination of “truth”. “If one’s positions and messages have integrity, they will either withstand public scrutiny or react, respond, and correct themselves in light of opposed positions and messages. If they lack integrity, as a great many political messages do, they will run and hide, grin and spin.”⁴⁴

Discursive Communities and Public Forums

Beyond making positions public and transparent through a particular manner of discourse, public judgment also requires that differing discourses be made available to public debate. This entails creating opportunities or forums for their examination. As Farrell argues, if citizens are to be engaged and made accountable in a reasoned approach to public decision-making, they nonetheless require “spaces” to voice and evaluate competing claims and positions. “More broadly defined, a rhetorical forum is any encounter setting which serves as a gathering place for discourse. As such, it provides a space for multiple positions to encounter one another. And, in its most developed condition, it may also provide precedents and modalities for granting a hearing to positions, as well as sorting through their agendas and constituencies. This is a way of saying that a rhetorical forum provides a provisionally constrained context and an avenue of mediation among discourses that might otherwise be self-confirming,

⁴⁴ Farrell, 305.

incommensurable, or perhaps not even heard at all.”⁴⁵

In the case of the Canadian forest industry, this was attempted through the creation of the Public Advisory Panel where opposing views were given the opportunity to negotiate the “meaning” of forest values and public communication. Contrary to the transmission model of communication, which would have dictated a communication process based on a presumption of objectivity or public opinion formation, the industry engaged in a process that maintained its explicit interests while attempting to arrive at a socially acceptable definition of risks and benefits. The characteristics of this forum were important in determining the quality of the rhetorical discourse that informed the Panel’s opinion on the standards for the industry’s communication and operational activities.

Summary

We have looked at how risk communication has evolved from public warning advisories to addressing public concerns associated with an industrial activity or new technology. In the United States, recent legislation requires industry and government agencies to inform the public of the inherent dangers associated with proposed and existing activities in order to enhance public and environmental safety and resolve conflicts over the acceptability of risks. This new legislation has ushered in a new era of public risk communication which, led

⁴⁵ Ibid., 282.

by technology sponsors, is increasingly focused on risk-reassurance. Having recognized the value-setting nature of public risk debates, this has led to suggestions that the role of the risk communicator should be restricted to the function of risk assessment. By doing so, the risk expert would be shielded from entering the arena of social values and as a result, would help ensure the neutrality of the discourse about risk.

Using the framework of rhetorical theory, I have attempted to demonstrate that debates over new technology-related risks are essentially debates over social values, and as such are the objects of rhetorical discourse proper. Further, I argue that the question of a motivated perspective of risk communication is not necessarily the source of the ethical gap in risk communication practice, but rather the lack of disclosure of its motivation or the pretense of representing objective truth. On the one hand, lack of transparency prohibits the public from understanding the underlying values associated with a particular position; a necessary condition for public judgment. On the other, claims of dominant scientific rationality lead to an exclusion of social values as the basis for public decision-making. The suggestion to redefine risk communication in terms of providing qualified scientific explanations regarding relative risk therefore does not advance the discussion of ethical risk communication. It merely reverts back to a definition of communication as information. Moreover, since risk analysis constitutes contingent logical arguments, this view does not contribute to an understanding how risk communication can facilitate public judgment over social values. As public moral

discourse, risk communication is made accountable to public decision-making in part by providing a social context or vision for social acceptance and providing forums for public debate.

In the following chapter, I will examine the rhetorical discourse of the CBI on the scientific and social merits of genetically modified foods. Rather than providing an opening for public discussion, I argue that its communication relies on the framing of GMOs as an issue of scientific knowledge, a conception of public judgment as public opinion and a view of risk communication as a one-way process of information transmission. In this sense, its rhetorical discourse represents an attempt to shape public opinion, rather than engage the public.

For a list of all the ways technology has failed to improve
the quality of life, please press three.

Alice Kahn

CHAPTER THREE

Why Biotechnology?

The overarching claim of my thesis is that risk communication, based on a model of information transmission using rational risk definitions and public relations techniques, are unable to resolve the question of ethical public discourse since their measures of success are linked to notions of efficiency and not public deliberation. Additionally, the presumption that risk analysis can form the neutral basis for public judgment ignores or displaces a discussion about the social values at stake in such debates. Consequently, risk communication understood in terms of efficient transmission cannot provide a vocabulary for criticism of current practices that seek public acceptance. This can however be achieved by viewing risk communication as rhetorical discourse. In this way, risk communication can be guided by a justifiable notion of advocacy and judged against the performative and ethical norms of public moral discourse.

In this last chapter, I will critically examine the communication activities of the Council for Biotechnology Information in terms of its ability to guide public judgment. The first claim that I make is that the CBI's activities are designed to

address the notion of risk associated with genetically modified organisms and constitute rhetorical discourse in a public debate over the desirability of their broad commercialization. The second claim is that as a commercial sponsor of GMOs, the CBI's rhetorical performance does not represent a sincere attempt to engage in a public discussion of their benefits and risks. This is particularly evident with respect to its undisclosed interests, its determination of public and the process of by which it provides opportunities for public debate.

GMOs and Risk Communication

To understand how the CBI's communication activities constitute risk communication, I begin by situating the historical debate over GMOs, in particular, genetically modified foods, and how the CBI was created to become a voice in that debate.

In the mid 90s, public concern over the safety of Europe's food supply reached fever pitch due to an outbreak of "mad cow" disease in the British beef industry. This outbreak set in motion a series of events that pitted international trade interests against those of public health and safety. The debate centered on the right of national governments to set and uphold public health and environmental standards over the right of the World Trade Organization (WTO) to judge and invalidate these policies against the economic standards of free trade. The principle at stake was whether an international economic body represented a

legitimate forum for determining the validity of national health and environmental policies based on the primacy of free-trade.

In the 1995, the establishment of the WTO and the European Union (EU) represented important changes to the international regulatory framework on trade. Both organizations sought to reform the rules governing international commerce, including that of agriculture, traditionally the most nationally protected sector of trade. The first test of the WTO's new international powers involved France's refusal to import British beef. France contended that ten new cases of Creutzfeld Jakob Disease (CJD), a human variant of Bovine Spongiform Encephalopathy (BSE) or "mad cow" disease, could be linked to the consumption of contaminated British beef. On that basis, and despite scientific and British government assurances that "mad cow" disease could not cross the species barrier, France banned British beef imports. The WTO for its part, basing its ruling on scientific evidence that no health danger existed, ruled that the ban was not justified and constituted an artificial barrier to trade. It therefore allowed Britain to impose punitive trade restrictions on France. By 1996 however, the British government conceded that "mad cow" disease could not be ruled out as a cause behind the growing number of CJD cases in Europe.¹ This concession added strength to the public view of the WTO as an organization preoccupied more with the economic interests of transnationals than public health and safety. Not long after, North America was also hit with a food contamination crisis. A rash of large-scale e-coli outbreaks in the United States beef industry created

¹ Douglas Powell and William Leiss, *Mad Cows and Mother's Milk*, (Montreal: McGill-Queen's University Press, 1997).

wide-spread distrust of the country's food supply system. This issue galvanized mass media attention when the U.S. cattle association sued daytime television host, Oprah Winfrey, for saying she would not eat another hamburger. Quickly fusing with this debate were the concerns being raised by environmental and social groups over the dangers of genetically modified foods, figuratively named "frankenfood", which were making inroads into North America's food supply system.

The combined effect of these events over a relatively short period of time produced a mediated discourse around food safety that intertwined the issues of disease and genetically modified foods. This situation drew increased attention to the links between industrial food production, biotechnology and international business interests. The distrust of corporate priorities and decision-making around public safety as exemplified by the handling of the "mad-cow" crisis and the cattle industry's attack on Oprah Winfrey, coupled with the increased questioning of the health benefits of biologically engineered food furthered the case against their use. In 2000, the EU introduced bans and restrictions on the production and importation of genetically modified foods, which for the most part remain in place today. This ban primarily affected the U.S. biotech food industry; the major source of genetically modified foods and agriculture in the world. The ban also energized critics at home who were calling on the U.S. Food and Drug Agency to force manufacturers to make the labelling of genetically modified foods a market requirement. From the perspective of the U.S. biotech food industry, there was growing concern that the public was beginning to harden its opinion

towards genetically modified foods and that labelling would entrench the notion of risk associated with GMOs. The concept of “genetically modified foods” therefore became a subject of risk communication for the biotech industry.

www.whybiotech.com as Rhetorical Discourse

Launched in April 2000, the Council for Biotechnology Information is the jointly-funded communication initiative of the North American biotechnology industry entitled “Why Biotechnology” at www.whybiotech.com. Its stated goal is to “provide objective, balanced information to help you (*the public*) better understand the benefits of biotechnology offers, as well as encourage informed debate about the issues it raises.” Its founders are the six largest biotechnology companies in the world; Aventis, BASF, Bayer, Dow, Dupont, Monsanto, Syngenta, and two major biotechnology trade associations.

The communication of the CBI consists of a North American television and print advertising campaign signed by the Council for Biotechnology Information around the single message of biotechnology benefits, and more precisely genetically modified foods. Both the television and print advertisements, which continue to run in Canada today, feature a reference to a website and a toll-free number. Although the names of the company which fund the CBI are listed in a sub-section of the website, they are not immediately apparent and the television and print only reference the Council.

The CBI website provides extensive factual information on the development of biotechnology in food production and references a wide variety of sources (newspaper, magazines, international health organizations, academic and scientific institutions) in favour of their use. In addition to addressing the scientifically proven safety of genetically modified foods, the major themes invoked are the link between their commercialization and the elimination of world hunger and the economic and environmental benefits accruing to developing countries. The CBI's website is also remarkable for what it does not broach. Unlike the communications of national industry associations, the CBI does not address the economic interests of its sponsors. The content and design of the site are designed to rhetorically address only one aspect of the debate and answer one question "why we want biotechnology?" By situating the debate in terms of "we" as a global society, and not "we" as private enterprise, the CBI avoids broadening the discussion to include questions of its motives, control and interest.

As rhetorical discourse, I will now look at how this design helps organize a discussion of biotechnology in way that artificially reduces its risks and theorizes its benefits in global food production. Additionally, I will examine the CBI's treatment of publics and its invitation to the public to engage in a discussion on GMOs. In summary, I argue that the CBI's rhetorical discourse, bounded by epistemological assumptions of scientific objectivity and Western economic values on development, reflects a public relations view of public communication based on information transmission, and does not create the conditions for a

meaningful public discourse on the global social risks and benefits of genetically modified foods.

Virtual Virtue

The CBI's website is in fact the Council. There is no Council per se. It is a virtual entity designed to provide the biotechnology industry with a mediated public voice to deliver messages on the benefits of genetically modified foods initially to North Americans, and then to other mass publics around the world. At the time of its launch in 2000, there was no stated geographical location for the Council. Two years later, the website added a U.S. and Canadian street address. At the same time, it added the name and photo of an executive director, minus however any biographical information, or explanation of the connection this person has with the issue of biotechnology. Over the past year, it has also expanded to include a Spanish site for Mexico, and cites future plans to establish a "presence" in Asia and Europe.

Experienced as a website, the CBI's presence as a rhetorical speaker is entirely virtual. This distancing from any individual, institutional or geographic context enables a discussion of biotechnology from a purely theoretical stance. In other words, the design of the CBI's communication does not provide the public with a performative speaker or a context for its discourse. While its perspective is scientifically, culturally and economically driven, this is not discernable without some investigation.

In addition, its ambiguously neutral name submerges the visibility of industry and creates the appearance of a scientific, and by extension, objective organization in favour of genetically modified foods. The construction of this third-party voice rests on a view of risk communication as information transmission. Its underlying assumption is that the industry's role and interests have no bearing on a reasonable discourse on GMOs. Information alone, disassociated from its true source, is sufficient and, in this case, necessary for an informed and objective public debate. From a rhetorical perspective however, this construction does not allow the public to engage in an act of practical reasoning over virtue and to confirm the social values at stake. In other words, are the benefits accruing to society greater than the benefits accruing to industry.

Attempts to construct credibility through a third-party, mediatized voice are not new and sometimes they are not rhetorically significant. For example, most people view "Ducks Unlimited" as an environmental organization dedicated to the preservation of wetlands for duck habitat. In fact, Ducks Unlimited is an organization of hunters, and its primary objective is to ensure the continued sport of duck hunting. Its television advertising does not mention this, but its website and catalogue are primarily devoted to the sale and promotion of hunting guns and activities. The reason this obfuscation is not capable of generating public outrage is that ducks are not endangered and duck-hunting is not socially controversial. As such, its subject is not an issue of significant public interest or rhetorical discourse.

In contrast, the British Columbia forest industry initiated a similar public relations campaign in the early 90s entitled "Forests Forever" which immediately drew the ire of environmentalists and the public. The difference in public reaction is due to the status of industrial logging as a contested public issue. Commercial forestry is controversial and the industry's rhetorical claim ran counter to the public's view that the long-term future of Canadian forests could be in any way assured by its continual destruction. The campaign was eventually shut down, and the industry's credibility was further damaged by this attempt to characterize its activities as aligned with the values of the general public. Although its position was not credible, the forest industry was the visible source of this campaign, unlike the situation with the CBI where its authors' identity is largely hidden. A decade later, the Canadian forest industry initiated a new communication program entitled "Open Doors" which featured public visits of mill operations and forestry activities. While this did not necessarily result in greater social acceptance for industrial logging, its discursive performance was seen as more ethical and accountable.

Similar to the situation with Ducks Unlimited, only a small percentage of the public are expected to consult the CBI website. The television and print ads are the primary vehicles for the CBI's messages in North America, and because these do not reveal the commercial interests of the biotech industry, the majority of viewers are expected to perceive the CBI as an independent source of information on genetically modified foods. As Susskind and Field note, these constructions are viewed as inherently unethical when dealing with controversial

issues. "Sometimes, organizations enter into a debate under false pretenses. A company or trade association sets up a front, which then goes about lobbying for one cause or another in a seeming spirit of citizen activism. Organizations like the 'Coalition for Health Insurance Choices' or 'Citizens for Sensible Acid Rain Control' sound reasonable enough. But these organizations were funded, respectively, by the Health Insurance Association of America and public utility companies. When the press ultimately publicized the industry connection, the public was angry and surprised."²

Transmission of Scientific Information

By reducing its visibility, the industry's discourse is thus focused on a scientific defense over the safety of biotechnology and, in particular, its measurable qualitative and quantitative benefits in food production. In this way, it mimics the reductionist and specialized perspective of the modern scientific gaze in generalizing truth regarding a particular aspect of an issue to its totality. As Alan McHughen explains, the scientific view of GMOs does not encompass broader socio-economic realities. "Some people demand GMOs be evaluated according to 'socio-economic considerations' before being allowed in the market place. Socio-economic considerations are under discussion at the Convention of Biological Diversity (CBD), the international group charged with developing a

² Lawrence Susskind and Patrick Field, *Dealing with an Angry Public*, (New York: The Free Press, 1996), 10-11.

protocol for world-wide trade in GM products. There are legitimate socio-economic issues, but they are not in the realm of scientific discourse.”³

The CBI’s stated purpose is to provide “scientifically-based information about the benefits and safety of agricultural and food biotechnology”, hence its name. Since it views its commercial interests as peripheral to this discussion, communication and public acceptability are framed as a question of transmitting more scientific and statistical data. This view is exemplified and reinforced through the educational intent of all the CBI print advertisements and the closing call to action to “learn more”.

**WOULD IT SURPRISE YOU TO KNOW THAT TOMATOES
MAY HELP FIGHT CANCER IN THE FUTURE?**

Through advancements in biotechnology, researchers are developing a type of tomato* that produces considerably more lycopene than conventional tomatoes. Up to 3.5 times more. Lycopene, a pigment that gives tomatoes their red colour, acts as an anti-oxidant in our bodies, capturing electrically charged oxygen molecules that can damage tissue. In fact, there have been many studies on the benefits of anti-oxidants and their role in helping prevent cancer. The research is on-going and the facts are there to be examined. If you want to learn more, we invite you to call us or visit our Website.
www.whybiotech.ca 1-800-980-8660.

Council for Biotechnology Information *good ideas are growing*

*High-lycopene tomatoes are still undergoing research and are not yet approved by regulatory authorities or available for sale in grocery stores.⁴

The statement that “facts are there to be examined” suggests that the public has been influenced by something else than objective information. This

³ Alan McHughen, *Pandora’s Picnic Basket: The Potential and Hazards of Genetically Modified Foods*, (Oxford: Oxford University Press, 2000), 143.

⁴ Council for Biotechnology Information print advertisement in *Canadian Geographic*, November/December 2003.

suggestion is in fact explicit in other CBI articles, "Although some organizations have led well-orchestrated campaigns to discredit biotech foods overseas, the Council for Biotechnology Information (CBI) welcomes the debate. We've found that the more people know about plant technology, the more they support it. A CBI public opinion survey showed that 69% of the respondents who 'heard some or a lot' about biotechnology supported its use to develop new varieties of crops, while 52% of the people who 'heard little or nothing' about biotechnology still supported its use to create new crops."⁵

Framed from the perspective of the public's lack of objective facts, the challenge of making genetically modified foods more socially acceptable therefore rests on the effective transmission of more scientific information to the public. Moreover, its use of public opinion surveys as a proxy for determining the degree of public acceptance relies on a view of quantitative analysis as the qualitative equivalent of general public understanding and acceptability. This conception, argues Hauser, confuses statistical public opinion data with the notion of public judgment. "Polls can't substitute for informed deliberation. They may give a convenient indication of what a representative aggregate of private individuals believe, and leaders may use poll results to suggest that the majority supports their actions, but without deliberation we have no assurance that these opinions are informed or that the poll results reflect what public judgment would

⁵ Linda Thrane, "Using Biotechnology To Feed The World", commentary in *Food Forum* November 2002 <<http://www.groceryheadquarters.com>> as cited by The Council for Biotechnology Information. Oct. 2002. Oct. 22 2002 <<http://www.whybiotech.com/about us>>

look like if people were informed.”⁶

The Progress of Science Over Nature

On its website, the scientific case for biotechnology is largely organized around the “naturalization” of biotechnology, and conversely, the “technologization” of nature. As exemplified in the following description of biotechnology, this is achieved through analogies between the natural and the unnatural, and the familiar with the non-familiar, where biotechnology is shown to be “like nature”, but better because it is controlled.

Just think for a moment about what gives each and every flower its special color and form, the source of its beauty or what allows a corn stalk to grow tall and strong, and what brings out that unique flavor of your favorite fruit. Every living thing, from the most simple to the most sophisticated, carries a genetic code, or ‘blueprint’ that determines precisely what traits it will have. In much the same way, biotechnology is a precise science that enables us to find the most beneficial traits, in terms of added nutrition, increased flavor or greater ability to fight pests and disease, and incorporate them into various organisms. On one level, this process is not unlike adding a new ingredient to a recipe, or a new color The only difference is the results. With biotechnology, we are providing real answers to some of the greatest challenges we face at the dawn of a new century, such as hunger and malnutrition, as well as more effective ways to prevent disease and treat serious illness.⁷

A recurrent theme in the CBI’s arguments is the unpredictability of nature, and its imperfect and at times retro-grade form. “The non-transgenic plants in

⁶ Gerard A. Hauser, *Introduction to Rhetorical Theory*, (Prospect Heights: Waveland Press, 2002), 87.

⁷ Council for Biotechnology Information. Feb. 2001. Feb. 18 2001. <[http://www.biotech.com/what is biotechnology](http://www.biotech.com/what_is_biotechnology)

the field were a stunted mess, and the transgenic plants were healthy.”⁸ This conceptualization of nature helps build the argument that nature is in fact a less desired form of reality, and GMOs, the product of scientific knowledge, the preferred ideal. This is further exemplified in the following assessment of biotechnology, “The tools of biotechnology allow researchers to achieve the same kind of genetic exchange, but more precisely; eliminating the need to crossbreed plants for several generations to breed in desired qualities and breed out those qualities that are unwanted.”⁹

In contrast to nature, biotechnology is described “precise science” that respects the fundamental structure of nature, and simply removes the “uncertainty” of outcomes. Conceptually, an uncertain event differs from a risky one in that risk can, in contrast to uncertainty, be calculated. Its outcome can therefore be successfully shaped and reliably controlled by a dominant strategy. As Hewitt notes, the degree of uncertainty helps define the nature of all risk as well as circumscribe possible solutions of control, “The scientific ingredient that most helps to maintain the dominant view is the thoroughly respectable notion of uncertainty and related ideas. . . . Universally the hazards literature states that the fundamental problem with hazards . . . is that people have little or no way of telling when, where or to whom they may happen . . . The uncertainty thus identified is not just intrinsically important. It is used to specify what is and is not

⁸ “Grains of Hope”, *Times Asia*, (March 1, 2001) Council for Biotechnology Feb. 2001. Feb. 18 2001. <[http:// www.biotech.com/what'snew](http://www.biotech.com/what'snew)

⁹ Council for Biotechnology Information. Feb. 2004. Feb. 27 2004. <[http:// www.whybiotech.com/faqs](http://www.whybiotech.com/faqs)

likely to improve our grasp of the problem.”¹⁰ Thus, in the CBI’s rhetorical discourse on genetically modified plants, “uncertainty” becomes a deficient dimension of nature and its defining characteristic. The value of biotechnology, on the other hand, is its mechanism of control over nature. Here again, science is viewed as the measure of the good. Biotechnology is good because of its ability to produce reliable outcomes and a means of eliminating the uncertainty in global food production.

The Emotional Appeal of Development Discourse

In terms of emotional appeals, the CBI’s discourse is primarily organized around the humanitarian benefits of biotechnology to developing countries. To underscore these benefits, the CBI features a seemingly endless number of personal stories and images of hungry, poor families and farmers from Africa and Asia who are benefiting from increased food production from GMOs. “Potrykus was elated. For more than a decade, he had dreamed of creating a golden rice that would improve the lives of millions of the world’s poorest people.”¹¹ While the CBI acknowledges that current biotech foods are largely for North American consumers only, the potential for greater good is generalized to other regions in the future. “Creating a better tomato is just the first step in developing technology

¹⁰ K. Hewitt, ed., *Interpretations of Calamity*, (Boston: Allen & Unwin, 1983), 20.

¹¹ “Grains of Hope” *Times Asia* (March 1, 2001).

that will eventually feed more people than ever before.”¹²

From a cultural theory perspective, these appeals rely extensively on the production of third world imagery of “development” discourse, and a framing of the roots of poverty, hunger and environmental degradation as a question of insufficient food production. “While global problems such as deforestation and loss of bio-diversity are growing, increased crop yields enabled by biotech may someday help save natural eco-systems by alleviating the need for additional farmland to feed an expanding world population – and this may become particularly true for developing countries.”¹³ While content to exploit the cultural imagery of development discourse, what is not addressed are the economic relationships that contribute to social conditions in developing countries, and these same interests in the global commercialization of biotechnology. The internal logic of the CBI’s discourse is that world hunger and poverty are the result of lack of technology. The dramatic imagery provides the moral imperative for the continued use of biotechnology - one that places the audience in an ethical dilemma. If it is possible to denounce the introduction of genetically modified foods in Western societies, it is more difficult to refuse help to the poor and hungry in less developed parts of the world. Moreover, if the risk of genetically modified foods is scientifically unproven, who would want to prevent their use given the tremendous benefits. This urgency is echoed throughout the

¹² Linda Thrane, “Using Biotechnology to Feed the World”.

¹³ Council for Biotechnology Information. February 2001. February 18, 2001. <[http:// www.whybiotech.com](http://www.whybiotech.com)

CBI's discourse. "While some opponents are lobbying to slow its development or restrict its uses by citing unknown and unproven potential risks, most of the world cannot afford to wait to reap biotechnology's proven benefits."¹⁴

In this way, the third world serves as the rhetorical moral form of biotechnology discourse. By bracketing a discussion of its commercial interests, the CBI's discourse has the effect of symbolically disassociating the health and environmental issues from the political ones, which were initially linked in the international debate over GMOs. The crux of that debate involved the right of the WTO to impose its decisions on nations over their right to determine health and environmental standards. In the case of genetically modified foods, the issue has been whether the refusal by European and African governments to accept the sale of GMOs constitutes artificial barriers to trade. What the CBI does not disclose is the link between the acceptance of GMOs, the intellectual property protection rights of producers and the implications this has on the ability of nations to continue to refuse their introduction. There is virtually no mention of the intellectual property protection rights that GMO sponsors enjoy, and the deployment of GMOs in the area of agricultural trade. This is significant element in a discussion of the broad economic benefits of biotechnology, particularly food production, for developing countries.

¹⁴ Council for Biotechnology Information. Feb. 2004. Feb. 27 2004.
<<http://www.whybiotech.com/fags>

An Alternative View of Technology and Development

From a discursive perspective, Arturo Escobar argues that these representations of developing countries as “poor” and “hungry” are narrative extensions of an economic construct and ideology based on mass productivity and technological development. The deployment of these cultural representations provided the original justification for re-organizing national economies along the lines of classical economic theory in the 1940s.

When in 1948, the World Bank defined poor countries as those with an annual per capita income of less than \$100, it did so based on a number of western and capitalist assumptions. Namely that economic and material indicators were appropriate measures of well-being and cultural progress. The naturalness of these assumptions belied the western world’s definition of progress as synonymous with technology and science. These assumptions set up the possibility of viewing the world strictly in economic terms. At the same, this view enacted an “ordering of differences” which would ultimately define the identity and determine the political relationship between the “have” and “have-not” regions of the world. Moreover, the problematization of development carried within itself its own solution: modern economic growth. “The pioneers of development economics conceived of development as something to be achieved by the more or less straightforward application of savings, investment and

productivity increases.”¹⁵

Beyond these basic tenets, neo-classical economic theory favoured growth based on a global trading system, and that thinking led to large-scale attempts to reorganize national economies based on output and input infrastructures. This economic modeling was pervasive and, as Escobar explains, subordinated all other realities and values to economic considerations. “The discursive nature of capital is evident in various ways – for instance in the resignification of nature as resources; in the construction of poverty as lack of development, of peasants merely as food producers, and of hunger as lack of food requiring rural development; and in the representation of capital and technology as agents of transformation.”¹⁶

Today, these very same issues are being raised by developing countries as the WTO seeks to enshrine the notions of intellectual property protection rights, in particular for GMOs, into the global trading system in agriculture. In contrast to the CBI's enthusiastic advocacy of GMOs for developing countries, the monopoly exercised by the Western biotech industry in GMO food production represents a new model of potential dependency for these regions. “Without giving this issue much conscious thought, Africa is being lured into the agroecosystem market by industrialized countries. . . . A second lure is technical and financial aid which is effectively used by Europe and North America to make

¹⁵ Arturo Escobar, *Encountering Development*, (Princeton: Princeton University Press, 1995). 83.

¹⁶ *Ibid.*, 130.

Africa adopt the new ways which they choose for it. This lure is reinforced by the demand or assumed demand of industrialized country markets for a specified homogenous agricultural produce. Often, in fact, the market is fickle and it disappears after the advocated change in agriculture has taken place in Africa. For example, DDT and other pesticides were in the past pushed on Africa by industrialized countries. Now, their continued application is used by those same industrialized countries as a reason for rejecting African products.”¹⁷

Similar to the “ideologies of the real” that underpin a commitment to scientific rationalism, “ideologies of development” underpin the commitment to unrestricted economic growth and affect the discussion of GMO “benefits” in an important way. As Schumacher states in his criticism of the systematic application of industrial economics in developing countries, “To do justice to the real situation, it is necessary to consider the reactions and capabilities of people, and not confine oneself to machinery or abstract concepts.”¹⁸ The CBI suggests that the benefits of GMOs to global society are tremendous. Without disclosing its economic interests in the international commercialization of GMOs, the discussion on their social and economic benefits, particularly to developing countries, in this sense remains partial and theoretical. Are the benefits substantially greater than the risks? If so, how are these benefits shared?

¹⁷ Tewelde Berhan Gebre Egziabher, “Enhancing the Sustainable Use of Agrobiodiversity”, *Bridges*, 5, no. 6 (July-August 2001) : 9.

¹⁸ E.F. Schumacher, *Small is Beautiful*, (New York: Harper & Row, 1973), 127.

Target Audiences

In terms of audience, the CBI's current advertising and website communications are indiscriminately aimed at the public at large in the U.S., Canada and Mexico, although its website is linked internationally to a number of other sites. Within its website, the content is divided into four categories of publics: consumers, farmers, journalists, teachers and students.

From a consumer audience perspective, the merits of GMOs are highlighted in terms of addressing North American tastes, and environmental and health issues, such as the "cancer-fighting tomato" print advertisement. The benefits of this "better" tomato are defined in terms of its consumer appeal. "Master chef and cookbook author Julia Child was once asked her opinion about plant biotechnology. She said, 'If they can give us a better tomato, I'm all for it.' It's a simple response, but speaks volumes about consumer attitudes. No matter what the product, consumers want to know what's in it for them. Does it taste better? Is it healthier? Is it cheaper?"¹⁹

While these types of consumer products appear to meet consumer and social needs, there are in fact no demands for GMO products. What is not disclosed in this representation is the economic motivation for developing GMO consumer products in the first place. As McHughen notes, the development of the "better tomato" and other biotech products for North Americans are designed primarily to increase mass production. "Most of the GM products are from big

¹⁹ Linda Thrane, "Using Biotechnology to Feed the World".

multinational companies such as Monsanto, Novartis, AgrEvo, and the like. None of these products to date addresses public demand; there is no 'pull' from the consumer to obtain these GM products. Instead, the novel features are of interest to the company because it will increase their sales of related products, such as their brand of pesticide. Or they are of interest to the farmer, who will enjoy increased pest control choices. Even the Flavr-Savr™ tomato, marketed as having longer shelf life, and so of benefit to the consumer, was originally intended to benefit the processor, who could extend the harvest window time of the tomato crop."²⁰

Contrary to the rhetorical conception of the public as engaged participants, the public in this case is defined primarily in terms of the mass consumer. Thus, it enables a discussion of benefits based on individual preferences, economic and aesthetic, rather than dimensions of the public good.

Publicity vs. Public Judgment

The CBI's utilization of television and print advertising further constructs a consumer-oriented discourse on genetically modified foods in terms of its content and its form. "CBI is working to better inform consumers in a number of ways: Creating integrated information and communication programs in the United States, Canada and Mexico, and setting up similar efforts in Africa, Brazil, Europe and the Asia-Pacific region. Placing advertisements and advertorials

²⁰ McHughen, 157.

describing the benefits of biotechnology in national publications.”²¹

The content of their advertising not only focuses on notions of biotechnology benefits and consumer values, the limiting form of advertisement itself, as Mayhew notes, produces a discourse that encourages an economical and superficial understanding of issues. “Mass communication provides efficient, relatively low-cost channels for providing information to consumers. Advertising provides just the sort of abbreviated, easily digested information that consumers need. Moreover, advertising encourages consumers to put their trust in brand and company names, which economizes information, and in turn, requires producers to sustain the quality of their goods in order to maintain that trust.”²² Viewed from this perspective, the linking of the notions of “good” with “science” and “production” in the CBI’s television and print advertisements and its slogan, “Good ideas are growing” are designed to fulfill this abbreviated form of communication for consumer understanding and acceptance.

Transmission vs. Public Sphere

This last point that I wish to examine is regarding deliberative forums as a condition for meaningful public judgment. It can be argued that the CBI’s willingness to exchange viewpoints with North Americans through its website and

²¹ Linda Thrane, “Using Biotechnology to Feed the World”.

²² Leon Mayhew, *The New Public: Professional Communication and the Means of Social Influence*, (Cambridge: Cambridge University Press, 1997), 194.

toll-free number represent an attempt to engage in public dialogue and discussion. However, in reality, the website and its toll-free number do not link the public to the CBI's national representatives, even less to other voices in the debate. The toll-free number is linked to a call centre which serves as a distribution centre for information on the CBI and its positions. In addition, the toll-free number is active only during the advertising period, and its purpose is to measure the impact of the CBI's print and television advertising activities. This is exemplified by a set of questions call centre representatives are trained to ask each caller on which form of advertising the caller obtained the number, and which region of the country they are calling from. The website, which provides users with a field to ask questions, also claims to provide a forum for questions and answers. However, when I sent an email asking whether developing countries would be subject to the intellectual property protection of genetically modified foods, I received a system-generated reply saying that my question would be answered within five business days. After several months, a reply has yet to come.

Summary

Based on a model of transmission, the CBI's evaluation of "effectiveness" is determined by the change in public opinion as measured by quantitative polls. In this way, it does not take into account the ethicalness of its constructed identity or the means by which it engages the public. From a rhetorical theory

perspective however, its discourse can be examined and judged from an ethical perspective. The CBI's bracketing a discussion of its interests, its focus on mass communication and publics, as well as its restricted form of "public dialogue" do not constitute an open and transparent form of public discourse. Rather as Hauser notes, the manner in which its public discourse is constructed reveals a desire to shape public opinion, rather than engage public debate. "The structure we choose to join events and values when we communicate is synonymous with our motivation for communicating."²³ As Mayhew argues, such discourse is merely self-interested and does not constitute ethical public discourse. "When persuasion becomes entirely instrumental, its techniques governed by the criterion of effectiveness, the warrants of sincerity that allow audiences to extend credit to their persuaders are undermined."²⁴

Horizons of Risk and Rhetoric

The Council of Biotechnology Information is an interesting example of an attempt to develop a North American consciousness around the issue of genetically modified foods. The transnational nature of companies and global communications is making it easier to unite around common issues. For rhetorical consistency and impact, and economies of scale, more sectors,

²³ Hauser, 252.

²⁴ Mayhew, 190.

including the forest industry with its North American-based website www.forestinformation.com, are structuring themselves around a consensus position and engaging in international public communication activities on issues that negatively affect them. In this sense, these types of public communication initiatives can be viewed as a new rhetorical "genre". From a critical perspective however, the cohesiveness of this type of global rhetorical discourse depends in large measure on the exclusion of certain elements of discussion, such as economic interests.

For risk communication and rhetorical discourse, this brings up a new questioning of how discursive frameworks can address issues that go beyond national democratic borders. Traditionally, risk communication and rhetorical theory has focused on how ethical public discourse can be viewed in the context of national democracies. But as Norton explains, the impact of broad new technologies has economic, health and environmental implications for global communities.

Today, with growing emphasis on a 'global' culture and concern for changes in global ecosystems, it appears that a third scale of concern is evolving, and it can be associated with the indefinite time scale on which the human species evolves. On this scale, more and more environmentalists and policy makers are examining our impacts on ecological and physical systems over indefinite time. Since these very long-term impacts will affect global systems, we can once again apply hierarchy theory, which correlates very long term temporal scales with very large extent in space. This third, emerging horizon of concern is associated with the emergence of a species-wide consciousness – a concern for the indefinite future and well-being of the human species.²⁵

²⁵ Bryan G. Norton, "Ecological Risk Assessment: Toward a Broader Analytic Framework" in *Handbook for Environmental Risk Decision Making* (Boca Raton: Lewis Publishers, 1996), 162.

Moreover, as industries, like the biotechnology sector, develop integrated international communication efforts, it raises questions on how rhetorical theory can address global discourses that regionally subdivide national democracies while organizing their practice from a single source or perspective.

The way to gain a good reputation is to endeavour to
be what you desire to appear

Socrates

CONCLUSION

Ethical Risk Communication and Rhetorical Discourse

All forms of risk communication entail publicly communicating information about a level of danger associated with an event, behaviour or activity. However, social risk communication almost exclusively involves industrial or technological risks that are not voluntary, and ultimately seek public acceptance through changes in attitudes, rather than individual changes in behaviour. This type of risk communication is inherently more controversial because the risks and benefits of an industrial or technological hazard tend to be unequally shared between the technology sponsors and the risk bearers, and as a result, radicalize the moral nature of risk communication.

In my examination of risk communication, I argue that risk communications which deal with publicly contested issues and involve contingent values of the future public good constitute public moral discourse. In this sense, risk communication issues are proper subjects of rhetorical discourse. The resolution of rhetorical situations is dependent on a process of public deliberation and performative discourse, and therefore requires a model of communication

that operates and can be judged from the perspective of moral public judgment. I further argue that risk communication, based on a model of information transmission, is governed by norms of efficiency, and is therefore incapable of providing a framework or critical vocabulary for the moral nature of these debates. Viewed from the perspective of rhetorical theory, risk communication functions as ethical public discourse, not from the unmotivated perspective of its source, but from the manner in which it makes itself open to public examination and debate.

In terms of risk communication, the CBI's communication is based on a view of effectiveness in terms of public relations and not public deliberation. As Sandman argues, this view is insufficient to address the value-setting nature of public debates over risk. "The ultimate job of risk communication is to try and produce a citizenry that has the knowledge, the power and the will to assess its own risks rationally, decide which ones it wants to tolerate and which ones it wants to reduce or eliminate, and act accordingly."¹ For risk communication to achieve this goal requires open settings where positions are not only public, but are made accountable to public judgment through an acknowledged perspective and in a way that allows citizens to judge discursive practices and rhetorical claims.

It is quite possible that GMOs will provide tremendous environmental health and economic benefit to society. From a rhetorical perspective, the CBI's

¹ Peter M. Sandman, *Responding to Community Outrage: Strategies for Effective Risk Communication* (Fairfax: American Hygiene Association, 1993), 80.

public communication does not allow the public to evaluate the “truthfulness” of its claims on the scientific and humanitarian benefits of genetically modified foods, since its motivation for advocating their use is not fully disclosed. Moreover, the design and the construction of its discourse prevent a meaningful public debate and discussion. Its attempts to construct a pseudo ethos through the creation of a third-party voice, its notion of public as mass consumers, and a pseudo community forum for debate, suggest that its goal to “provide objective, balanced information to help you (*the public*) better understand the benefits of biotechnology offers, as well as encourage informed debate about the issues it raises” is not sincere. The biotech industry’s lack of transparency in this case is significant precisely because the value of biotechnology is a contested issue, not only for North American consumers but also has implications for other regions where the patented control of genetically-modified food production will impact on global environmental and economic outcomes. Framed as a scientific debate, these issues are excluded in a discussion of their benefits.

In conclusion, the CBI’s discourse fails to adequately answer its own question “why biotechnology” is good by refusing to fully address the question of “for whom”.

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