Communication: Inquiry, Energy, and Risk - ARST Reports

Defining (the Concept of) Risk

Project On Rhetoric Of Inquiry POROI http://ir.uiowa.edu/poroi

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Poroi 8,1 (April 2012)

Our blind spot as a "risk society" is our inability to recognize that definitions of risk are communicative claims that have constitutive force (Beck, 1992). They are consequential social constructions that reflexively create the very uncertainty they purport to describe (Sigman, 1995; Deetz, 1994). Accordingly, the ways in which we define risk recursively "fabricate risk analyses, which in turn shapes actions that form or produce risks" (Russell & Babrow, 2011, p. 244). This is a form of entrapment that Luhmann termed "scientization" in order to capture the circular process by which we are taken in by our own language (Luhmann 2002). We contend that a critical rhetorical and discursive approach may offer analytical tools in for setting aside the scientization of risk-constructs in favor of empirical examination of risk as an in-the-moment, emergent, and shifting dynamic of uncertainty (Bartesaghi & Castor, 2010).

In the last several decades, risk has been described, defined, and managed across industrial and scientific fields. In 2009 the technical study of risk culminated in the publication ISO 31000-2009, a document on "Risk management-principle and guidelines." This document gives definitions of risk and risk-related terms as well as advice about how to maximize risk management. While its inclusion of recommendations for taking context into account in risk management implicitly invites readers to conceive of risk as constructed, managers following this document are likely to ignore this implication or fail in other ways to come to terms with this aspect of risk. As rhetoricians and communication scholars, however, we cannot but keep in mind the fact that definitions cannot be decontextualized from the process of defining. This report takes definitions of risk as metadiscourse (Craig, 2005). As communication about risk, our constructs inevitably "rationalize and reinforce many societal, political, and economic structures" and therefore need to be

evaluated in terms of the social, political, and economic communicative realities they create for us to inhabit (Russell & Babrow, 2011, p. 244).

Our argument proceeds as follows. We review definitions of risk as an object of inquiry in three fields dedicated to reducing uncertainty: banking, computer science, and disasters. In doing so, we examine how definitions construct risk as communication. We then weave together our own definitions of risk and risk communication and conclude with a reflection on how communication scholars can direct discussion to neglected aspects of how risk and danger are approached by industry and science.

As Bernstein notes, probability is the key to the management of uncertainty (Bernstein, 1996; O'Doherty, 2006). It thus makes sense that in spite of significant differences between fields of inquiry and application risk is defined across the board in probabilistic terms and accordingly at the intersection between the achievement of instrumentally constructed means to goals and the likelihood of failure and negative outcomes. Banking, computer science, and natural disasters all share this understanding of risk. In banking, managers seek to balance the risk inherent in investments against the potential for profit through models which include value at risk (VAR). In computer science, programmers and managers use models and tools that are meant to assign quantified values to possible error and failure rates. When preparing for the possible impact of natural disasters, officials seek to identify the amount of investment required to balance the potential magnitude of the future disaster. Practices in these three fields seek to reduce uncontrolled agency through use of technical planning, decisions, and actions, aimed and building the structures needed to respond to all identified risks.

Yet in all of these three cases, risk is constructed as extrinsic to communicative practices. It is situated as an objective structure-agency phenomenon that precedes communication. Accordingly, it is unsurprising that much of the literature surrounding risk communication prepares organizations to meet the challenges presented by disaster with strong attention to detail and planning (Samansky, 2002). This shift has the effect of demoting communication to the effective and clear management of the media from a public relations standpoint (Lundgren & McMakin, 2004; Heath, 1996; Hadden, 1989). Unsurprisingly, much of this work is concerned with making sure that training programs are in place and that the given organization can present a unified message to the public sector that it has been charged with managing.

Yet in problematizing the concept of risk as extrinsic to communicative inter-action, Otway (1992) writes, "The main product of risk communication is not information, but the quality of the social relationship it supports" (p. 227). He recommends that communities move away from purely technical understandings of the events and toward an understanding that recognizes both the interpretive and emotional levels implicated in situations where property, wealth, and lives may be at stake. Interpretive research in communication has highlighted the role of individual and situational factors in the meanings of risk through which individuals interpret from their everyday talk

(Edwards, 1998). Individual differences along gender lines, or personal characteristics like loneliness, and ego-involvement are associated with how individuals make sense of messages as more or less credible, honest, and competent (Bello & Edwards, 2005; Edwards, et al., 2001).

Insufficient as they are these discoveries point to the fracturing of the illusion of expert infallibility, and lead to more recent studies that suggest that risk is not so much a question of management as of shifting our collective understanding to the realities of unpredictability (Biocca, 2004). This means embracing many of the traditional enemies of science such as complexity, uncertainty, and ambiguity (Renn, 2003). In turn, this enhanced appreciation of the unknowable in the risk equation has led some scholars to suggest a more rhetorically sensitive interpretive framework for bridging the gaps in trust between expert and lay communities (Millar & Heath, 2004).

As complexity and ambiguity enter the picture, the role of communication as an aspect of risk comes into sharper focus. Our own scholarship tackles the complexities that emerge in constructing risk in this way.

In his presentation "Evolutionary Software Development to Reduce Risk," Steven Gibson suggests an approach to objectively reducing risks in industries that include software development through modified documentation and citation methods. Gibson examines a partial test case using an approach to documentation of software evolution using the citation techniques applied in scholarly research; he relates how communications researchers can contribute to software risk reduction by helping build ontologies of best-of- breed software and advising in dissemination and documentation of the software resources as they are developed.

Similar approaches have been attempted in industries, including the development of ISO 31000 and specialized software frameworks and documentation. Gibson illustrates his methodological approach by means of a test case of a software system employing documentation and citation. This study foregrounds approaches communication scholars can take to make contributions to computer science.

In "Hedging Disaster: Rhetorics of Risk, Mitigation, Normalcy and Necessity," Stephanie Houston Grey explores the relationship between a postmodern risk economy and the creation of scientific and economic objects during times of natural disaster. The Deepwater Horizon oil spill of 2010 was rhetorically framed in the media as the product of an economy that perpetually wavers on the edge of apocalypse, driven by a hunger for consumption and excess risk. Within this "accursed share," to use Georges Bataille's (1991) term for the excess energy by which an economy may proceed undeterred to its ruin, Grey argues that risk management is no longer concerned with caution or risk avoidance, but instead aims to normalize and operationalize risk even while increasing our tolerance for it. Grey's work traces the Deepwater Horizon disaster as a valuation – or, a construction of its worth as a tangible commodity – though which the relatively unknown and underexplored "deepwater" Gulf of Mexico has been converted into an object of study with scientific,

political as well as economic overtones in the form of a financial bottomline. This progression culminates in the process of Natural Resource Damage Assessment which seeks an inclusive, but palatable dollar figure for the disaster, establishing a finite cost that the risk economy is capable of absorbing.

Mariaelena Bartesaghi's "Risk as Social Interaction: Revisiting Hurricane Katrina," employed discourse analyses to examine over four hours of "fateful conversation" via audiorecorded telephone meetings between local, state, and federal officials in the days immediately before and following Katrina's landfall on New Orleans (Whalen, Zimmermann, & Whalen, 1989). By exploring decision making as exhibiting a pragmatic tension between risk and danger, Bartesaghi proposes that risk was in fact constituted in and through participants' strategies of assessing uncertainty, making Katrina into a communicative disaster.

First, Bartesaghi examines how evacuation of the citizens of New Orleans was achieved by the speakers as an outcome of the interactional machinery. Machinery is explained: in terms of how single utterances encode risk (e.g., pronoun switches, modals, if-then formulations) as well as structural features of the interaction (turn-taking, question-answer sequences, and meta communication). Bartesaghi examines how both single utterances and structural features point to broader logic of context of "acting jointly" and "speaking with one voice." Speakers endeavored to maintain this and which was moderated as a violation. Explicating this context in terms of strategies of uncertainty where claims insufficient knowledge may serve useful purposes, Bartesaghi shows how both directness and indirection can be fruitfully understood as ways of accomplishing action. In the case of direct communication, Bartesaghi identifies these as acting alone, premature action, and lack of information. In the case of indirect communication dilemmas were acting collectively, delayed action, and lack of follow-up.

As these three authors have attempted to posit, rhetorical contribution to risk communication should begin with deconstructing the taken-for-granted knowledge of the risk society and shed light on its blind spots. It should then move toward, "the task of discovering...the available means of constructing better social worlds" (Russell & Babrow, 2011, p. 256). To conceptualize risk as endogenous to social interaction challenges prevailing notions that participants are not accountable for creating uncertainty, that uncertainty is not a rhetorical strategy in risk settings, and that risk is not itself a dynamic between participants in a situation of uncertainty; as well, it allows us, as communication scholars to move past the structure-agency dichotomy that we inherited from other fields (Bartesaghi & Castor, 2009).

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