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## **Wal-Mart's presentation to the community: Discursive practices in mitigating risk, limiting public participation, and developing a relationship**

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WAL-MART'S PRESENTATION TO THE COMMUNITY  
DISCURSIVE PRACTICES IN MITIGATING RISK,  
LIMITING PUBLIC DISCUSSION,  
AND DEVELOPING A RELATIONSHIP

*in Discourse & Communication*

By

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*Abstract*

This study examines Wal-Mart representatives' presentation to the community on their site plan and Draft Environmental Impact Statement. Given the on-going controversy and criticisms from local residents, it is interesting to see Wal-Mart's strategies in attenuating these risks and negative impacts. The discursive practices found here are: formulating prior citizen complaints by a neutral-sounding, legalistic language which works euphemistically or as a gloss. Citizen concerns are fitted into a problem-solution format where the solutions involve engineering technology. The Wal-Mart representatives display their expertise through describing these technological answers. Scientific documents or tests are presented which point to counter-intuitive results. They draw on a discourse of "facts" and "information," but use these to make arguments in support of their proposals. In addition to displaying scientific-technological expertise, they avow openness to dialogue and willingness to work with the town. The Wal-Mart representatives present themselves as both technical experts and trustworthy partners, but they also may be seen as rhetor in using facts, findings, and documents to make an argument for their project. (Key words: discursive analysis, rhetoric, environmental risk, Wal-Mart, formulations, expert discourse).

(T)hose who control the discourse on risk will most likely control political battles as well (Plough & Krinsky, 1988, p.4).

This study<sup>1</sup> examines Wal-Mart representatives' oral presentation at a public hearing on their draft Environmental Impact Statement in an up-state New York town. This presentation needs to be seen as part of an on-going controversy over Wal-Mart's proposal to build a Super Center at the end of a commercial strip. At prior public gatherings many residents spoke out disparagingly about the proposed Wal-Mart due to its detrimental environmental and economic impact on the community (Buttny & Cohen 2007; Cohen & Buttny, 2008). While a seeming David and Goliath story, opponents of the project gained some traction and were able to slow down the process due to worries about the location of the Wal-Mart on an environmentally sensitive site. The controversy continued to play out through letters to newspaper and on a local talk-radio program. These statements, pro and con, but mostly against the project, create the background context leading up to Wal-Mart's presentation to the community.

Wal-Mart's presentation can be understood in light of the opening epigram: how corporate bodies attempt to "control the discourse on risk" in order to succeed in the political arena. But "control" needs to be taken in a more nuanced way, not simply as an epiphenomenon of the will of the powerful—sometimes David does slay Goliath. "Control" will be seen here from a discursive perspective, as attempted, achieved, or contested through participants' practices. To be sure, Wal-Mart is the world's largest corporation (Brunn, 2006) and has very deep pockets to attain its goals. Our focus is on how control is attempted through various communicative and rhetorical practices, so to

speak, control-in-action. To build on the opening epigram, our project here is to investigate the discursive practices of “control (of) the discourse of risk.” How Wal-Mart representatives strategically make their presentation in light of the prior community criticism is the focus of this study. This investigation is important in that it describes how Wal-Mart uses technological and legalistic discourses to circumvent public criticisms. Such knowledge of Wal-Mart’s strategies provides a basis for making some recommendations as regards practice.

In the following two sections the literatures on risk, and on experts, are reviewed to provide a rationale for our research questions. These environmental literatures are read from a discursive analytic perspective; that is, how the participants’ categories or assessments are achieved through their speech practices.

### **Risk**

The central issue in this on-going controversy over the Wal-Mart proposal is the notion of risk. Several risks or untoward consequences have been raised by local residents. The most serious environmental risk is the threat to the aquifer—the town’s source of drinking water. One of the major sources of water contamination in the US today comes from ground-water run-off from big-box store parking lots. Other potential problems that have been raised are the negative economic impact on the downtown and on other grocery stores. Also, cited by residents is the danger resulting from increased traffic and congestion as well as the changing character of the community and continuation of sprawl along the commercial strip. In addition, residents worry about the noise and light pollution the Super Center would have on an adjoining sub-division and retirement home.

Turning now to the literature on risk: in contemporary society we are said to be more aware of risks to the environment associated with economic development than we were in the past (Beck, 1992; Douglas, 1992). Risk has been conceived of as the probability of events combined with the magnitude of consequences (Kasperson, 1992). The probability of catastrophic events is typically very low, but the consequences can be great. However, this characterization of risk is criticized as overly narrow and technical since it fails to consider the processes by which risk becomes represented (Krimsky & Plough, 1988; Slovic, 1999; Pidgeon et.al., 2006). More recent thinking conceives of risk as part objective threat and part socio-cultural experience (Kasperson, 1992; Otway, 1992; Rowan, 1995). Risk involves both real dangers in the world as well as how people experience or socially construct risk.

One approach to broaden this conception of risk is the “social amplification model” (Kasperson, 1992; Kasperson et.al., 2005). Risk becomes interpreted and amplified by various social actors: scientists, governmental members, the press, interest groups, or residents. The amplification process either intensifies or attenuates the signals about risk. As will be seen, the Wal-Mart presentation clearly is designed to attenuate any sense of risk. The insight of this model is the recognition that risk is not simply an objective fact to be read off of some objective test, but is amplified in one direction or the other through social actors’ discourse. This amplification process suggests that risk is essentially a political act.

This social amplification perspective has been criticized for relying too heavily on a transmission model of communication, a one-way process of source-message-receiver. It fails to consider the political, social, and psychological processes which underlie the

amplification or attenuation of risk communication (Pidgeon et.al., 2006). An attempt to extend the social amplification model through focusing on the political debates about risk is “social arena theory” (Renn, 1992). The social arena is metaphor for “the symbolic location of political actions that influence collective decisions” (p. 181). The key to influencing decisions on risk is the social resources that can be mobilized towards one’s ends, e.g., money, power, persuasion, cultural meaning, or evidence. Often in controversies over risk there are competing claims of evidence resulting in confusion, which leads competing groups to moralize issues resulting in further polarization. So the focus needs to be on the communication patterns between political actors, interest groups, and the general public. This more expansive view looks at the various ways parties deal with risk: through science and reason, as feelings and intuitive reactions, and thirdly, as politics (Slovic et.al., 2004). Outcomes are seen as a function of availability of resources and mobilization potential.

Kasperson (1992) calls for “in-depth case studies in which social amplification and attenuation processes are carefully reconstructed in their social and historical context” (p. 176). Along this vein, recent approaches examine the framing and construction of risk within terms of peoples’ local contexts (Roth et.al., 2004; Cox, 2006, ch.6). These studies are “predominately qualitative...seeking to explore talk about, or understandings of, risk where people are directly exposed to hazard...within everyday lives. The emphasis is upon the logics and rationalities that local people bring to bear on an issue” (Pidgeon et.al., 2006, p. 103). For instance in a prior study of the communicative and rhetorical practices during a public hearing, residents drew on the words of others as reported speech to construct the risk of the Wal-Mart proposal (Buttney

& Cohen, 2007). These practices construct the local understandings of risk and serve as the context to which Wal-Mart must respond. This rationale points to our first research question, What discursive practices do Wal-Mart representatives use in framing risk?

## **Experts**

The Wal-Mart representatives at this public hearing are all experts of a kind—an attorney, civil engineer, architect, and traffic analyst. Experts are an interesting membership category in that they can draw upon scientific-technical rationality to support their assessments (Krimsky & Plough, 1988a; Parr, 2005). Such assessments are believed to be objective and measurable. The discourses of science and technology are a source of authority for experts in addressing complex environmental issues (Cohen, 2000). Experts are said to be able to make valid predictions based on their assessments. Access to scientific and technical knowledge allows those with power to legitimate their political decisions (Fischer, 2000). At public forums, experts frequently speak using technical terms or ignore the vernacular discourse of the local residents (Roth, et. al., 2004). These technocratic ways of speaking create a divide between experts and the lay citizenry. Experts characterize the nature of risk and thereby set the parameters of how to address it in the Environmental Impact Statement.

The legal requirement for doing an Environmental Impact Statement (EIS) originated as a way for administrative bodies to examine the consequences of proposed development projects. But according to critics, the EIS has not become the desired policy instrument for environmental protection (Lawrence, 2003, pp. 9-12). EISs are criticized as lacking scientific rigor and peer review; instead they are seen as inherently political favoring the developer. The circumscribing of what is relevant to scientific and



technological issues has been seen as limiting public participation by restricting the public's diverse interests and subjectivity (Killingsworth & Palmer, 1992). The multiple volumes and technical language of the EIS discourage public involvement. Such tomes make it doubtful that anybody has read the entire thing. The objectivist language of the document "overwhelms the reader with methods, instruments, and procedures" (Patterson & Lee, 1997, p. 32). Environmental Impact Statements are written in the experts' "techs and regs" (Walker, 2007); that is, in a technical language combined with legal regulations. Instead of being central to the decision-making process, there is the sense that the EIS is compiled after the decision has already been made (Friesema & Culhane, 1976, p. 339). The covert main goal of the EIS is to avoid legal challenge (Killingsworth & Steffens, 1989, p. 174). As Patterson and Lee put it, "Environmental impact statements diminish the public by law. The administrative regime reduces the 'public' to a bureaucratic step" (1997, p. 29). Public comment on an EIS rarely directly impacts an administrative body's decision, though it may alter the context and positioning of the decision makers in a more environmental way (Dryzak, 2005, p. 102). Community groups often complain that they have been marginalized or manipulated by the EIS process (Lawrence, 2003).

Given that the experts who wrote the draft Environmental Impact Statement and who speak at this public hearing are all employed by Wal-Mart, their neutrality and objectivity may be called into question by audience members. Experts hired by competing interests, or coming from different scientific-technological perspectives, not uncommonly disagree over the risk of a project. Opposing sides may each have their own expert testify. Knowledge of complex matters is frequently uncertain and contested

(Douglas & Wildavsky, 1982). Given that different experts may disagree and that a projection of future consequences is uncertain, underscores the assertion of the “politicalization of risk” (Douglas, 1992). The role of experts in an environmental impact assessment process involves both their authorized knowledge and the public’s trust in the experts as developed through a relationship (Myers, 2004, pp. 158-9). Our second research question becomes: How do the Wal-Mart representatives position themselves in their presentation?

### **Analytic Methods and Data**

Our perspective in studying Wal-Mart’s presentation is discursive constructionism (Buttny, 2004). The project here is to describe the practices that participants use as well as the social, or natural, realities that are thereby constructed. We examine Wal-Mart representatives’ efforts to attenuate risk and examine how this is discursively achieved in the course of their presentation. Drawing from Bakhtin (1981) we can see Wal-Mart as dialogically addressing, reformulating, or avoiding prior citizen complaints about the risk to the aquifer or the local economy. Wal-Mart hires the technical experts to write the Environmental Impact Statement and make this presentation. We examine how expertise, and ultimately attenuating risk, gets accomplished through their representatives’ discursive practices. Wal-Mart’s account is not simply a neutral representation of the likely consequences; obviously there are interests at stake which are constituted through their rhetorical practices (Potter, 1996). Rhetoric can be seen at work in the technical, scientific, and even relational stances that their spokespersons take up (Kinsella, 2007). Our focus on Wal-Mart’s presentation is, not only on the content of their claims about risk mitigation, but also on how these claims get strategically

constructed through various practices.

The data for this study come from a videotape of the public hearing that was held on March 1, 2006 in a town in upstate New York. The Town Board routinely records their meetings and public hearings. Our focus will be on the presentation made by the Wal-Mart representatives. The presentations were transcribed using a modified Jefferson format (Atkinson & Heritage, 1984).

Methodologically the videotape was watched repeatedly and the transcripts read numerous times. Given the background context of the on-going controversy and the prior citizen criticisms, we looked to how Wal-Mart representatives address, transform, or avoid these issues in their presentation. In particular, we examine how these discursive practices unfold, how they are made relevant by the speaker, and what they attempt to construct as social or natural realities.

### **The Setting and Background Context**

A sketch is provided of the ethnographic setting and context. My reason for attending the Wal-Mart presentation originated from being a member of a local environmental group trying to halt this project due to the threat to the aquifer. Given the amount of local criticism against the proposal, I was especially interested in how the Wal-Mart spokespeople would respond to this. There was a sizeable community interest in the Wal-Mart controversy--all the chairs in the meeting hall were filled, people were standing around the walls and over-flowing into an adjoining room. Reporters from the local newspaper and radio stations were in attendance, and the hearings were being videotaped to be aired on community access television. The public hearing was even extended for two more days to accommodate each of the citizens who wanted to make

comments. Wal-Mart representatives began the hearing by delivering a presentation to the community on their site plan and their Draft Environmental Impact Statement.

The evening commences with the Supervisor of the Town Board announcing that the purpose of the public hearing is for the Town Board members to listen to the involved and interested agencies as well as the public's comments on the Draft Environmental Impact Statement (DEIS) as submitted by Wal-Mart. The Supervisor turns things over to the Town's attorney to moderate the hearing. After some preliminary remarks on decorum at the hearing, the attorney calls on the Wal-Mart attorney to begin their presentation.

Wal-Mart's presentation can be heard as a kind of executive summary of their site plan and Draft Environmental Impact Statement. By way of overview, Wal-Mart's attorney begins by characterizing the legal aspects of the environmental impact assessment process. She speaks for about four minutes and then turns it over to their civil engineer. The engineer addresses some of the problems raised by residents and how Wal-Mart will solve them. Additionally, he sketches out some of their proposals on the site plan. The engineer's presentation is the longest at twenty-six minutes. Their architect then speaks briefly for about two and one-half minutes followed by their traffic analyst for about eight minutes. Finally the engineer returns to the podium and describes the financial benefits to the community. Overall, the Wal-Mart presentation lasts for approximately forty-five minutes before turning to comments from different agencies and from the general public.

### **Strategies used in Wal-Mart's Presentation to the Community**

#### **Discursive Uses of the Environmental Impact Statement**

The Wal-Mart attorney begins by drawing on provisions from the State Environmental Quality Review Act (SEQRA) to frame the discussion as being about the Draft Environmental Impact Statement (DEIS). She follows PowerPoint slides which she largely reads from or paraphrases. What is striking about the following excerpt is that the attorney draws on the state code to attempt to limit the range and relevance of the comments for the public hearing.

1. (Pub Hear 3/1/06, 5)

01 Attorney P: ...we're also going to talk about the purpose of the hearing

02 (1.5) the State Environmental Quality Review Act also referred to as

03 SEQRA is a fact-finding process in which to aid a municipality in making a

04 determination (.) as to whether or not a project is appropriate,

((skip one line))

05 The Draft Environmental Impact Statement submitted by the applicant details the

06 potential environmental impacts of the project and the various means to avoid or

07 mitigate any adverse impacts, (1.0) the purpose of the hearing tonight is to gather

08 oral comments on the Draft Environmental Impact Statement from the involved

09 agencies, as well as the public at large

((skip two lines))

10 uhm there are certain uhm procedures and rules that you must keep in mind

11 during this review process, uhm ↑>again statements of general opposition to

12 the project are are really not relevant:=it's specifically designed to< hear

13 comments on the DEIS, um the respon- the applicant is required to respond to

14 any written or oral comments that are mau:de and that are relevant on the DEIS

The attorney characterizes the state code, SEQRA, as “a fact finding process” (lines 2-3). The use of “fact finding” implicates technical expertise in contrast to mere emotional reactions from the public. This is the familiar contrast in the risk literature between the discourse of facts, objectivity, science-technology, and experts, on the one hand, and the public’s expression of feelings, opinion, subjectivity, folk logic and local knowledge on the other (Krimsky & Plough, 1988; Fischer, 2000). Also the characterization of the process as “fact finding” carries a certain epistemological cache while back grounding the political aspects of risk (Slovic et.al., 2004). For instance, what facts are selected or omitted for inclusion in the DEIS, not to mention who has the resources to hire the experts to compile the facts and write the report.

The attorney attempts to focus the hearing as about the DEIS as written by Wal-Mart. This restriction would make irrelevant citizen comments and criticisms about Wal-Mart or other matters not included in the DEIS. The attorney characterizes the DEIS as “detail(ing) the potential environmental impacts... and the various means to avoid or mitigate any adverse impacts” (lines 5-6). Her word choice here is instructive: instead of a straightforward language of ‘risks,’ or ‘environmental problems’ we get the more nebulous term, ‘impacts’ (line 5, 6). As she puts it, “any adverse impacts” can be “avoid(ed) or mitigate(d)” presumably by their technical-experts’ plan. Potential “adverse impacts” or risks can be managed or solved by technological means. As will be seen, much of the experts’ presentation employs such euphemistic language.

This attempt to limit or circumvent the speech in the public hearing from “general opposition” to Wal-Mart, or from other citizen issues, and just respond to the DEIS is a well-worn tactic used by administrators (Cohen, 2000; Lawrence, 2003). As the attorney

proclaims, “statements of general opposition to the project are really not relevant. It's specifically designed to hear comments on the DEIS” (lines 10-12). The attorney here, drawing on the state code, tells the community what is and what is not relevant to the hearing. She issues this directive to the audience, “there are certain uhm procedures and rules that you must keep in mind during this review process” (lines 10-11). She addresses the audience by the second-person pronoun, you, while speaking in an imperative voice about what can and cannot be said by the public.

### **Formulating, Mitigating, or Avoiding Environmental Risks**

Wal-Mart's civil engineer speaks next; he goes through various points or proposals--some of which are found in greater detail in the written DEIS. Our main focus is on how he goes about formulating the various problems or risks cited previously by local residents, and then offering their technical solutions. In addition we consider how he displays expertise in his speech.

How one formulates prior events or discourse commonly reflects the interests or positions of that speaker. In the following excerpt, the engineer formulates the main environmental risk that has been raised while showing a PowerPoint slide of the site map of the aquifer and the proposed Wal-Mart.

2. (Pub Hear 3/1/06, 7)

01 Engineer: uhm the existing aquifer obviously has been one of the major concerns

02 raised by ah: not only the Town: but the County an- and many of the public

03 representatives as well,...

Here the engineer formulates the most contentious environmental issue. Like the attorney, he never speaks of 'environmental risk' or 'aquifer contamination' but uses the

more neutral term “concerns” as a formulation of prior citizen statements. Formulations, of course, commonly reflect the interests or positions of the speaker (Heritage & Watson, 1979). This practice of formulating prior complaints allows one to be selective, not only in what one responds to, but also in how one characterizes the potential problem. By formulating the aquifer as “one of the major concerns” he is able to elide saying anything about the causes or consequences of the concern. The use of “concerns” indicates that such potential problems have been raised previously at prior public hearings, consultations with regulatory agencies, or from letters to the local newspaper. Interestingly “concerns” are something that people have, rather than something attributable to the project or the aquifer. So the formulation, “concerns,” works as a gloss (Garfinkel & Sacks, 1970) which summarizes any number of prior utterances or documents. The word also hearably neutralizes what is potentially at stake.

Formulating potential problems as “concerns” allows the engineer to immediately show ways of alleviating those concerns. A discourse of concerns (or problems) makes relevant ways to assuage them, so much of the engineer’s presentation gets structured by a problem-solution format (Harré et.al., 1999, pp. 96-97).

3. (Pub Hear 3/1/06, 7)

1 Engineer: ah one of the things that has been brought ↑up is there's been some

2 areas: (.) up in the ah Walden Oaks and be↑yond that have had some

3 pressure ↓concerns, one of the ah things that the applicant has proposed is...

In his presentation, this is the initial “concern” that the engineer formulates. He formulates “some pressure concerns” that residents from the adjoining sub-division, Walden Oaks, have expressed. Notice how this language of “concerns” allows him to



avoid saying something more specific, e.g., lack of water pressure. He immediately moves into describing their solution to the envisioned water-pressure problem.

A key component to his presentation is the credibility of Wal-Mart's proposed solutions for mitigating the problems or concerns. Having formulated, "one of the major concerns" (excerpt 2), the engineer then immediately moves to cite their solutions or "controls." In this transcript we examine the presentation of the engineer's technological solutions.

4. (Pub Hear 3/1/06, 7-8)

04 uhm (.) some of the controls: that we are providing fer aquifer protection  
05 >because that's been< one of the major concerns (.) is ah we're putting in  
06 numerous different items and they're all staged (.) um but first of all we're using  
07 oil hoods in all the inlets, the oil hoods are just basically a component that's  
08 placed in there to keep all:: the oils and lighter fluids antifreezes and it localizes  
09 them to that specific inlet. uhm basically those are siz:::ed >if you look at about a  
10 thirty by thirty in- inlet< which is about the size- the smallest one that we use at  
11 approximately a little over thirty gallons that could be held in there so even if a  
12 gas tank ruptured the entire (.) gas tank could be held within that, again what  
13 happens if that's got water in there >that's fine< the water um would then push out  
14 underneath and the lighter fluids would stay up above and stay within that inlet so  
15 it be would pumped out and cleaned (.) and again if you have a ruptured gas ( )  
16 er gas tank people are going to know about it because the car °isn't going  
17 anywhere°

The engineer speaks mostly about their solutions or “controls” and the “numerous different items” (line 6) that they are proposing. He offers the reassuring language of “controls that we are providing for aquifer protection” (line 4). In describing their “controls,” or engineering solutions, the engineer lists them starting with “oil hoods.” He begins by explaining this technology in general terms by citing its function and capacities.

The engineer speaks in both a lay and technical idiom. While he eschews technical terms and describes the technology in ordinary language, to the lay person this technology and its effectiveness may still sound confusing. He illustrates the technology by a hypothetical situation of a car’s gas tank rupturing in the parking lot and claiming that the oil hood would take care of it all. The proposed solutions get articulated in a non-technical way but seem at best sketchy and indeterminate for the layperson’s understanding.

The use of formulations allows the Wal-Mart representatives to characterize prior problems as “concerns” and then immediately move into their solutions or “controls.” We have also seen that such neutral-sounding language works as a gloss and allows the speaker to avoid using more ominous or threatening versions of future possibilities as uttered by the local citizens. Looking at what is said and what is unsaid, consider the following transcript as a way to avoid talking about prior allegations of Wal-Mart’s dire economic impact on a small town.

5. (Pub Hear 3/1/06, 24)

1 Engineer: Uhm:: (.) again one of the things ((reading Pp))Wal-Mart believes in a  
2 free-market competition and sees the benefit of- to all consumers through lower

3 prices, Wal-Mart offers same goods at lower prices at one convenient location,  
4 one of the successes of Wal-Mart is is that many of the people that are on fixed  
5 incomes or have limited transportation (won't-) they can go there and get many of  
6 their items under one roof, and that's been a convenient opportunity for them,  
7 ah the presence of Wal-Mart generally helps the local economy through  
8 increased taxes as well as it draws (.) in many cases other retailers to that area,  
9 again increasing tax revenue and other things

This excerpt is from a concluding section of the presentation in which the engineer speaks of the benefits of having Wal-Mart in the community. He does not formulate prior citizen criticisms or “concerns” about Wal-Mart’s economic effects on the community as has been expressed numerous times at prior forums. Here he does not draw on a problem-solution discourse. But his utterance, “Wal-Mart believes in a free-market competition and sees the benefit of- to all consumers through lower prices” (lines 1-3), can be heard as a justificatory account (Buttny, 1993). This justification is obliquely responsive to previous citizen criticisms of Wal-Mart’s impact on downtown businesses or on other grocery stores.

### **Discursive Uses of Models, Tests, and Technology**

In the prior section we focused on the engineer’s formulation of citizen criticisms of the Wal-Mart proposal. In this section we turn to the engineer offering proposals or findings not raised previously by residents. The aquifer has certainly been the main environmental issue in this on-going dispute. The Wal-Mart representatives have been assiduously careful in their language choices, avoiding terms such as environmental risk, contamination, pollution, and the like. Instead they use more nebulous terms such as

“concerns,” “controls,” “items,” or “impacts.” The exception to this appears in the following excerpt in which the engineer refers to “pollutants.” However, these “pollutants” originate, not from their facilities, but from a different source. By way of background, remember, one of the major environmental problems with the project is the contaminants from ground-water runoff seeping into the aquifer. In the following excerpt the engineer makes a case for a different source of the pollutants and how their proposal can help.

6. (Pub Hear 3/1/06, 14)

01 Engineer: Uhm the last thing I wanted to get on this slide was that we also did  
02 some testing: of a facility: that has the similar system in Central Square ah  
03 New York, and it's ah in that there's some- there was very low levels if any  
04 pollutants >and as a matter of ↑fact (.) if you look at it it was interesting  
05 because one of the things they did with this testing that most people don't do  
06 we actually tested rain water, and found that many of the pollutants were  
07 actually in the rain water not actually (.) being introduced by: ah the parking  
08 lots but >were already in there< (.) if- if somebody ran through that you might  
09 want to take a look at the ph values of the rain water versus the run-off because  
10 it- it does tell you: (.) a lot about what you're see:ing and where some of these  
11 pollutants ↓may be coming from, remember you have an Ohio Basin that's  
12 fairly industrial? some of those pollutants can get into the air and get into the  
13 precipitation and come down, so some of the water-quality provisions that  
14 we're providing may help treat some of those ↓as well.

To paraphrase the engineer's claim here--at a comparable Wal-Mart site the source of the pollutants in ground-water runoff comes not from oil or other emissions from autos in the parking lot, but from air pollution from the Ohio Basin. In comparing the pollutants from the parking lot to the pollutants in the rain, his locution elides any description of how the parking lot may contribute to the pollutants. The use of "actually" does some interesting work here: "the pollutants were actually in the rain water not actually (.) being introduced by: ah the parking lots but >were already in there<" (lines 6-8). "Actually" seems to work here as a way to mark what is surprising or counter-intuitive, but is really the case (Clift, 2001). Notice his caution and search for appropriate language in mentioning the parking lot: after a micro-pause we get the description "being introduced by the parking lots."

We see the engineer positioning the proposal under a banner of science—as merely reporting the results from their tests of the water. On another level, though, we can see him making a case or an argument for their project and pointing a finger at the other polluter. Indeed, their "water-quality provisions" can help control this other pollution from the Ohio Basin without addressing the pollutants from ground-water runoff from the Wal-Mart parking lot.

Throughout their presentation the Wal-Mart representatives have been portraying their site plan as going above and beyond normal expectations to protect the aquifer. The technology they propose, such as oil hoods or sand filters, will "control" the storm water run-off or any accidental spills. Such technologies will alleviate citizen "concerns." Wal-Mart claims to be focusing on "fact-finding" or conveying "information" about the technology or maps of the aquifer. We have seen this strategy of the Wal-Mart

representatives drawing on a rhetoric of “information” or “facts” in portraying their proposal. But when examined closely we can see that the engineer using facts and information to build an argument or make a case for their desired ends. We see this in how the engineer makes a case for their proposal of including a Tire Lube Express in the new Wal-Mart. Notice how the engineer argues that an oil-change facility can be beneficial for the aquifer.

7. (Pub Hear 3/1/06, TLE, 12-13)

01 Engineer: uh: we are proposing a TLE area over here (0.5) ah: the Tire Lube Express?

02 (.) that area over there we are not doing any heavy main- ur any heavy >ah<  
03 maintenance of the equipment or of the ca:rs, it is to have an oil change on there  
04 (.) we see that as a ↑positive aspect for the aquifer and now let me take a: (.) little  
05 reason why, ah if you read through the aquifer protection you'll find in that (.)  
06 almost fifty percent of the contributing area is upland lands not only the aquifer  
07 area that I showed but the lands upwards flowing down into the aquifer, (.) so that  
08 means anything that's polluted in the uplands are actually making its way there  
09 ↑as well, (.) one of the things that (.) we look at is by having ah an oil-change  
10 <facility> we can design that with the cooperation of the Town to include not  
11 only double-wall tanks >but they can also put curbs on it so you actually have  
12 three-way protection< (.) if we can provide you with a low cost oil change (.)  
13 method within the area (0.5) sometimes you take away from that ah instinct of  
14 many people to try to change the oil themselves and ah: I think you could find out  
15 that a lot of people probably don't follow all the appropriate standards of: a  
16 putting the waste or oil where it's supposed to go, ↑now one of the things also

17 when you operate a facility like this you have to accept oil from anyone (.) and  
18 that means that oil– anyone that changes their own oil can bring it to this facility  
19 and it will be stored in that (.) that area (storage) and that would be controlled, one  
20 of the things we've ah we've been willing to do on this one and in respect to that  
21 we'd work with the Town, is to address all those concerns regards- respectful of  
22 the aquifer

Prima facie, it seems counter-intuitive to claim that an oil change facility is beneficial for the aquifer given the potential damage from an oil spill. The engineer makes this case for a Tire Lube Express by drawing on the aquifer protection document to assert that roughly fifty percent of the aquifer's water comes from the uplands. He combines this fact with the hypothetical examples of people changing their car's oil and in the process spilling or disposing of some oil which then finds its way into the aquifer. To paraphrase his rationale, if Wal-Mart can offer a low-cost, oil-change facility, then people will be less likely to change their oil themselves.

The engineer implicitly disavows any stake or interest in this proposal; it is, as he puts it, to be “respectful of the aquifer” (lines 21-22). He positions the project as, again, going above and beyond normal standards with “the double-wall tanks” and the “three-way protection.” What seems like a high risk proposal becomes transformed in his presentation as actually beneficial for the aquifer.

A second theme, evident here that we have seen throughout, is the engineer's efforts at establishing some level of trust through his avowed desire to “work with the Town” and to alleviate all “concerns.” This relational dimension, which seems secondary

to the technical solutions and proposals examined thus far, becomes a focal point of the next portion of the presentation.

### **On Developing a Working Relationship**

Throughout the presentation the Wal-Mart representatives speak in both a problem-solution voice and a relational voice. For instance, the engineer's presentation can be heard at different levels. One is the technical solutions or proposals; the second is more about public relations, about Wal-Mart's image as a responsible neighbor, as a corporation that the Town can trust. Trust is an emerging crucial issue in the risk communication literature (Pidgeon et.al., 2006). Opponents at previous public hearings have brought in or mentioned newspaper articles or internet sites of Wal-Mart's abuses and fines from litigation. This negative image of Wal-Mart gets reinforced by critical stories in the local newspaper or in letters to the editor.

Most of the engineer's presentation has been on technological solutions, but also embedded in this is a relational voice. As he has avowed several times: we are going above and beyond the normal safety standards, and working with local agencies. As he puts it, "we're working with the DEC the County and the Town to establish a- a very good solid (.) storm water ah water quality (entrance) system" and "we'd work with the Town, is to address all those concerns regards- respectful of the aquifer" (excerpt 7). The subtext here can be heard as "Don't worry, trust us, we know what we are doing" (Krimsky & Plough, 1988).

After the engineer, the architect gives a short presentation and concludes by drawing on the importance of "communication" and "dialogue" with the community.

8. (Pub Hear 3/1/06, 19)



1 Architect: and this ah store (1.6) is um par↑ticular (.) uhm to this community  
2 >it's a- it's it's< what Wal-Mart calls the store of the community and  
3 really uhm: by me coming here tonight and introducing (.) >a myself<  
4 and this store to you it kind of open up- opens up an avenue of communication  
5 >I hope< between myself and the community that we can um open a dialogue  
6 (.) where ah I can get some ideas: and some input from you as to how this  
7 store and the esthetics of this store can fit best within your community

Here the architect cites (without irony) the Wal-Mart marketing language, “the store of the community” (line 2). So-called “glocalization” (Fishman, 2006; Lichtenstein, 2006) seems to be at work—applying the global to the local setting--the world’s largest corporation and “this community.”

The architect draws on a rhetoric of communication (Katriel & Philipsen, 1981; Cameron, 2000) to support his claim about the relation of the store to the community. He speaks of his presence here as signaling “an avenue of communication,” “open(ing) a dialogue,” and as “get(ing) some input from you” (lines 4-6).

After the architect and traffic analyst have finished, the engineer comes back to the podium to discuss the benefits of having a Wal-Mart Super Center in terms of jobs, tax revenue, and charitable donations to the community. After listing the financial benefits, the engineer ends the presentation ends with the following statement.

9. (Pub Hear 3/1/06, 24-25)

01 Engineer: Basically in conclusion ((reading PowerPoint)) with the mitigations  
02 proposed no significant um >detrimental impacts are as a result of this  
03 project< ((end reading)) >basically what we're saying is that< we don't-

04 we feel that we've addressed the ah concerns and have mitigated appropriately,  
05 um one of the things we really want to say to you and I think it's impor:tant (.)  
06 in closing with this, is that we hear:? ↓the comments, (.) one of the reasons  
07 that we came in with the alternative drawings today was because we went we  
08 met with the neighbors (.) we tried to hear what they had to say: we tried to go  
09 back and offer alternatives: and we continue to do that throughout this process,  
10 um if anyone has been familiar with this process as many of you have you've seen  
11 this project go through many iterations (.) the building's been moved turned tilted  
12 twisted and put in a lot of different locations to try to provide the best opportunity  
13 for this community, we'll continue in that mode we'll work with the Town and  
14 work with those people that will work with us to try to create the >best °project  
15 we can for this community,° < and I appreciate your time thank you.

The engineer after reading from the PowerPoint slide turns to re-say and expand on “the message” in an extemporaneous way. In his re-stating, he returns to the euphemistic language of “concerns.” Of course the concerns are “mitigated appropriately”--drawing on the legalistic language from the prepared slide.

The engineer continues with a seemingly more personal stance vis-à-vis the audience, “we really want to say to you” (line 5). He has referenced other groups they have spoken to--the Town, the neighbors, the community—but here he uses the second-person pronoun, “you,” to address the audience in a seemingly more personal way. He switches from the technical-legalistic voice to a more relational voice as responsive to the community: “we hear:? ↓the comments” (line 6), and a moment latter in referencing “the neighbors,” “we tried to hear what they had to say” (line 8). To show their two-way

communication, he reminds the audience that they are responsive to these “comments”; they have provided “alternative drawings” or “offer(ed) alternatives” or “moved turned tilted twisted and put in a lot of different locations.” So within this “process” of communicating and working with the community, Wal-Mart can alleviate “concerns” and “provide the best opportunity for this community” (line 12-13). Quite simply, the process points to a “problem-solution” format and economic benefits for the community through working together.

The engineer ends by displaying recognition that not everyone accepts the Wal-Mart proposals and their pro-development picture of technological solutions to potential environmental problems. As he puts it, “we’ll work with the Town and work with those people that will work with us...” (lines 14-15). This last person reference, of course, implies those people against the proposal. The assumption behind “the process” or “working together” is that the proposal, in some form, will become a reality.

## **Discussion**

Here we return to our research questions to take stock of our findings and see how they inform theory. I reflect on my own participation as partisan and as researcher, and offer some suggestions for practice and for future research.

The first research question was to identify the discursive practices used in framing risk. One practice employed several times by the Wal-Mart representatives is formulating residents’ prior complaints about the project. Formulations work to preserve, avoid, or transform what others have said (Heritage & Watson, 1979). As we have seen, the engineer formulates residents’ criticisms about risk as “concerns” or “items.” Such formulations allow him to dialogically reference resident complaints with cleansed,

neutral glosses (Garfinkel & Sacks, 1970). Formulations are a kind of metadiscourse, in that formulations “re-say” what has been already said. Such word choice, at times, functions as euphemism to reference delicate or controversial issues without having to explicitly name them (Schultz, 2001; Mühlhäusler & Peace, 2006). We have emphasized how citizen complaints get neutralized or transformed through the engineer’s formulations.

Formulations are used here to specify Wal-Mart’s preferred version of the background context. The engineer’s formulation of residents’ “concerns” makes relevant how those concerns will be addressed by Wal-Mart. Much of the engineer’s presentation can be heard as structured by a problem-solution discourse (Harré et.al., 1999). By way of speculation, it seems doubtful that a problem would be formulated unless the engineer had a solution to propose for it.

Turning to the second research question of how Wal-Mart representatives position themselves during their presentation. The Wal-Mart spokespersons display expertise in the course of their presentation. The most obvious way the engineer conveyed expertise was by offering technological solutions to their formulation of residents’ concerns. By citing engineering technologies such as oil hoods, catch basins, and three-way protection, he can be seen as having solutions to potential environmental problems. The engineer also displays expertise by presenting counter-intuitive findings. By drawing from scientific documents or chemical tests, he offers surprising positions. For instance, his assertion that according to their tests, most of the pollutants in ground-water runoff come, not from residue in their parking lots, but from contaminates in the rain-water.

In terms of theory on risk, much of the literature is critical of experts' use of technical language at public forums which is not understandable by ordinary citizens (Krimsky & Plough, 1988; Parr 2005; Roth et. al., 2004). As we have seen, the engineer does adapt to the audience by largely eschewing technical language. However, his cursory descriptions of the engineering technology, even in ordinary language, appear insufficient for lay persons' understanding. The engineer displays recognition of this difficulty by formulating the upshot of what he is describing in simpler terms, often introduced by the marker, "basically." Also we saw the attorney attempt to restrict discussion at the public hearing to matters contained in their Draft Environmental Impact Statement. The attorney attempts to limit the relevance of broader topics or issues raised by citizens, such as: the impact on the local economy, the change of community character, or Wal-Mart's past environmental fines.

Returning to address the issue implicit in the epigram--the "control of the discourses on risk." "Control," we argue, needs to be respecified in terms of participants' discursive practices. The attorney's attempt to circumscribe what can be discussed to the DEIS (which Wal-Mart's people have written) is the most blatant move in framing risk. The engineer's practices are less blatant but no less consequential. His formulations and neutral-sounding vocabulary along with their objectivist references to science-technology masks the rhetorical-political aspects of risk. The engineer selectively draws on facts or information, not solely for scientific rigor, but to make the case for their desired ends (Killingsworth & Palmer, 1992; Wynne, 1992; Fischer, 2000). He identifies documents and their chemical tests as just "information," but uses this information to make an argument in support of Wal-Mart's proposals. In terms of a social arena theory approach

to risk, it is not merely mobilizing resources (Renn, 1992), but how these resources of technical and legal expertise get articulated and evaluated in situ. So the engineer speaks as technical expert, but also tacitly, as rhetorician in making Wal-Mart's case.

The attorney's and the engineer's practices are consistent with Walker's (2007) observation that experts speak in "techs and regs" at public forums. The "regs," or regulations, being the attorney's drawing on the state code to specify what is relevant for the Environmental Impact Assessment process; the "techs" meaning the technological answers proposed by the engineer to the environmental risk. Our description of the experts' practices fleshes out how the "techs and regs" are voiced, that is, accomplished discursively in attempting to "control the discourse on risk."

In addition to speaking of these "techs and regs," the engineer avows wanting to build a working relationship with the Town. As the engineer says (paraphrasing): "We will work with the Town Board, the neighbors, and the local and state agencies to provide the best store for the community." To establish trust and such a working relationship, he points to the avenue of communication that they have opened up with the community (Slovic, 1999; Slovic et.al., 2004). He cites the many changes that they have already made to the site plan based on feedback from the neighbors and the Town.

A surprising finding is how metadiscourse gets used at points throughout these presentations, that is, how the Wal-Mart representatives talk about communication (Craig, 2005). Here we critically reflect on the quality of this "communication." On the one hand, the engineer and architect speak of "dialogue," "openness," and "sustaining a working relationship." But on the other, their attorney began the presentation by instructing the community as to what is relevant and irrelevant to comment on during the

public hearing. In effect, the attorney attempts to circumvent the range of citizen comments, while the engineer and architect call for building a relationship through communication (Gregory et.al., 1992). While the engineer calls for dialogue and willingness to work with the town, the assumption underlying such relational statements is that the Wal-Mart plan, in some form, will be approved and eventually realized. In terms of social positioning theory (Harré & Langenhove, 1999) the Wal-Mart representatives present themselves as both technical experts and trustworthy partners, but they also may be heard as ensor over what is relevant to the hearing, and as rheter in using facts, findings, and documents to make an argument for their project.

The value of doing an in-depth case study is that it allows us to get at the nuances and particulars of Wal-Mart's discursive strategies—their attempt to “control the discourse of risk.” We can see three main strategies from the Wal-Mart presentation: circumscribing the relevance of residents' comments to the Draft Environmental Impact Statement, providing technological solutions to their version of residents' concerns, and wanting to develop a working relationship through communication. The discursive practices used to implement these strategies come from our study in upstate New York, but such practices, we hypothesize, are generalizable to other political controversies and public forums. Indeed, many of our findings are consistent with other studies in framing risk. Our contribution comes from how risk gets transformed or avoided through the presenters' discursive practices.

In reflecting on my own part in all this, as noted above I originally participated in this public hearing as an environmental group member against the project. Once I decided to study the hearing, I was able to better understand Wal-Mart's practices

through using the tools of discursive analysis. This study is decidedly descriptive and critical in intent; I base the analyses on empirical grounds available to the reader through the transcripts.

In terms of practice, environmental groups need to point out what developers avoid discussing or minimize through their word choice, euphemisms, or formulations. Residents need to show that what is presented in the Draft Environmental Impact Statement is not simply “the facts” or “information” or the best science/technology, but that the developer is making an argument or building a case for their project. Also, residents need to highlight the seeming contradiction between restricting what can be discussed at public forums and the relational talk of building trust and a partnership between the corporation and the community. While public discussion needs to be curtailed at some point in the deliberation process, the developer’s focus on engineering solutions and minimizing of the socio-economic consequences for the town is troublesome.

From this data we do not know if Wal-Mart will be successful in convincing the citizenry and the Town Board (Halebsky, 2006), but we do know better how they go about making their case. For future research the next question would be how do residents make sense of and respond to Wal-Mart’s presentation? Given Wal-Mart’s strategies of attempting to circumscribe public discussion to the DEIS and frame risk in terms of their engineering solutions, what do local citizens or Town Board members make relevant from this presentation in their own statements at the public hearing? My original plan for this study was to include the public’s responses to Wal-Mart’s presentation, but laying



out Wal-Mart's strategies and practices were more than enough for the article-length format.

Another important question would be how do decision makers draw on experts assessments in making their decision? Given that the developer, the environmental group, and the Town Board each have "their own experts" who may disagree with one another, how can lay persons be informed by such lack of consensus? In terms of practice, can there be a neutral expert, or meta-expert, who can assess the competing reports and provide the Town with the different options and the likelihood and magnitude of environmental or socio-economic damage?

## Notes

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## References

- Atkinson, J.M., & Heritage, J. (1984). Transcript notation. In J.M. Atkinson, & J. Heritage (Eds.) Structures of social action (pp. ix-xvi). Cambridge: Cambridge University Press.
- 1 Bakhtin, M.M. (1981). The dialogic imagination. M. Holquist (Ed.), C.Emerson and M. Holquist (trans.). Austin: University of Texas Press.
- 2 Beck, U. (1992). Risk society. London: Sage Publications.
- Brunn, S.D. (2006). Wal-Mart world: The world's biggest corporation in the global economy. New York: Routledge.
- 3 Buttny, R. (1993). Social accountability in communication. London: Sage Publications.
- Buttny, R. (2004). Talking problems: Studies on discursive construction. Albany: State University of New York Press
- Buttny, R., & Cohen, J.R. (2007). Drawing on the words of others at public hearings: Zoning, Wal-Mart, and the threat to the aquifer. Language in Society, 36, 735-756.
- Cameron, D. (2000). Good to talk? London: Sage Pub.
- Clift, R. (2001). Meaning in interaction: The case of *actually*. Language, 77, 245-291.

- Cohen, M.J. (2000). Environmental sociology: Social theory, and risk: an introductory discussion. In M.J. Cohen (Ed.) Risk in the modern age (pp. 3-31). London: St.Martin's Press.
- Cohen, J.R., & Buttny, R. (2008) "This is not about Wal-Mart:" Immeasurable environmental risk in the rhetoric of public meetings. Presentation at the National Communication Association Convention, San Diego, CA.
- Cox, R. (2006). Environmental communication and the public sphere. Newbury Park, CA: Sage.
- Craig, R.T. (2005). How we talk about how we talk: Communication theory in the public interest. Journal of Communication, 55, 659-667.
- Douglas, M., & Wildavsky, A. (1982). Risk and culture. Berkeley: University of California Press.
- Douglas, M. (1992). Risk and blame: Essays in cultural theory. New York: Routledge.
- Dryzek, J.S. (2005). The politics of the earth: Environmental discourses (Second edition). Oxford: Oxford University Press.
- Fischer, F. (2000). Citizens, experts, and the environment. Durham, NC: Duke University Press
- Fishman, C. (2006). The Wal-Mart effect and a decent society: Who knew shopping was so important? Academy of Management Perspectives, 20, 6-25.
- Friesema, H.P., & Culhane, P.J. (1976). Social impacts, politics, and environmental impact statement process. Natural Resources Journal, 16, 339-356.
- Garfinkel, H., & Sacks, H. (1970) On formal structures of practical action. In: J.C. McKinney & E.A. Tiryakian, eds. Theoretical sociology: perspectives and

- Developments (338-66). New York: Appleton-Century-Crofts.
- Grabill, J. T., & Simmons, W. M. (1998). Toward a critical rhetoric of risk communication: Producing citizens and the role of technical communicators. Technical Communication Quarterly: 415-441
- Gregory, R., Keeney, R., & Von Winterfeldt, D. (1992). Adapting the environmental impact statement process to inform decision makers. Journal of Policy Analysis and Management, 11, 58-75.
- Halebsky, S. (2006). Explaining the outcomes of antisuperstore movements: A comparative analysis of six communities. Mobilization, 11, 443-460.
- Harré, R., & Langenhove, L. van (Eds.) (1999). Positioning theory. Oxford: Blackwell.
- Harré, R., Brockmeier, J., & Mühlhäusler, P. (1999). Greenspeak: A study of environmental discourse. Thousand Oaks, CA: Sage.
- Heritage, J., & Watson, D.R. (1979). Formulations as conversational objects. In G. Psathas (ed.), Everyday language: Studies in ethnomethodology, 123-62. New York: Irvington.
- Kasperson, R.E. (1992). The social amplification of risk: Progress in developing an integrative framework. In S.Krimsky, & D.Golding (Eds.), Social theories of risk (pp. 153-178) Westport, CT: Praeger Pub.
- Kasperson, J.X., Kasperson, R.E., Pidgeon, N., & Slovic, P. (2005). The social amplification of risk: Assessing 15 years of research and theory. In J.X. Kasperson, & R.E. Kasperson (Eds.), The social contours of risk, Vol. 1 (pp.202-229). London: Earthscan
- Katriel, T., & Philipsen, G. (1981). "What we need is communication":

- “Communication” as a cultural category in some American speech.  
Communication Monographs, 48, 301-317.
- Killingsworth, M.J., & Steffens, D. (1989). Effectiveness in the environmental impact statement. Written Communication, 6, 155-180.
- Killingsworth, M.J., & Palmer, J.S. (1992). Ecospeak: Rhetoric and environmental politics in America. Carbondale, Southern Illinois University Press.
- Kinsella, W. (2007). Presentation at the International Communication Association Annual Convention, San Francisco.
- Krimsky, S., & Plough, A. (1988). Environmental hazards: Communicating risks as a social process. Dover, MA: Auburn House Publishing.
- Lawrence, D.P. (2003). Environmental impact assessment: Practical solutions to recurrent problems. Hoboken, NJ: John Wiley & Sons.
- Lichtenstein, N. (Ed.) (2006). Wal-Mart: The face of twenty-first-century capitalism. New York: The New Press
- Mühlhäusler, P., & Peace, A. (2006). Environmental discourses. Annual Review of Anthropology, 35, 457-479.
- Myers, G. (2004). Matters of opinion: Talking about public issues. Cambridge: Cambridge University Press
- Otway, H. (1992). Public wisdom, expert fallibility: Toward a contextual theory of risk. In S.Krimsky, & D.Golding (Eds.), Social theories of risk (pp. 2153-228) Westport, CT: Praeger Pub.
- Parr, J. (2005). Local water diversely known: Walkerton Ontario, 2000 and after. Environment and Planning D: Society and Space, 23, 251-271

- Patterson, R., & Lee, R. (1997). The environmental rhetoric of “balance”: A case study of regulatory discourse and colonization of the public. Technical Communication Quarterly, 6, 25-40.
- Pidgeon, N., Simmons, P., & Henwood, K. (2006). Risk, environment, and technology. In P. Taylor-Gooby & J. Zinn (Eds). Risk in social science (pp. 94-116). Oxford: Oxford University Press.
- Potter, J. (1996). Representing reality. London: Sage.
- Renn, O. (1992). The social arena concept of risk debates. In S.Krimsky, & D.Golding (Eds.), Social theories of risk (pp. 179-196) Westport, CT: Praeger Pub.
- Roth, W-M., et.al. (2004). Those who get hurt aren’t always being heard: Scientist-resident interactions over community water. Science, Technology, & Human Values 29: 153-183.
- Rowan, K. E. (1995). What risk communicators need to know: An agenda for research. In B.R. Burleson (ed.), Communication yearbook, 18 300-319. Newbury Park, CA: Sage.
- Schultz, B. (2001). Language and the natural environment. In A. Fill & P. Mühlhäusler (Eds.) The ecolinguistics reader (pp. 109-114). New York: Continuum
- Slovic, P. (1999). Trust, emotion, sex, politics, and science: Surveying the risk-assessment battlefield. Risk Analysis, 19, 689-701.
- Slovic, P., Finucane, M.L., Peters, E., & MacGregor, D.G. (2004). Risk as analysis and risk as feelings: Some thoughts about affect, reason, risk, and rationality. Risk Analysis, 24, 311-322
- Walker, G. (2007). Presentation at the Conference on Communication and Environment,

Chicago.

Wynne, B. (1992). Risk and social learning: Reification to engagement. In S.Krimsky, & D.Golding (Eds.), Social theories of risk (pp. 275-297) Westport, CT: Praeger.