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# THE INTERACTING ARGUMENTS OF RISK COMMUNICATION IN RESPONSE TO TERRORIST HOAXES

Timothy L. Sellnow, Robert S. Littlefield, Kathleen G. Vidoloff, and Elizabeth M. Webb

Responding to terrorist hoaxes requires two arguments that "interact" (Perelman & Olbrechts-Tyteca, 1969). First, responders have a plan in place, pre-established or spontaneously generated, that can mitigate or manage any crisis emerging from the threat. Second, responders must scrutinize available evidence in order to recognize and refute false claims at the earliest point possible. This study examines the risk communication of the New Zealand government's response to a bioterrorist hoax. The study reveals that effective hoax responses attack the source, reinterpret the claims made by the hoaxer, and acknowledge the value of what is threatened. **Key words:** risk, crisis, hoax, terrorist, bioterrorism

The lingering threat and uncertainty generated by terrorism takes a psychological and financial toll. Potential victims live in nagging fear of future assaults. As Lerbinger (1997) explained, "In particular, it is the psychological element of malice that makes each terrorist act, no matter how small, deeply repugnant" (p. 145). Government agencies dedicate considerable financial resources to protecting citizens against terrorist assaults. This financial burden is complicated by the fact that terrorism is, by its nature, fraught with uncertainty. Government agencies can never be certain they have devoted sufficient resources for mitigating the most urgent terrorist threats. This uncertainty also diminishes the effectiveness of risk communication. Heath, McKinney, and Palenchar (2005) argued that terrorists exploit uncertainty in order to erode responders' ability to "communicate knowledgeably on the facts and issues surrounding a specific risk" (p. 157). Such uncertainty is paramount in terrorist hoaxes. These false claims of attack increase anxiety and force government agencies to devote valuable resources in response to claims that never actually manifest in assault. Thus, terrorist hoaxes pose a notable challenge for government agencies who must respond to them. A significant component of this challenge involves risk communication.

This study explores the complex communication required for responding to terrorist hoaxes. Specifically, the study examines the New Zealand government's risk communication in response to a bioterrorist hoax. In the study, we address the seemingly contradictory communication demands on government agents as they must explain that a threat is likely a hoax while noting simultaneously that they are responding as if the danger were genuine. Our analysis begins by reviewing the nature of terrorist hoaxes. We then characterize hoax responses as interacting arguments. Next, we apply this perspective to the New Zealand case. Finally, we offer a series of conclusions about the case and implications for communicating in a hoax environment.

Timothy L. Sellnow is Professor of Communication, University of Kentucky; Robert S. Littlefield is Professor of Communication, North Dakota State University; Kathleen G. Vidoloff and Elizabeth M. Webb are doctoral candidates in Communication, University of Kentucky. This article was developed under DHS Science and Technology Assistance Agreement No. DHS-2007-ST-061-000003 awarded by the U.S. Department of Homeland Security. It has not been formally reviewed by DHS. The views and conclusions contained in this document are those of the authors and should not be interpreted as necessarily representing the official policies, either expressed or implied, of the U.S. Department of Homeland Security. The Department of Homeland Security does not endorse any products or commercial services mentioned in this publication. An earlier version of this manuscript was presented on the top papers panel of the Argumentation and Forensics division at the 2008 meeting of the National Communication Association. Correspondence concerning this article should be addressed to: Timothy L. Sellnow, University of Kentucky, 249 Grehan Building, Lexington, KY, 40506. Phone: 859.257.2295. Email: tim.sellnow@uky.edu.

#### CONTEXTUAL FRAMEWORK

Heath and O'Hair (2008) vividly depict the inherent nature of uncertainty in terrorism with the statement, "uncertainty and instability are the playground of terrorism" (p. 25). By maximizing uncertainty, terrorists have the capacity to upset a system's stability. As such, uncertainty has the capacity to "demoralize and intimidate" innocent people (p. 25). Similarly, Heath et al. (2005) see uncertainty as a key variable in all communication surrounding terrorism. Ultimately, such uncertainty disrupts a targeted audience's ability to comprehend the actual likelihood of attack because the terrorists' actions "focus attention on the malevolence of the act rather than the probability of the occurrence" (Heath & O'Hair, p. 18). Clearly, hoaxers seek to heighten uncertainty by capitalizing on the fear that persists in a terrorist context. In other words, the fear of a looming attack, whether legitimate or not, can diminish the ability of a target audience to keep potential threats in proper perspective.

Hoaxes appear with some regularity in a variety of settings. One such setting involves explosive devices placed on or near school campuses. Such devices have recently been detonated on school property in Colorado, Missouri, and Georgia (Dorn, 2001). These attacks have increased the uncertainty and, consequently, the impact of bomb threat hoaxes. Ronald D. Stephens, Executive Director of the National School Safety Center, suggests that such hoaxes create a notable financial burden, because "you've got to respond as if it's the real thing every time" (Bowman, 2004, para. 10). This financial pressure is leading some school safety consultants to recommend preemptive strikes as a deterrent to hoaxers. Officials in states such as Vermont and New York have followed this advice by aggressively prosecuting such hoaxers at the felony level. Other states are following suit. Considering the frequency of hoaxes and the relative rarity of actual crisis events in schools, Halikias (2004) cautioned against treating all threatening situations the same way: "Myopic attention to low base rate or rare events is one factor that encourages judgment errors" (p. 599). Instead, he advocated that school administrators should "be willing to assess a diverse group of students and not adhere strictly to models of dangerousness evaluations or targeted school violence" (p. 606).

Collins (2004) explained that in the wake of legitimate terrorist attacks, such as 9/11 and the succeeding attacks on transit systems in Madrid, London, and Glasgow, the countries affected experience an emotional sense of mass solidarity. After 9/11, for example, Collins noted that the display of all forms of American flags, claims to have donated blood, and the willingness to tolerate increased restrictions on privacy were commonplace. This solidarity was further reflected in popular culture as music, sports, movies, and television programs commemorated the loss. He concludes that this solidarity tends to fade over time, eventually regressing to normal levels. However, during the period of intense solidarity, Collins argued, prevailing attitudes promoted a sense of hysteria. This hysteria may be empowering to hoaxers. As emotions run high, hoaxers engage in what Collins described as "the attack emulation process" (p. 82). He explained that this emulation was most common during the period of heightened fear following the anthrax attacks on media and government officials in 2001. For example, during the period of October 1-18, 2001, there were 2,300 anthrax reports in the United States, some accidental and others stemming from innocuous white powder mailed by hoaxers. Nearly all reports were false. Collins contended that this increased vulnerability was due, in part, to the media's intense coverage of the subject while public concern was at its apex.

In fact, a USA Today/CNN/Gallup poll indicated that "67 percent agreed that the media were overreacting to the anthrax threats, and 47 percent said that the public was overreacting" (Collins, 2004, p. 83). This excessive coverage was due in part to what Ricchiardi (2001) called "a stroke of evil genius" (para. 3). By attacking the media, the perpetrator(s) behind the anthrax attacks assured intense media coverage of the event. Nevertheless, the mainstream media was relatively effective in sorting rumors from credible stories following 9/11. Larosa (2003) argued that "despite unusually difficult reporting circumstances, [the mainstream news media] did a remarkably good job of separating out false rumors" (p. 14). Larosa found that, while a myriad of rumors circulated the internet, there were only four instances "where the mainstream news media extensively carried false reports" (p. 14).

In her study of emotional reactions of diplomats, military personnel, and civilian Americans who were living abroad following 9/11, Speckhard (2003) found the majority of those she interviewed admitted to having experienced an "assault on previously held world assumptions" and to perceiving a "new sense of uncertainty about the future" (p. 156). Speckhard also observed that the uncertainty related to new procedures for bomb drills and mail handling heightened anxiety levels. The following example of an anthrax hoax emphasizes the intensity of these emotions:

One woman told of her husband calling frantically from work to tell her to remove *The Economist* magazine from their home because an embassy e-mail (later discovered to be a hoax) warned that some copies had been laced with anthrax. "You should have seen me with my plastic gloves and tweezers trying to take it out of our house," she recounted. "He was so afraid. He didn't want the kids to be infected." (p. 156)

In retrospect, the above example seems rather extreme. Yet the complexity and uncertainty surrounding terrorist events made such behavior appear rational. Thus, this is the potential impact of hoaxes.

Speckhard (2003) offers several practical implications in her study of hoaxes. She observed that the public tends to focus excessively on the terrorist event and subsequent threat, "especially if the media supports an obsessive new interest" (p. 157). To counter this immoderation, Speckhard recommends keeping the threat in perspective so that the actual risk was clear. She also suggests that fear can be managed through efforts to enhance the public's "self-awareness and vigilance" in helping to prevent a terrorist attack (p. 157). Periods of increased concern are also times when safety measures such as workplace security measures and individual behavior can and should be assessed to determine their effectiveness, the need for compliance, and the importance of making life choices that are in line with one's tolerance for risk. Speckhard proposes that such measures can help the public "make adjustments to reduce anxiety, aid in creating new schemas, and even inoculate resilience into the workforce for the 'new world' we live in after September 11" (p. 157).

#### HOAX RESPONSE

By their nature, hoaxes begin with a threat communicated either verbally, as in a letter or phone call, or nonverbally, as in a benign device or substance designed to resemble a bomb or noxious material. In either case, responders must provide relevant stakeholders (often including the general public) with messages that either validate or refute the threat. At their inception, however, distinguishing between a well-designed hoax and a legitimate attack is at best difficult and at worst impossible. Because well-designed hoaxes capitalize on uncertainty and perceptions of vulnerability, responders have the difficult task of simultaneously

enacting a response plan, while still assessing the threat's legitimacy. Thus, a hoax situation requires first and foremost that responders assess the veracity of the terrorists' claims. If this assessment produces doubt as to the threat's legitimacy, responders must manage the *interaction* of two distinct arguments until the hoax is eventually exposed and refuted:

- Responders must argue they have a plan in place, either pre-established or spontaneously generated, that can mitigate or manage any crisis emerging from the threat.
- Responders must scrutinize available evidence in order to recognize and refute false claims at the earliest point possible.

While addressing the interaction of these arguments, responders must avoid any temptation to prematurely diminish the uncertainty of the event or to over-reassure stakeholders there is no risk (Seeger, 2006).

We base our analysis in argumentation because a hoax situation requires a "discussion technique for convincing or refuting an adversary and for coming to an agreement with others about the legitimacy of a decision" (Polkinghorn, 1983, p. 196). This discussion technique requires practical reasoning based on the values and norms to which a group or society is already committed. Perelman and Olbrechts-Tyteca provide a framework for interpreting and analyzing such practical reasoning.

#### The Interaction of Hoax Arguments

Perelman and Olbrechts-Tyteca (1969) provide an established and detailed framework for analyzing the interaction of arguments. They explain that arguments can interact on four levels: "interaction between various arguments put forward, interaction between the arguments and the overall argumentative situation, between the arguments and their conclusion, and between the arguments occurring in the discourse and those that are about the discourse" (p. 460). The level of interaction most relevant to hoaxes is the latter–interaction between the discourse and arguments about the discourse. Specifically, well-designed hoaxes require responders to argue they are prepared for a potential crisis, but they must establish this argument in a context where the hoaxer's claims are concurrently questioned and, when possible, soundly refuted. To complicate the situation further, responders must recognize the level of fear perceived by their stakeholders so that they can communicate with a corresponding level of compassion (Seeger, 2006). For Perelman and Olbrechts-Tyteca (1969), fear that is widely held by stakeholders may strengthen a hoaxer's argument by contributing to its "capacity for resisting objections" (p. 461).

When arguments interact in the manner described above, Perelman and Olbrechts-Tyteca (1969) explain that stakeholders make judgments based on the argument's strength. The strength of an argument "shows itself as much by the difficulty there is in refuting it as by its inherent qualities" (p. 461). In this case, hoaxers attempt to establish false claims that are plausible and daunting. In doing so, hoaxers make a "deliberate overestimation" that has the potential to increase the perceived strength of their claims (p. 464). The task of responders, then, is to decrease the strength of the hoaxer's claims, thereby fortifying their own argument of preparedness. Perelman and Olbrechts-Tyteca articulated several strategies that "diminish the force" (p. 467) of an opponent's interacting arguments. We summarize these strategies as attacking the source, reinterpreting opposing claims, and recognizing the value of what is attacked. Each strategy is summarized below.

Attacking the source. Knowledge of a hoaxer's motives or identity can lead to questions of authenticity. Accordingly, responders can, if they have enough information, diminish the

strength of a hoaxer's claims simply by attacking the source's credibility. Perelman and Olbrechts-Tyteca (1969) explain that "either in advance, or after delivery, the effect of some arguments can be played down by attributing their effect to factors inherent in the person of the speaker, instead of to their own value" (p. 467). The goal, then, is to discredit the speaker in an effort to diminish the strength of her or his claims. If, for example, responders suspect a threat is a hoax they may emphasize the devious nature of the offender and question the offender's wherewithal to actually enact the existing threats.

Reinterpreting the opposing claims. Perelman and Olbrechts-Tyteca (1969) offered two general strategies for reinterpreting the evidence. First, one can argue that the opponent's claims are routine. By definition, crises represent non-routine events that must be managed through extraordinary measures (Hermann, 1969; Ulmer, Sellnow, & Seeger, 2007). To the extent that a hoax can be characterized as routine, its perceived magnitude is diminished. As Perelman and Olbrechts-Tyteca (1969) explain: "Another way of lessening the strength of arguments is to emphasize their routine, easily foreseeable character, making them old stuff to the hearer" (p. 468). Events such as college pranks or "copycat" threats following a legitimate event can be classified as routine hoaxes. Perelman and Olbrechts-Tyteca explained that anticipating such hollow claims makes them "banal" (p. 468) arguments while simultaneously serving as a "sign of competence" (p. 469) for the responder. For Perelman and Olbrechts-Tyteca, the mere act of labeling a threat as a routine hoax can reduce the strength of the hoaxer's claim:

An argument can lose its force also, not by having been anticipated in its concrete singularity, but if it can be shown, by labeling it with a technical term [in this case hoax], that it belongs to the category of arguments that the theoreticians have picked out and classified as overbold . . . The audience thus enlightened and enabled to recognize the banality of the argument and to appreciate that it is a device, will retroactively modify its appraisal of its strength. (p. 469)

In short, hoaxes are a routine problem for responders. In cases where responders can raise reasonable suspicion that a potential crisis is a hoax, the strength of the hoaxers' claims is weakened.

Responders may also diminish the strength of opposing arguments by challenging and thereby refuting their evidence and reasoning. For Perelman and Olbrechts-Tyteca (1969), this reinterpretation of a hoaxer's claims involve "taking up of one's opponent's argument and drawing from it a conclusion different from, or even opposite to, the conclusion he [sid] drew from it" (p. 469). Although this reinterpretation process may involve any level of evidence, claims involving the application of science or physics are particularly vulnerable. If, for example, a hoaxer claims to have poisoned a population, the means and noxious agent of this hideous act is the subject of evaluation. If the claims cannot withstand the measures of science, the claims are likely to be considered false.

Value. The act of responding to a threat, in itself, gives a degree of merit to the threat. Simply put, a threat that is preposterous does not merit attention. In cases where a hoax is suspected, but not certain, the perceived need to respond with interacting arguments is based on the value of what is threatened. As Perelman and Olbrechts-Tyteca explain (1969):

To make the refutation of consequence and deserving of consideration, one has to make a sufficiently high estimate of what one is attacking: This is necessary not only for purposes of prestige, but in order to better gain the attention of the audience and secure certain strength for the future for the arguments one uses. (p. 470).

If a hoaxer threatens something that is of little perceived value, the public is not inclined to take note or to advocate devoting resources to addressing the threat. Conversely, if the threat

May 10	MAF receives letter stating that vial of foot and mouth disease virus has been released on Waiheke Island. Direct location is not known. MAF releases press release on threat investigation and provides question and answer document on situation. 18 of 39 farmers on Waiheke Island are contacted.
May 11	MAF holds media conference to inform public of its efforts. 30 of 39 farmers on Waiheke Island are contacted. Hotline established for farmers to call if not yet contacted.
May 12	MAF holds media conference stating that no symptoms of foot and mouth have been found.
May 13	MAF holds media conference. Press calls today "D-Day" as symptoms would begin to show if foot and mouth disease has been released on the island. MAF launches awareness campaign on foot and mouth disease symptoms.
May 14	No foot and mouth disease symptoms appear.
<b>May</b> 15	No foot and mouth disease symptoms appear.
May 16	Local newspaper receives second hoax letter. MAF's press release officially declares situation a hoax. Average foot and mouth disease incubation period passes.
May 17–24	MAF does not issue any press releases. MAF reduces crisis response teams.
May 25	MAF's Operation Waiheke officially stands down.

Figure 1. Timeline.

is to something of value, a response is likely to be perceived as essential and justifiable. The hoaxer's attack on something of value shows his or her disdain for the essence of that which is valued.

#### THE CASE

On May 10, 2005, New Zealand's Prime Minister received a threat letter claiming a release of a vial of the foot and mouth disease virus on Waiheke Island. The case was assigned to New Zealand's Ministry of Agriculture and Forestry (MAF). Suspicious about the content of the letter, but considering the threat viable, MAF responded quickly to disseminate information to media outlets alerting farmers who could have been affected by the intentional contamination. MAF held daily press conferences and involved many industry organizations in the emergency response effort to specifically address farmers' concerns and general public concerns. It tested cattle in the alleged area of infection, but found no cases of foot and mouth disease. On May 14, 2005, a local newspaper received a second letter which was verified by the New Zealand police and a North American law enforcement agency to be from the original hoaxer. Further tests continued to show no cases of foot and mouth disease on Waiheke Island. In addition, the content of the second letter lacked scientific merit and gave further assurance to MAF that the threat was a hoax. On May 16, 2005, MAF issued a press release officially declaring the foot and mouth disease threat a hoax. Figure 1 provides a general timeline of the case.

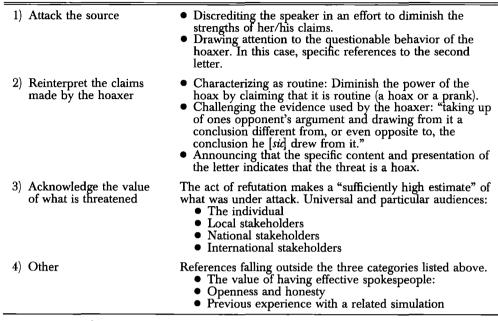


Figure 2. Categories of responses designed to mitigate the severity of the hoax.

#### **METHOD**

#### **Participants**

The data for the present study consisted of transcripts from five interviews conducted with high ranking officials who were directly involved with decision-making during the New Zealand foot and mouth disease (FMD) hoax. As such, these five individuals served as key responders. We chose interviews for data collection because the interaction of the key responders during the actual crisis event was not documented. Hence, reflective interviews offered the only viable means of gathering data about the decision making process throughout the case. The interviews were recorded and transcribed. One prepared statement made by a community leader to the public was included in text form. The texts had some words/phrases deleted from the transcriptions, due to sound issues and/or the need to protect the confidentiality of the interviewees. The researchers reviewed the context of the remarks and completed the phrases/sentences by including missing words within brackets [e.g., added word(s)] to reflect the insertion of words into the original text. The interviewees are not identified by name (as required by IRB), but agreed to be identified by their title or general area of responsibility.

#### The Emergent Design

Because our analytical framework, provided by Perelman and Olbrechts-Tyteca (1969), provided clearly distinguishable categories (see Figure 2), we chose to employ content analysis to organize our analysis of the interview transcripts. The process of analysis began with researchers' establishment of categories and a coding scheme (Lindlof & Taylor, 2002). Categories give meaning to units of analysis and cover "an array of general phenomena:

concepts, constructs, themes, and other types of 'bins' in which to put items that are similar" (p. 214). Categories may be drawn from "existing theory and research" (p. 214) and applied to particular contexts or cases where one might expect to find their manifestation. In the present study, we applied the categories established by Perelman and Olbrechts-Tyteca (1969) to interview transcripts of the New Zealand responders.

Two independent coders completed several close readings of the transcripts of interviews conducted with officials and community leaders involved with the New Zealand FMD hoax to familiarize themselves with the content. Following their readings, the coders approached the transcripts deductively searching for data that reflected the categories. Particular comments made by the interviewees reflecting the categories were isolated and labeled. For example, any statement directly or indirectly that made reference to challenge the character of the hoaxer was coded as *attacking the source*. Statements explaining how the stakeholders drew different or opposing conclusions than the hoaxers were categorized as *reinterpret the claim*. Any statement exploring how the stakeholders recognized the value of what was threatened by the hoax was characterized as fitting the *value* category.

Each coder completed the coding process independently. The coders then met to establish consensus and to clarify any confusion in the category descriptions. After further discussion, the category descriptions were refined. The final description of each category is provided in Figure 2. Following a discussion of the categories with two additional content experts, the coders returned to the transcripts to identify best examples of each category. These examples were used to illustrate the categories and strategies designed to mitigate the severity of the hoax.

#### RESULTS

Using examples drawn from interviews with various officials and individuals within the agencies dealing with the New Zealand hoax, the following comments illustrate the hoax framework advanced in this study. The four general categories of response (attack the source, reinterpret claims made by the hoaxer, acknowledge the value of what is threatened, and other) will be discussed individually, followed by implications.

#### Attack the Source

Initially, the officials attacked the source by discrediting the initial source of the hoax and drawing attention to the questionable behavior of the hoaxer (in this case, specific reference in an effort to diminish the strengths of the claims).

Discredit the hoaxer in an effort to diminish the strength of the claims. There were several instances where the hoaxer was attacked. Immediately after the initial threat, one high-ranking official described the character of the hoaxer as "irresponsible" and "senseless" by commenting:

Yes, it was an expensive and foolish prank that caused a great deal of unwarranted stress and heartbreak to innocent people. It put our international trade in jeopardy and threatened the financial base of our economy. Nothing can justify that time of [sid] irresponsible and senseless activity.

Other officials were equally discrediting in their comments. For instance, a high ranking communications official described the hoaxer as "criminal" and a high-ranking executive within the Federated Farmers of New Zealand asked, "What kind of an idiot writes a letter like that?"

Draw attention to the questionable behavior of the hoazer. The behavior of the hoazer was questioned consistently by the responders. The Post-clearance Director of Biosecurity at the Ministry of Agriculture and Forestry (MAF) explained that

one of the things we got the media doing early on was villainizing the person who wrote the letter and that was a deliberate strategy. . . . For several nights the media would, they'd interview people on the street saying what do you think of the idiot who did this? They were terrible, they'd call him a loser and so, that was really good that they targeted any anger or frustration at the person who wrote the letter rather than at the things that were annoying or inconveniencing people.

By discrediting the hoaxer and drawing attention systematically to the hoaxer's behavior, the crisis responders were able to advance the argument that the threat was minimal and that the public and stakeholders should not take the threat seriously.

#### Reinterpret the Claims Made by the Hoaxer

Despite the belief that the FMD threat was a hoax, the responders were also quick to show that they were prepared to respond, should the threat become reality. This was accomplished by characterizing the threat as routine, claiming the hoax was a prank, challenging the evidence used by the hoaxer, and using the content and format of the hoax message as evidence supporting the belief the threat was a hoax.

Characterize as routine by claiming the hoax is a prank. Because the responders needed to establish their preparation and readiness to handle a crisis, messages reflected that dealing with the threat of FMD was routine. Several officials reinforced this position. A high-ranking communications director within the New Zealand Food Safety Authority (NZFSA) established the need for this careful balance between treating the threat as a hoax versus a reality:

Basically, we took the view that it was probably a hoax, but that we had to be really, really certain of that so we would treat it as real. . . . We were acting as if it was real, but understanding the chances were quite high that it was a hoax.

The Biosecurity Director for MAF in New Zealand described the routine process of putting measures in place to be ready, while understanding that the threat would likely turn out to be a hoax:

We actually communicated that we were of the opinion that we were dealing with a hoax and therefore we put measures in place, but we (um) are going to manage the hoax but we weren't going to actually go excessive with those measures.

One of the ways the local responders could demonstrate their routine handling of the threat was to set up the necessary two-week survey of the affected livestock to see if they were infected. A high-ranking official at MAF confirmed this response:

We had a look at it, the police had a look at it, they assisted, they got an opinion from [several] international enforcement agencies they're not allowed to reveal and after that we said, "Yeah, we're concerned that it's a hoax," so we scaled operations back but we did keep some [activity] going really just to satisfy the international partners that we were doing surveys for the full 14 days for the disease to become apparent.

Challenge the evidence used by the hoaxer. The clearest indication of the responders' mitigation of the threat through reinterpretation of the claims came as the officials considered the scientific evidence of the hoaxer. This reinterpretation came as the responders reviewed the contamination method described in the initial letter. The lead communication officer at MAF

illustrated this criticism of the evidence: "Some information contained in the letter regarding the alleged method of contaminating livestock with FMD also raised concerns with our animal health experts as to the veracity of the letter." The Biosecurity Director summarized his review of the evidence from the letter: "Simply, we didn't think it was a terrorist action. We thought it was a hoax and the nature of the letter took us that way."

Content and presentation indicates a hoax. As the responders sought to reinterpret the claims made by the hoaxer, the actual content and presentation of the threat became suspect. The Biosecurity Director for MAF confirmed these suspicions:

The letter itself, you have to actually have read the letter, there were a number of dynamics to it—concerns about the political situation in New Zealand, the fixation system in New Zealand... the demand for money, so when you looked at the letter, the letter itself was (um) pretty unusual in its makeup. Then when you looked what's in those various elements, they all seemed to be a little bit strange.... so looking at it initially, in reading the letter, it was reasonable to conclude that this was a hoax.

In addition, the nature of the content suggested that the threat was not well-conceived. The Post-clearance Director of Biosecurity for MAF explained:

I guess one of the things that helped we had an early assessment from the police, you know, saying that they, they have a threat assessment unit, they looked at the letter and said it was credible enough to be taken seriously that there were enough inconsistencies or questions . . . things around it that made them think that the release probably hadn't happened and they deduced from their own [findings] things like we don't have foot and mouth disease anywhere in the country . . . so it would have had to be brought over. We thought it was a little odd that if someone was going to do it they'd chosen [Waiheke]. So there was enough in there to make us doubt that it was real but you know we had to take it seriously.

Finally, the sequence of the letters and their similarity enabled the responders to reinterpret the threat as a hoax, as explained by the Biosecurity Director:

Another thing we did is we didn't release the letter, and then ... when the second letter came and we were able to get the criminologist to see if the letter, to verify that they were the same author and they came from the same author. But when we received the second letter ... we could have the confidence that ... it wasn't a sort of a second hoax, if you like.

Through a process of characterizing the threat as routine, reinterpreting the hoax by questioning the scientific evidence, and using the content, form, and sequence of the actual hoax document, responders were able to demonstrate a level of confidence that, while considering the threat to be a hoax, they were still responding using procedures described as routine.

#### Acknowledge the Value of What is Threatened

As the responders established the likelihood that the threat was actually a hoax, they still needed to acknowledge the value of what was threatened in order to demonstrate a motivation for treating the hoax and a potential crisis. MAF recognized and acknowledged the catastrophic consequences an FMD outbreak would create for New Zealand. In doing so, the responders established the extreme value of the hoaxer's target.

Personal and community stakeholders. The responders established a clear value to the farmers and general public regarding the impact of a potential threat of FMD. A communication officer at MAF suggested these groups understood what FMD would mean to them:

FMD is rare amongst many of the threats to New Zealand's Biosecurity in that much is known about the disease and the potential economic impacts to this country. The general public and farmers already have a high level of awareness and understanding of the potential impacts of this disease here.

As a group, the islanders pulled together to demonstrate their support for the efforts of the responders, suggesting they valued the need to work together in dealing with the hoax. This was evident in the comments of the Biosecurity Director for MAF:

The islanders on Waiheke Island are very proud, very strong people and without that their sole support, I think we would have gotten no real sense of control .... we were lucky in that the, the leaders of the community group from the island were very, very supportive and we quickly took them ... in helping us, working with us, to find out where the farms were.... It was actually sort of all New Zealand pulling together against this major risk to the country.

National stakeholders. The responders clearly understood the importance of this potential threat and extended a belief that a FMD crisis would affect every stakeholder in the country. The Chief Executive of the Federated Farmers in New Zealand portrayed this view:

In New Zealand, 20% of our exports are based on [beef] . . . There would be no one in New Zealand that would not be affected . . . Everyone understands that this was not just you know, a farmer's [problem]. New Zealand gets foot and mouth, every single New Zealander is worse off. Especially worse off than the day before foot and mouth came.

Clearly, the national reputation of New Zealand was at stake, as the communications director at MAF declared:

It's just critical that you do that [communicate openly and honestly with stakeholders] for a whole, for a whole range of reasons and you know we're dealing here in the case of a major emergency not just with personal reputation, the reputation of the ministry of agriculture and forestry, we're dealing with ultimately the reputation of New Zealand so there, you know, you know reputation is something that you just don't mess around with.

For this reason, the media were credited by a communication officer in the NZFSA with covering the story in a manner that reported the potential threat of an FMD outbreak judiciously: "I think that they [the media] understood the gravity of the situation. They understood what this would do to New Zealand's economy to have a foot-and-mouth disease actually present in New Zealand."

International stakeholders. The responders also made a concerted effort to demonstrate to the international stakeholders the value of what was threatened by acknowledging their concerns and suggesting that the New Zealand authorities were taking the necessary steps to contain the potential crisis. As the Biosecurity Director for MAF reported:

[The additional contact] was one of reassurance of what we believed was happening and to give the citizens overseas the confidence that we had this thing under control and we knew what we were doing and that we weren't dealing with something here that was bigger than what we were finding in the media, etc.

Keeping channels of communication open with the international stakeholders about the steps being undertaken to contain the crisis was critical, as the Post-clearance Director of Biosecurity at MAF pointed out:

Internationally, we had to make sure that we could absolutely be trusted to be open and honest and truthful with our trading partners and any risk that information might be withheld or we might hold something back and then have a leak, you know we just didn't want to go there.

The economic impact of an uncontained crisis would be devastating to New Zealand and its international stakeholders, as the same official explained:

There's been economic impact assessments on foot and mouth disease, basically saying if we had an outbreak and it wasn't controlled and eradicated within you know two months or something and the economic impact on New Zealand would be about ten billion dollars in the first six months and 20 billion within the year. And for an economy our size, you know that's a huge hit. And so, yeah, it's pretty major. . . . The reserve bank said that they did notice . . . a slight drop in the value of the New Zealand dollar but that it recovered very quickly as . . . financial institutions gained confidence [in] our assurances that the letter was a hoax and that we were taking actions to mitigate any risk just in case it wasn't a hoax. So it was a very short-term effect on currency.

The responders took action to demonstrate that what was threatened was of high value. This was reflected through the personal and local stakeholders, national stakeholders, and the international community. A unified effort on the part of all stakeholders to mitigate the threat was the result of the responders' words and actions.

#### Other

The model of responses designed to mitigate a hoax allows for other themes to be identified. With this in mind, two other themes emerged: the importance of spokesperson aptitude and the value of maintaining open and honest communication.

A communications officer with the NZFSA illustrated the value of having effective spokespeople:

We were incredibly fortunate that we had the two spokespeople we used from here.... both very good communicators and both people that relate well with New Zealanders. They both have quite an engaging style and we used them .... It was fortunate that both of them are very good communicators, and that both understand what we told them.... We have given them quite a bit of training in risk communication that they understood the need to do that – to communicate with compassion.

A second aspect that benefited the responders was their open and honest communication throughout the event. The Post-clearance director of Biosecurity at MAF emphasized the importance of transparent communication when dealing with the emotional complexities of a hoax:

The other big lesson is really just a reminder that managing the organism or the disease, that's the easy part. And the stuff we did on the island, testing cows and doing the survey and tracing and all that stuff, that's easy but the hard part is managing the infections and politics, the media and all that kind of stuff. You know that's where the real challenge is at. And I guess if I was to pick just one more it would have to be that the value of open and honest communication, you know just being completely transparent, providing as much information as you can. You know if people want to criticize, that's fine but at least they'll be doing it on a basis of being as fully informed as we can make them.

Several of those interviewed for the study emphasized the role of a previous simulation exercise in establishing clear lines of communication with stakeholders. When the FMD hoax emerged, the responders were able to rely on previously established and tested lines of communication. Thus, this previous experience contributed to the open flow of communication throughout the hoax event.

These two themes in the "other" category provide additional insight into some of the variables that may have affected the ability of the responders to manage the FMD crisis while acknowledging the likelihood that it was a hoax.

#### CONCLUSIONS AND IMPLICATIONS

Clearly, the New Zealand FMD case serves as an example of successful risk communication in response to a hoax. The government agencies worked in concert to deliver a clear, reasonably cautious, and unified response to claims that, if true, would have been devastating to New Zealand's beef industry, specifically, and the country's economy, in general. In this section, we offer conclusions specific to the New Zealand case and related implications for risk communicators in general who may face potential hoax situations.

#### Attack the Source

The New Zealand responders were blunt and open in their criticism of the hoaxers. Initially, they discredited the character of the hoaxers by labeling them "idiots" and suggesting that if they were ever caught by the farmers, they would be "skinned alive." The responders indicated, however, that the role of criticizing the hoaxers was quickly usurped by the media. This criticism by the New Zealand media served three purposes. First, the media's direct attack on hoaxers enabled the responders to focus on refuting the evidence (discussed further below). Second, the media's attack on the hoaxers focused blame squarely on the perpetrators and did not shift blame toward any potential failures on the part of the government. Any shifting of blame toward the government's response or failure to respond adequately would have diminished the responders' capacity to act. Third, the media served as an objective source that validated the risk communication provided by the government's responders. Maintaining a positive relationship with the media is a long-held recommendation or best practice in risk and crisis communication (Seeger, 2006). This study clearly illustrates that maintaining a positive and open relationship with the media is equally valuable in responding to hoax situations.

To discredit hoaxers, organizations and agencies must have a clear understanding of the hoaxers' motives and means for accomplishing their claims. Without this knowledge, responders cannot openly challenge the credibility of hoaxers. Thus, as organizations and agencies engage in risk and crisis planning, they should take account of potential adversaries, including the motives, the means, and the potential influence of such possible foes. This preparation would enable organizations and agencies to quickly communicate the information necessary for characterizing the source of a suspected hoax. This characterization should clearly assess the adversary and the veracity of its claims. Planning ahead in this manner allows for a much more efficient and credible response. Such tracking of adversaries may not always be possible. Pranksters, for example, may produce little if any information prior to a hoax. If, however, an organized terrorist group poses an ongoing threat, proactively gathering information about the group, depending on access to information and available resources to expend on the tracking process, could be helpful in resolving a hoax situation.

#### Reinterpret Claims Made by the Hoaxer

From the onset, the responders believed this FMD threat was a hoax. Still, they wisely understood that the consequences of failing to respond, should the threat prove true, would be devastating. Thus, they offered the interacting argument that the case was likely a hoax; yet, the agencies were well-prepared and took steps to address any potential threat. By introducing the argument that the case was likely a hoax, the responders generated two important benefits. First, the responders' indication that they had compelling evidence

suggesting the threat was likely a hoax diminished public alarm. As mentioned above, failures in addressing public concern at the onset of hoax situations can be devastating (Collins, 2004; Speckhard, 2003). Second, the responders indicated that, by introducing the likelihood that the threat was a hoax, they were able to communicate the interacting arguments. While responders were taking measures to respond appropriately should the threat prove true, they were not devoting excessive resources to the situation. In retrospect, this was a wise strategy. As Halikias (2004) noted, all hoaxes should not be treated the same. If there is sufficient doubt in the credibility of the hoax, resources should be devoted to the hoax judiciously.

Although the strategy of introducing the likely possibility that the FMD threat was a routine hoax worked well in this case, the strategy has obvious limitations. Simply suggesting a threat is likely a hoax is irresponsible unless the responders have compelling evidence to support this claim. Suggesting an event is a hoax and subsequently having the assumed hoax prove real could result in added loss of life and property, as well as the almost certain loss in credibility for the responder. Accordingly, organizations and agencies should be wary of immediately dismissing a threat. A strength of the New Zealand responders was their access to multiple agencies who could offer informed assessments about the validity of the hoaxers' claims. The New Zealand responders were also able to conduct tests to physically determine whether or not FMD had been contracted in the area. As agencies and organizations plan for potential crises and hoaxes, they should consider what resources would be available for determining the validity of threats or claims of attack. Coordinating such associations prior to an event is advisable.

#### Acknowledging the Value of What is Threatened

As Perelman and Olbrechts-Tyteca (1969) explained, there is little or no need to respond to threats such as hoaxes if they do not threaten something that is valued by the audience. The New Zealand responders were unified in their recognition of what was threatened by the FMD hoax. As the responders frankly noted, New Zealand's credibility, in the context of international trade, was at stake. If New Zealand were found to have FMD contamination on its soil, the country would have seen its opportunities to export beef plummet. The financial impact could have reached an excess of 10 billion dollars. Local farmers would have faced bankruptcy and the government agency leaders would have been humiliated. Without doubt, the New Zealand hoaxers concocted a scheme that posed a wide scale threat to one of the country's most valued industries. Hence, the responders were justified in constructing a highly public and carefully calculated response.

The responders' message effectively united farmers, local leaders, national industry and government agencies, and international marketing partners. This macroscopic focus satisfied two immediate needs. First, this inclusive effort enhanced the responders' credibility. Having the support of relevant stakeholders at all levels provided objective support for the responders and reinforcement of their message. Second, the recognition of what was at stake provided justification for the responders' calculated dedication of resources for responding to what was widely recognized as a potential hoax. Again, acknowledging the value of what was at stake served as an interacting argument with the claim that the threat was likely a hoax.

Thus, acknowledging the value of what is threatened in the initial stages of a hoax event is an effective strategy. As risk communicators frame the situation for a public audience, they would be wise to emphasize the potential impact if the threat turns out to be legitimate.

Doing so provides a rationale for the interacting claims of doubt and caution. Without an explanation of potential peril to something of communal value, dedicating resources to managing a potential hoax may have the appearance of excess or improvidence.

Additional categories arising from the analysis, coded as "other," involve the importance of spokesperson aptitude and the importance of open and honest communication. The New Zealand responders praised their primary spokespersons for their skill and knowledge. Without skilled spokespersons, the responders' arguments may not have been presented in as cogent a manner.

As organizations and agencies plan for crises and potential hoaxes, consideration of who would best serve as spokesperson is essential. Hoax situations require the careful interaction of two seemingly contradictory arguments. Spokespersons must have the credibility and capacity to simultaneously argue that the validity of the threat is in doubt, but that responding with an abundance of caution is an appropriate use of time and resources. Organizations and agencies should consider who would best meet this demand as spokesperson prior to an actual event.

The New Zealand responders were also fortunate in that they had recently completed an exercise enhancing their knowledge and preparation for responding to an FMD outbreak and allowing them to fortify their relationship with key stakeholders. This previous work enhanced the responders' credibility and established communication channels through which MAF could communicate openly and honestly to its stakeholders. Several of the responders made reference to this advance training as a contributor to their success. This type of training is also fitting with the best practices of risk and crisis communication (Seeger, 2006). Clearly, these are elements of a hoax response that warrant investigation in future research.

#### Limitations

As we discuss the implications of this study, however, the fact that the New Zealand case focused on a potentially devastating attack on the country's economic livelihood rather than the potential loss of human lives is relevant. The applications may vary in hoax situations involving the threat to human lives. In addition, this study relied on interviews conducted after the crisis event. As with any such retrospective data collection based on individual perception, there is some risk that the subject's understanding of events could be impaired by bias and the fallibility of human memory.

#### Conclusion

Hoaxes are an inevitable problem in the ongoing effort to cope with terrorism. The New Zealand case provides insight into how responders craft their risk communication messages in response to the contrasting demands of a hoax situation. Further study of the risk communication in terrorist hoax situations is needed. For example, this study suggests that further understanding of the media's function in hoax responses is needed. Analysis of additional terrorist hoax cases will also advance our understanding of the communication opportunities and constraints in varying hoax situations. Most importantly, this study provides a perspective that accounts for the responders' need to both see the threat as a possible hoax and to articulate a fitting response plan should the threat prove true. Studies in risk communication cannot eliminate the occurrence of terrorist hoaxes. Such research may, however, enhance our capacity to respond to such hoaxes in a manner that ultimately

reduces psychological harm and the tendency to respond with excessive resources. This is the challenge.

#### REFERENCES

- Bowman, D. H. (2004). Bomb threats taking financial toll. Education Week, 24, 1-23.
- Collins, R. (2004). Rituals of solidarity and security in the wake of terrorist attack. Sociological Theory, 22, 53-87. Dorn, M. (2001, February). Bomb threat basics: Handing bomb threats in schools. School Planning and Management, 40,
- Halikias, W. (2004). School-based risk assessments: A conceptual framework and model for professional practice. Professional Psychology: Research and Practice, 36, 598-607.
- Heath, R. L., McKinney, D. B., & Palenchar, M. F. (2005). Community right-to-know vs. terrorists' exploitation of public information. In H. D. O'Hair, R. L. Heath, & G. R. Ledlow (Eds.), Community preparedness and response to terrorism: Communication and the media (pp. 125-166). Westport, CT: Praeger.
- Heath, R. L., & O'Hair, H. D. (2008). Terrorism: From the eyes of the beholder. In H. D. O'Hair, R. L. Heath, K. J. Ayotte, & G. R. Ledlow (Eds.), Terrorism: Communication and rhetorical perspectives (pp. 17-42). Cresskill, NJ: Hampton.
- Lasorsa, D. (2003). News media perpetuate few rumors about 9/11 crisis. Newspaper Research Journal, 24, 11-21.
- Lerbinger, O. (1997). The crisis manager: Facing risk and responsibility. Mahwah, NJ: Erlbaum.

  Lindlof, T. R., & Taylor, B. C. (2002). Qualitiative communication research methods, (2<sup>nd</sup> ed.). Thousand Oaks, CA: Sage.

  Perelman, C., & Olbrechts-Tyteca, L. (1960). The new rhetoric: A treatise on argumentation. London: University of Notre Dame Press.
- Polkinghorn, D. (1983). Methodology of the human science: Systems of inquiry. Albany, NY: State University of New York Press.
- Ricchiardi, S. (2001, December). The anthrax enigma. American Journalism Review, 23(10), 1-6.
- Seeger, M. W. (2006). Best practices in crisis communication: An expert panel process. Journal of Applied Communication Research, 34, 232-244.
- Speckhard, A. (2003). Acute stress disorder in diplomats, military, and civilian Americans living abroad following the September 11 terrorist attacks on America. Professional Psychology: Research and Practice, 34, 151-158.