

CROSS-NATIONAL CONFLICT SHIFTING:
A CASE STUDY OF THE DUPONT TEFLON CRISIS
IN CHINA

By

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by

Yimin Wang

I would like to dedicate this thesis to my parents and my sister.
They light up my life with their ever-lasting love.

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Few previous crisis studies have focused on transnational processes, which could provide a fresh and valuable perspective for the global public relations field of study in terms of transnational crisis planning and implementation. Thus, this thesis examines and interprets a transnational crisis, the DuPont Teflon crisis, focusing on the interaction between the involved transnational corporation's crisis management efforts and the global media coverage. This crisis originated in the United States due to the U.S. Environmental Protection Agency's action against DuPont, and then unexpectedly shifted to China and turned into an escalated domestic crisis. The purpose of this study was to (1) illustrate various challenges in crisis management posed by transnational processes, and (2) test and expand the cross-national conflict shifting (CNCS) theory.

In this study, DuPont's news releases and an interview with its public affairs manager were analyzed to identify its response strategies throughout the life cycle of the Teflon crisis. In addition, a quantitative content analysis of the English and Chinese

language news coverage of the Teflon crisis was conducted to test the CNCS theory and examine the media reception of DuPont's response strategies.

The study found DuPont China unprepared for the crisis in terms of early signal detection and prompt initial response. DuPont subsequently implemented a series of active turnaround actions and multiple response strategies. However, the damage to the company's reputation and the Chinese Teflon market due to its response lapses in the early stage of the crisis could be hard to recover from in the short term.

The findings of the study indicated that DuPont employed a strategy mix mainly combining clarification, comparison, and bolstering strategies, supplemented by strategies of attack, shift blame, and praising others. These strategies were used to offer a competing narrative considering the unfavorable perceptions held by its stakeholders and redefine the alleged acts to less offensiveness. DuPont's combined strategies were found internally coherent and partially corroborated by the media coverage.

The study indicated a reversed CNCS phenomenon: the conflict involving a transnational corporation shifts from a home country to a host country through international media and results in greater impact in the host country. The impact could potentially lead to repercussions in the corporation's home country. Based on the findings from testing of the hypotheses, the study suggested interpreting such a phenomenon from three perspectives: the *crisis management performance* of the involved transnational corporation, the *level of media interest* in the involved issue, and the unique and complicated *social and cultural context* of the involved country.

CHAPTER 1 INTRODUCTION

Globalization of politics, business transactions, news, and information technology has blurred traditional geographic boundaries as information flows instantly and freely across borders. Today transnational organizations are operating under the oversight of global players such as non-governmental organizations (NGOs), governments, and global media.

According to Molleda and Connolly-Ahern (2002), transnational corporations' (TNCs) decisions, actions, and operations that affect domestic publics in a country could also impact transnational publics in many locations and home publics at their headquarters. In order to study public relations practices during such transnational processes, a team of researchers developed the theory of cross-national conflict shifting (CNCS) with various propositions (Molleda & Connolly-Ahern, 2002; Molleda & Quinn, 2004; Molleda, Connolly-Ahern, & Quinn, 2005). Within this theoretical framework, a conflict or crisis involving a TNC in one country could potentially shift to another country or countries, facing the threat of an escalated crisis, which could tarnish its reputation and even result in negative financial consequences at a transnational level.

Crisis response research has been an important and increasingly growing area in the public relations field (e.g., Benoit, 1997; Coombs, 1995; Coombs, 1999c; Gonzales-Herrero & Pratt, 1995; Hearit, 1999; Heath & Millar, 2004; Ihlen, 2002). However, few previous studies have focused on cross-national or transnational processes, which could offer a fresh perspective of systematic crisis preparation for TNCs (e.g., Taylor, 2000).

Often, a cross-national crisis appears unanticipated and unreasonable. Close studies of existing cross-national crises are imperative for the global public relations field to better understand the conflict or crisis dynamic complicated by interactions among key players and other contextual or environmental factors (see Verčič, L. Grunig, & J. Grunig, 1996; Sriramesh & Verčič, 2003).

Thus the purpose of this paper is to first integrate the theory of CNCS and crisis response literature, and then introduce, examine, and interpret a transnational crisis focusing on the interaction between the involved TNC's crisis management efforts and the media coverage. This recent corporate crisis, the DuPont Teflon crisis in China, originated in the United States due to the U.S. Environmental Protection Agency's (EPA) administrative action against DuPont, which then shifted to China where it transformed into a consumer product safety crisis.

This case study provides a good opportunity to (1) illustrate various challenges in crisis management practices posed by transnational processes and (2) test and expand the theory of CNCS in a unique Chinese scenario. In addition to examining the dynamic evolution of the DuPont Teflon crisis, the study analyzes DuPont's crisis response discourse by evaluating its internal coherence and determining its external corroboration through a systematic analysis of the Chinese media and international media coverage.

China is one of the fastest growing markets in the world, yet with a relatively short history and weak tradition for public relations practice and research. Thus this study seeks to examine the crisis communication planning and implementation strategies employed by public relations managers working for a TNC expanded to the Chinese market. Besides, this study also seeks to expand the knowledge base of global public

relations by adding a unique Chinese perspective with its distinct social and cultural context.

CHAPTER 2 LITERATURE REVIEW

Cross-National Conflict Shifting

According to German international business scholars Weldge and Holtbrügge (2001, p. 323, cited in Molleda & Connolly-Ahern, 2002), today transnational corporations (TNCs) are confronted with “globally active groups,” which oversight their behaviors in different operational sites. Berg and Holtbrügge (2001, p. 112, cited in Molleda & Connolly-Ahern, 2002) acknowledge that “interest groups in one country condemn multinational corporations for what they are doing in other countries.” Conflicts, therefore, are no longer isolated in a single country where they originated, but may be fought in other countries where interest groups can “best push through their position” (Weldge & Holtbrügge, 2001, p. 324, cited in Molleda & Connolly-Ahern, 2002).

Molleda and Connolly-Ahern (2002) borrowed this concept of cross-national conflict shifting (CNCS) from the discipline of international management and introduced it to the public relations academia in 2002. They illustrate and expand the concept to a systematic conceptualization of CNCS theory as it relates to the global public relations field.

With today’s unprecedented power of Internet communications, a local issue could easily shift across national borders and impact stakeholders internationally. Such cross-national conflict shifts involve a variety of publics at various geographical levels, namely,

host, home, and transnational publics (e.g., NGOs and activist groups, global media outlets, shareholders) (Molleda & Connolly-Ahern, 2002).

To illustrate the CNCS conceptualization, Molleda and Connolly-Ahern (2002) provide a case study where a legal incident involving America Online Latin America (AOLA) in Brazil caused repercussions in the U.S. and European financial markets.

Molleda and Connolly-Ahern (2002) further elaborate the conceptualization of CNCS as:

There are organizational decisions, actions and operations that affect publics in one country and have an impact internationally. This impact seems to be greater at the home country of the organization or organizations involved, which could be explained by the relevance and proximity of organization for the home publics. Domestic conflicts are increasingly shifting worldwide because of the growth of international transactions, transportation and communication, especially information technology. (p. 4)

Molleda and Quinn (2004) expand the dynamic of CNCS theory and use four additional cases to illustrate its various components, including: (1) the characteristics of the issue, (2) the ways a national conflict reaches transnational audiences; and (3) the parties involved or affected (p. 3). Molleda and Quinn propose ten propositions for further testing (p. 5-7):

Proposition 1. Cross-national conflict shifting is mainly related to corporate social performance issues and negative economic consequences of globalization.

Proposition 2. The magnitude of a cross-national conflict shifting will increase when it starts in an emergent or developing economy because of the greater pressure the transnational corporation will face in the host country and from the international activist community.

Proposition 3. Conflicts that occur in developed nations usually have a shorter life and do not cross borders as often as conflicts that start in developing nations or emergent economies.

Proposition 4. A greater number of involved parties will characterize a cross-national conflict shift in which a developed nation's transnational corporation is the principal participant of the crisis.

Proposition 5. A lower number of involved parties will characterize a cross-national conflict shift in which a developing nation or emergent economy corporation is the principal participant of the conflict.

Proposition 6. Transnational corporations that produce or commercialize tangible, boycottable products are more likely to receive attention than those who produce and commercialize intangible services.

Proposition 7. Transnational corporations headquartered in developed nations that produce or are part of a national conflict outside their home country will attract significant attention from global NGOs, international regulatory bodies, national governments, organized citizen groups, and international news agencies and global media outlets.

Proposition 8. The direct involvement of a transnational corporation in a cross-national conflict shift will produce greater consequences and demand a more comprehensive set of responses than a transnational corporation that is indirectly related to the issue.

Proposition 9. National conflicts shift to the international arena when (primarily) global NGOs or media report on the situation to audiences or publics in different parts of the world. However, there will be occasions in which the transnational corporation itself alerts authorities in its home country about improper actions or behaviors the transnational corporation is involved overseas.

Proposition 10. National conflicts with a great human-interest focus are likely to be shifted to the international arena.

To test these propositions, Molleda et al. (2005) conduct a content analysis of news coverage of a Lesotho (a Southern African nation) bribery scandal which was shifted to the international scenario, indicating the intricacy and magnitude of interactions amongst different players involved. Three hypotheses are tested and supported:

Hypothesis 1. News media outlets will publish stories about international conflicts in greater length when the story focuses on corporate players from the news media's country of origin.

Hypothesis 2. The news coverage of the Lesotho case will be characterized by the use of more sources and quotes in the North American (Canada-United States) news coverage than in the European and African coverage.

Hypothesis 3. The news coverage of the Lesotho case will be more extensive (i.e., number of sources and number of quotes) in Europe than Africa, yet less intensive than in North America (Canada-United States).

Molleda et al. (2005) call for more studies to further test and develop the theory of CNCS. Future work is expected to include case studies of cross-national conflict shifts not directly involving a government function, other media sources besides newspapers, and a wider range of language sources in cases involving a non-English speaking country (Molleda et al., 2005).

Thus in this thesis the DuPont Teflon crisis in China is introduced to serve such purposes, focusing on a corporate crisis response perspective. This recent cross-national conflict shift or transnational crisis originated from the United States due to the U.S.

Environmental Protection Agency's administrative action against DuPont, and then shifted to China where it transformed into a consumer product safety crisis.

Crisis Response

Organizational crisis is typically associated with an untimely event that “has actual or potential consequences for stakeholders’ interests as well as the reputation of the organization suffering from the crisis” (Heath & Millar, 2004, p. 2). Crisis involves events and outcomes about which key stakeholders make attribution regarding cause and responsibility (Coombs & Holladay, 1996). If poorly managed, crisis can damage the organization’s reputation and its efforts to create understanding and maintain mutually beneficial relationships with its stakeholders. It may even mature into a public policy issue and affect the organization’s ability to compete in the marketplace (Heath & Millar, 2004). Today, organizations are becoming more susceptible to crises due to a variety of environmental developments (Barton, 1993).

Stakeholder Activism and the New Media

According to Hearit’s (1999) review, Grunig’s (1989, 1992, 1997, cited in Hearit, 1999) situational theory of publics identifies three factors—“problem recognition,” “constraint recognition,” and “level of involvement”—to interpret the active degree stakeholders engage in seeking information and criticizing the organization under question. Following this reasoning, high degree of problem recognition, low degree of external constraint, and high degree of emotional or financial involvement would prompt latent publics to become more active publics and get involved in a crisis situation (Hearit, 1999).

Today, new communication technologies have empowered individuals with an unprecedented degree of information access and public influence (Badaracco, 1998).

Websites, chat rooms, and other online community forums have permeated into people's daily life. Individuals become more likely to access information concerned, link with other like-minded stakeholders, share information and observations, influence each other's meaning systems, and unite to initiate coordinated actions (Coombs, 1998; Cozier & Witmer, 2001; Hearit, 1999). With easy access to the Internet and electronic publishing, and the emergence and increasing popularity of personal journalism—blogs, the general public, rather than a limited number of social elites, are allowed to accelerate awareness, participate in the coverage of an incident, and exert influence on the crisis evolution. Therefore, the new media have indeed resulted in a heightened level of problem recognition and involvement and a lowered level of external constraint. Stakeholders are increasingly becoming more active and vocal when dealing with organizations under siege (Hearit, 1999).

Stakeholder groups such as customers, shareholders, employees, governments, NGOs, and representatives of the media, have become more and more important players in organizational crises.irate customers are more likely to speak out about consumer issues and take them to the public (Maynard, 1993). Disgruntled shareholders have fought hard to exert more control over corporate governance (Star, 1993). Activist groups are more organized and shrewd than ever to initiate and instigate negative public relations campaigns, boycotts, and negative information dissemination through the Internet (Mitroff, 1994). Furthermore, corporations are challenged by interventions from governments and NGOs with regard to their business ethics and behaviors (Coombs, 1999c).

Media, or the firestorm of media attention following an issue or an accident, have long been viewed by many public relations practitioners at the epicenter of catalyzing and sustaining crises (Coombs, 1999c; Ketchum, 2004; Moore, 2004). Today new communication technologies have enabled the media to far exceed the traditional print media and extend to encompass faster, 24/7, more versatile and interactive channels. On the other hand, focusing on the instant releasing and updating of breaking news stories, Internet newsgroups are typically less strictly monitored in terms of news sources and facts' accuracy (Hearit, 1999).

In today's high-tech, high-volume communication environment, the instant transmission of news through cables and the Internet across the globe can turn a formal isolated local issue or crisis into an international hot topic within minutes (Coombs, 1999c; Ketchum, 2004; Moore, 2004). Due to the media interest in crises, a situation in a minor market that used to be of an insignificant influence may quickly become major news in any market in the world in a rainfall of news coverage from international media sources (Ketchum, 2004).

Consequently, the rise of stakeholder activism and the proliferation of the new media have combined to reinforce their powers to evoke and intensify conflicts or crises (Barton, 1993; Coombs, 1999c; Mitroff, 1994; Moore, 2004). Organizations face crises that have profound and dramatic impacts on the organizations and their surrounding communities (Gonzales-Herrero & Pratt, 1995; Moore, 2004). The escalated risks of financial and reputational damages due to the environmental developments have forced organizations to place higher premiums on crisis management (Coombs, 1999c).

Rhetorical Approach in Crisis Response

Among the various branches of crisis literature, crisis response is one of the most popular topics and a diverse and increasingly growing field (Coombs, 1999b). Many researches have been conducted to analyze organizational response and defense in disasters, scandals, illegalities, and corporate product safety incidents (Heath, 1999).

According to Heath and Millar (2004), the responsibility for a crisis, its magnitude, and its duration are contestable. Therefore, a rhetorical approach has been frequently applied by many scholars in crisis response studies, which features organizations' discourse over time, their response options and processes, and their message development and presentation (Ihlen, 2002; Heath & Millar, 2004). Such a rhetorical approach stresses the use of language to influence perceptions of the organization and the crisis (Bechler, 2004). Also, it focuses on the role that information, framing, and interpretation plays in the crisis evolution and outcome (Heath & Millar, 2004).

Organizational Apologia/Self-Defense Discourse

Apologia objectives

Under the surge of attacks, organizations regularly refer to mass media and employ self-defense discourse, or apologia, to “clear their names,” mitigate hostility, and repair the damage to their reputation (Heath, 1999). Organizational apologia is a “justifiable form of corporate communication” which presents a compelling explanation of its actions and “counter description...to situate alleged wrongdoing in a more favorable context” (Heath, 1994, p. 115). According to Heath (1994), the objectives of organizational apologia are:

1. Present a competing narrative describing the situation favorable to the organization, often by strategic definitions that seek to delimit the issue by establishing certain premises.

2. Diffuse anger and hostility toward the organization through a statement of regret.
3. Dissociate the organization from the wrongdoing. (Ihlen, 2002, p. 188)

The second level of typologies

Many scholars have conducted research to examine the organizational crisis responses and identify the recurring self-defense strategies. A number of typology systems have been proposed by various researchers to categorize response strategies and interpret how corporate entities or individuals execute their self-defense in a crisis situation. Among them, Benoit's (1995a) five-strategy, 14-subcategory typology is regarded as the most comprehensive image restoration typology widely used in personal and corporate image repair studies (e.g., Benoit, 1995a, 1995b, 1997, 1998, 2004; Benoit & Brinson, 1994; Brinson & Benoit, 1996, 1999; Frantz & Blumenthal, 1994; Sellnow & Ulmer, 1995). On the other hand, Coombs' (1999b) seven-category typology, which is then further developed and refined into a three-posture typology (2004), is believed to be most closely related to public relations efforts (Seeger, Sellnow, & Ulmer, 2003).

Benoit's typology. Base on past research, Benoit (1995a) develops the image repair typology applicable for both personal and organizational reputation restoration efforts. It includes five general strategies as denial, evading of responsibility, reducing offensiveness of event, corrective action, and mortification.

Denial includes two subcategories. Simple denial is employed when the organization denies any responsibility for an event. Shifting blame, or scapegoating, on contrast, intends to shift the blame from the organization to outside individuals or agencies.

Evading responsibility has four subcategories including Provocation, defeasibility, accident, and good intentions. Provocation claims that the accused action was merely

responsive to another's offensive action. Defeasibility refers to the claim by the organization as lack of information or control. Accident, is employed when the organization claims that the offensive action occurred by accident. Good Intentions, in contrast, claims that the offensive action was done with good intentions.

Reducing offensiveness of event contains six subcategories. Bolstering emphasizes the positive characteristics they have or positive acts they have done. Minimization downplays the negative effect due to the wrongful act. Differentiation differentiates the accused act from other similar but more offensive ones. Transcendence places the accused act in a more favorable context. Attack accuser damages the credibility of the source of allegation, whereas compensation reimburses the victim to mitigate the negative effect.

The last two general strategies are *corrective action* and *mortification*. *Corrective action* refers to the strategy when the accused promises to correct the problem (e.g., restore operation to preexisted state or prevent the recurrence of such problem). *Mortification*, on the other hand, is the strategy when the accused confesses and begs for forgiveness.

Coombs' typology. When a communicative dialogue is taken, the organization has in fact engaged in apologia, or some degree of concession, with its stakeholders (Ihlen, 2002). Coombs' (2004) typology differs from Benoit's (1995a) by stressing a series of strategies on a continuum from defensive to accommodative. Coombs (2004) categories corporate defense strategies into three postures—deny, diminish, and repair—each represents a set of strategies sharing similar communicative goals as follows:

The *deny* posture, as the most defensive posture, includes three strategies that claim either no crisis occurred or that the organization has no responsibility for the crisis. Clarification denies the crisis happened and reinforces the denial by explaining why the event could not have happened. Attack levels charges against the accusers to prompt the stop of making charges. Shifting blame admits a crisis event did occur but places the blame outside the organization.

The *diminish* posture, a moderate posture in the defensive-accommodative continuum, represents a set of strategies that seek to alter publics' attributions by reframing how publics should interpret the crisis. It includes two general strategies as Excuse and justification when the organization acknowledges the occurrence of the crisis and its involvement in the crisis. Excuse is employed to minimize the organization's responsibility for the crisis event, which could be done by deny intent and deny violation (cannot control events leading to the crisis). Justification, on the hand, accepts responsibility but seeks to offset the negativity associated with the crisis. It could be reached through minimizing (claiming the crisis creates no/little damage and pose no/little threat to stakeholders' interest), comparison (not as bad as similar crisis), big picture (places the crisis in a larger context and argues that such crises are the price that must be paid for reaching some larger, desirable goal), and misrepresentation (argues that the crisis is not as bad as others make it out to be).

The *repair* posture, the most accommodative posture, contains six strategies that seek to improve the organization's image in some way. Suffering stresses that the organization is also a victim in the crisis. Bolstering reminds stakeholders of the good deeds an organization has done in the past. Praising others uses flattery words toward a

stakeholder to win its approval of the organization. Compensation offers stakeholders gifts designed to counterbalance the crisis. Corrective action seeks to restore the crisis situation to normal operation and/or promises to make changes which will prevent a repeat of the crisis in the future. Apology has the organization accept responsibility for the crisis and ask stakeholders for forgiveness.

Crisis response suggestions

Openness, promptness, and compassion. Most crisis response experts argue against the stonewalling tactic, or the complete refusal to comment or cooperate when an organization is accused of wrong doing (Coombs, 1995; Hearit, 1994; Ihlen, 2002). On the contrary, when a crisis hits, the organization needs to communicate with its stakeholders in a prompt and open manner (Coombs, 1999b).

Promptness in response has been viewed as a key element to handle crisis situations. Because stakeholders want to know the information and will listen to whoever ready to answer their questions (Fearn-Banks, 1996; Hearit, 1994). If an organization remains silent or delays to respond, speculations and rumors will quickly fill the information void particularly considering the current new media environment (Coombs, 1999b). Besides, delay in responding to the media can create the perception that the accused has something to hide, as 65 percent of survey respondents assumed that “no comment” implied guilt (Lerbinger, 1997).

“Tell it early, tell it all, and tell it yourself” is regarded as an important guideline to follow in the new information age when facts can hardly be covered up (Ketchum, 2004). Crisis experts stress the necessity of openness in crisis communication, meaning the organization being available and willing to disclose information to the media and other stakeholders (Coombs, 1999b). Organizational communication research also indicates

openness as an effective element in building positive communication relationship (Richmond & McCroskey, 1992).

In addition, some crisis response experts stress showing compassion to stakeholders and noting their interests as another essential element in crafting crisis response messages (e.g., Coombs, 1999c; Coombs & Holladay, 1996; Marcus & Goodman, 1991; Siomkos & Shrivastava, 1993). The provision of instructing information and increased statements of compassion are proved to have a positively effect on stakeholders' "perceptions of organizational reputation," "account honoring," and "supportive behavior" (Coombs, 1999c).

Internal coherence. Consistency, or the internal coherence of an organization's self-defense strategies, significantly influences the success or the failure of its communication efforts (Ihlen, 2002). A combination of crisis response strategies is suggested to be employed to reinforce the image restoration power. However, the prerequisite of mixing different strategies is that the overall message should be free of contradiction (Barton, 1993; Ihlen, 2002). For instance, crisis managers should not combine deny strategies with any strategies that acknowledge the occurring of a crisis (Coombs, 2004). The combined use of accident and denying mistakes is viewed as contradictory, which undermines an organization's mortification intent (Drumheller & Benoit, 2004).

According to Coombs' (1998) situational crisis communication theory, organizational apologia is a discourse controlled by situations. Crisis managers should match their communication strategies to the contingent situational factors (Coombs, 1999b), and the degree of perceived responsibility attached to the organization (Ihlen,

2002). Changes in an organization's response strategies are necessary when a crisis evolves and the new situation prompts the organization to alter its initial position. This, however, could be potentially problematic if the public relations managers fail to respond consistently during a crisis, which could damage the credibility of the organization's response (Coombs, 1999b).

In Ihlen's (2002) case study, the author seeks to assess the internal coherence of the changing crisis-response strategies employed by Mercedes. Ihlen (2002) proposes an evaluation strategy concentrating on three perspectives built on Fisher (1987)'s coherence theory:

1. Argumentative/structural coherence: the story being told must have an internal logic to it, meaning it should hang together. The characters must seem to act from good reasons and so forth.
2. Material coherence: the story needs external coherence. It should not overlook important facts, counterarguments, or relevant issues. The story must be complete in terms of the events previously learned from other sources.
3. Characterological coherence: the narrators or the actors of the story must be believable. They should exhibit sets of fairly predictable and stable actional tendencies and thereby build ethos. (p. 191-192)

Ihlen (2002) notes that characterological coherence has to be weighed against the material coherence. As the crisis evolves into a new context, the media pressure or other external facts may force the organization to change its response strategies. When an initial argument proves invalid or unacceptable, the organization's insisting on characterological coherence may fail its communication efforts to reach material coherence.

Crisis reception/external corroboration. To evaluate the effectiveness of organizational apologia, assessments have to be conducted on the crisis reception, or how communication-targeted publics accept the crisis response given by the organization

accused. Ideally, reactions from multiple stakeholders should be analyzed. Measurement results of their satisfaction to the organizational apologia and their perceptions of the organization's responsibility and reputation are important to determine the outcome of organizational apologia.

Crisis response scholars have employed different methods to study crisis reception as an indicator of an organization's crisis management performance. Media analysis is an important and typical tool to study the impact of organizational apologia. Newsgroups' interpretations of an organization's crisis response messages and behaviors are analyzed, which could be used as external corroboration of the organization's crisis communication efforts. Additional methods that serve similar purpose include interviews, surveys, and public opinion polls.

Besides, empirical experiments have been conducted to determine the effectiveness of different strategies in a given situation. For example, in Coombs and Schmidt's (2000) study, Coombs and Schmidt design an experiment with the Texaco crisis scenario and actual messages employed by Texaco. This strategy is used to quantitatively test hypotheses involving respondents' reactions to Texaco's response strategies.

Review of Case Studies Focusing on Crisis Response Strategies

AT&T's defense after its long-distance service interruption in New York in 1991 is analyzed by Benoit and Brinson (1994). The researchers find that AT&T initially attempted to shift the blame to lower-level workers but as more of the story was exposed, AT&T chose to use the strategies of mortification (apologizing) and bolstering (emphasizing its merits—its commitment to excellence, heavy investment in its service, and skilled workers), and finally, AT&T promised to employ corrective action (promising a comprehensive review of its operations to anticipate and prevent future

problems). The authors conclude that AT&T's later crisis response effort and strategies were well conceived and should have helped to restore the company's image.

Benoit (1995a) analyzes Exxon's response to the Valdez oil spill in 1989 and contends Exxon's image restoration campaign was not very effectual. Exxon mainly used shifting blame strategy supplemented by minimization (downplaying the magnitude of the problem), bolstering (stressing its image as a concerned company), and corrective action (promising to alleviate the problem). Benoit argues that Exxon's attempt to shift the blame for the accident to Captain Hazelwood might be sensible because he was found drinking before the accident. However, the shifting of blame for the delay in the clean-up to slow authorization from the state of Alaska and the Coast Guard failed to be plausible. Furthermore, Exxon's effort to minimize the extent of the problem was invalidated by TV and newspaper coverage; its slow and inept clean-up undermined the credibility of its effort in bolstering and corrective action.

Benoit (1995a) also studies Union Carbide's response to its 1984 gas leak in Bhopal, India which killed thousands. Benoit identified Union Carbide's primary strategies as bolstering and corrective action (a relief fund, an orphanage, medical supplies, and medical personnel) and finds them appropriate. However, the author notes the weakness of this response in lacking of promised actions to prevent the problem recurrence.

Similarly, Coca-Cola and Pepsi-Cola's three years of advertising (1990-1992) in a trade publication, *Nation's Restaurant News*, is examined by Benoit (1995a) on how Coke countered Pepsi's charge (claiming that Coke charged less on McDonald's than other customers) and fired against Pepsi (pointing out that Pepsi used the profits it earned

from its customers to own fast food restaurants including 19,500 Taco Bells, KFCs, and Pizza Huts). Benoit argues that Coke and Pepsi both employed bolstering and attacking accusers, and Coke also used simple denial. Coke's attack and defense, however, was perceived more persuasive and superior than Pepsi's.

Dow Corning's defense against the harsh criticism over the potential danger of its breast implants is studied by Brinson and Benoit (1996). Three phases are identified including the initial denial, minimization, bolstering, and attacking accusers, the later transcendence due to the disclosure of its own damaging internal documents, and the final mortification and corrective action. The author notes that only when Dow Corning shifted its position to corrective action did the attack begin to abate.

Benoit and Czerwinski (1997) analyze USAir's response to Frantz and Blumenthal's (1994) the accusation in The New York Times for lack of safety after its 1994 Pittsburgh crash which killed 132 people. USAir put out three newspaper full-page letter ads from its management, pilots, and flight attendants, using bolstering, denial (denying unsafe operation), and corrective action (appointment of an Air Force General to oversee safety). According to the authors' judgment, these defense strategies are relatively unsuccessful because denial contradicts with corrective action, and the missing of a letter from the ground crew to counter the charge of delayed repair backfires.

Benoit (1998) examines the tobacco industry's defense against the attacks from TV shows (Prime Time Live and Day One) and Commissioner Kessler of Food and Drug Administration (FDA) alleging that the companies knowingly added nicotine to cigarettes out of greed when they were aware of the addictiveness of cigarettes. Based on the industry's testimony in Congress and newspaper advertising, Benoit acknowledges that it

used denial (denying nicotine and cigarettes are addicting and that they add nicotine to cigarettes), as well as bolstering and good intentions, attacking accusers, and differentiation (cigarettes are not like heroin, but more similar to Twinkies). Although these strategies are considered largely ineffective compared to the attack, the author points out that both the attack and the defense indicate how multiple strategies could function to reinforce main ideas.

Brinson and Benoit (1999) analyze Texaco's response to the accusation of racism due to a private remark about how African-Americans were like "black jelly beans...glued to the bottom of the jar." Texaco is found to have employed bolstering, corrective action, mortification, and shifting the blame (shifting blame to a group of "bad apples" employees).

Hearit (1999) studies Intel's flawed chip crisis in 1994, which was initiated by Internet news groups' criticism that Intel's Pentium processor was prone to error in sophisticated calculations due to flaws in the chips. According to the study, the first and primary response Intel enacted was a denial posture and a strategy of minimization (denying that the character of the flaw was significant enough to cause concern). Intel claimed that "statistically, the average person might see this problem once in every 27,000 years" (Clark, 1994, p. 84), but this analogy was proved unpersuasive according to Hearit's (1999) interpretation. This in fact evoked another round of criticism that Intel was insensitive to customers' concerns. When IBM came out to counter Intel's minimization strategy declaring the error occurred once every 24 days, Intel had to shift their stance and announce public apologies and the replacement of the chips. In particular, the author applies Grunig's (1989, 1992, 1997) situational theory of publics to

the phenomenon of Internet newsgroups and argues that the Internet technology facilitates the formation of active publics. Hearit (1999) also suggests companies to use staff or hire firms (using readily available technology) to monitor Internet news groups for criticism to better respond to customers' needs.

Ihlen (2002) conducts an in-depth analysis of Mercedes's changing responses to the public relations crisis triggered by Mercedes A-Class's overturn during test drives right after its October 1997 launch. The author argues that Mercedes' eventual success in the restoration of the company's reputation and the relaunch of the A-Class might be due to its effective response strategies—mainly ingratiation and corrective action—in the latest phase of the crisis, although this effort has been partly set off by its incoherence in response messages. Thus the author suggests public relations managers be cautious when combining and changing response strategies in crisis communication considering the coherence principle.

Greer and Moreland (2003) study American Airlines (AA) and United Airlines' (UA) websites crisis communication efforts during the first three weeks following the terrorist attacks of September 11, 2001. According to Sturges' (1994) response phases propositions, corporate messages should shift from "internalizing" information prior to or in the early stage of a crisis to "instructing" communication in crisis breakout stage and then to "adjusting" communication as crisis subsides and then "internalizing" message as the crisis subsides. The study indicates that both AA and UA followed Sturges' (1994) suggestions and employed their corporate websites to convey instruction information (such as facts and guiding information) and adjusting communication (such as condolence messages and links to relief organizations). The authors suggest that airlines

use online communication as an essential tool to offer immediate response and frequent updates to their diverse publics in attack situations.

The U.S. Navy's image restoration communication following the USS *Greeneville* collision with the Japanese trawler nearby Pearl Harbor, which killed nine people, is investigated by Drumheller and Benoit (2004). According to the study, U.S. Navy employed mortification as their primary strategy, which is deemed suitable to the Japanese culture; however, a direct apology to the victims' families was perceived important by Japanese people but was actually missing. The authors suggest four guidelines for image repair effort in crisis situations involving cultural issues: "(1) involve a culturally versed employee or consultant; (2) engage diplomatic relations to enhance the likelihood of the acceptance of image restoration strategies; (3) strategically identify compatible combinations of defense strategies; and (4) present a consistent defense" (p. 184)

Coombs (2004) proposes a system of Crisis Communication Standards derived from previous crisis literature. He studies the West Pharmaceutical's (West) massive explosion at its facility killing six employees in 2003 and evaluates West's crisis response strategies against the Crisis Communication Standards. He points out that West's crisis response is perceived effective through addressing the concerns and needs of employee and customer stakeholders. Nonetheless, the author suggests the crisis managers could have done better by portraying an accidental nature of the crisis and presenting possible corrective actions.

Hearit and Brown (2004) analyze Merrill Lynch's reputation restoration discourse responding to its public relations crisis when Attorney General of New York opened an

investigation of fraud at Merrill Lynch in 2001. The crisis was initiated by the damaging emails indicating analysts were recommending underperformed stocks to individual investors to profit from investment banks fees charging those companies. The study demonstrates a standard crisis response dynamic used by financial firms, which consists of the initial denial and counter-attack and the eventual settlement with its accusers offering a grudging apology and a large monetary compensation as concrete evidence of wrongdoing is presented. The authors argue that these companies attempt to make apology but avoid legal liability; thus in contemporary discourse compensation should be interpreted as “an argot that functions as an admission of culpability” (p. 459).

Zhang and Benoit (2004) analyze the message strategies of the Saudi Arabia’s image restoration campaign after September 11 against accusations which alleged that Saudi supported terrorism but failed to be allies with the United States. The study identifies denial, attacking accusers and bolstering as major image repair strategies, with minor emphasis on defeasibility, good intentions and differentiation. The authors judge Saudi’s image repair effort as partially effective through evaluating the persuasiveness of each strategy, supplemented with results of public opinion polls as external evidence.

CHAPTER 3
CASE BACKGROUND AND RESEARCH QUESTIONS

Emergence of the Teflon Controversy

Teflon, one of DuPont's hugely successful brands as non-stick coating, has spurred public debate because of its close relations with a type of controversial chemical called PFOA or C8 (the acronym of perfluorooctanoic acid and its principal salts). According to the U.S. Environmental Protection Agency (EPA)'s fact sheet, PFOA is a man-made chemical that does not exist naturally in the environment. It is used as an essential processing aid in the manufacture of fluoropolymers, such as the Teflon coating. As the EPA claims, "although fluoropolymers are made using PFOA, the finished products themselves are not expected to contain PFOA" (EPA, 2004, p. 1).

Fluoropolymers contribute important properties including fire resistance and oil, stain, grease, and water repellency, which allow their applications to pervade almost all industry segments and involve some world-famous consumer product brands such as Teflon, Stainmaster, Scotchgard and Gore-Tex. As a personification of the success of modern chemistry, PFOA was perceived as a miracle chemical which is extremely stable and biologically inert for decades. However, a series of scientific findings released since the late 1990s showed that PFOA could pose potential risk to human health and the environment although considerable scientific uncertainty remains (EPA, 2005).

Perfluorochemicals (PFCs) caught the EPA's attention in 1999 in the wake of discoveries from blood banks samples provided by the 3M Company (3M). The data indicated that perfluorooctyl sulfonates (PFOS) is persistent, unexpectedly toxic, and

bioaccumulative, and turned up in the blood of more than 90 percent of the U.S. population. 3M, the sole manufacturer of PFOS in the United States, announced in May 2000 it was discontinuing the production of perfluorochemicals including PFOS and PFOA following negotiations with the EPA. It was this decision that led DuPont to promptly announce it would begin making PFOA itself. Meanwhile, findings on PFOS prompted the EPA to expand its investigation in June 2000 to encompass PFOA, which also occurs in human blood samples, as to whether it might present similar concerns associated with PFOS (EPA, 2003).

In August 2001, residents of Ohio and West Virginia living near DuPont's Teflon manufacture plant filed a class-action lawsuit against DuPont. The suit alleged the company of knowingly contaminating the local land, air and water supply system by discharging PFOA without informing the community and that PFOA exposure had caused them ill (Cortese, 2004). In September 2002, the EPA began a priority review on PFOA as "the developmental toxicity data, the carcinogenicity data, and the blood monitoring data presented in an interim revised hazard assessment raised the possibility that PFOA might meet the criteria for consideration under Toxic Substances Control Act (TSCA) section 4(f)" (EPA, 2003).

In April of 2003, the Environmental Working Group (EWG), a Washington-based environmental advocacy group as well as the most vocal critic against DuPont, petitioned the EPA to enforce federal actions against DuPont. As EWG declared, PFCs belong to "the rogues gallery of highly toxic, extraordinarily persistent chemicals that pervasively contaminate human blood and wildlife the world over...PFCs seem destined to supplant DDT, PCBs, dioxin and other chemicals as the most notorious, global chemical

contaminants ever produced” (EWG, 2003). EWG alleged that DuPont had covered up significant health and environmental monitoring results required by federal reporting laws for almost 20 years:

The petition presented extensive evidence, based almost entirely on internal DuPont documents, that the company withheld knowledge of drinking water contamination with the key Teflon manufacturing ingredient, C-8, in the tap water of the Little Hocking, Ohio, and Lubeck, West Virginia, water systems from the time this contamination was first discovered in 1984, until 2001.

The petition also provided detailed documentation, again based on company documents, that the company knew in 1981 (1) that pregnant women working at DuPont's Parkersburg, West Virginia plant had high levels of C-8 in their blood; (2) that animal studies suggested a link between C-8 and rare birth defects of the eye; (3) that C-8 was also present in fetal cord blood, and; (4) that two of seven pregnancies with measured C-8 in the cord blood resulted in serious birth defects of the face and eye. The company has yet to submit data on these birth defects to the EPA (EWG, 2004).

On April 14, 2003, the EPA released a preliminary PFOA risk assessment declaring PFOA was found very persistent in the environment, at very low levels existing both in the environment and in the blood of the general U.S. population, and causing developmental and other adverse effects in laboratory animals. However, “significant data gaps were identified by the Agency, predominantly in the areas of exposure and exposure pathways” (EPA, 2003). In order to identify and generate additional information to strengthen the risk assessment, the EPA announced it would initiate a public process in the hope that “complete assessment will allow the Agency to determine if additional regulatory measures are necessary to mitigate any potential risks” (EPA, 2003).

Evolution of the Teflon Crisis

Whereas the EPA was still investigating the potential risk of PFOA without regulating it, on July 8, 2004, announcement came out that the EPA filed an administrative action against DuPont charging DuPont for withholding evidence it found

regarding the health and environmental concerns of PFOA since 1981 (supported by key information disclosed from the West Virginia lawsuit). The EPA alleged that Dupont detected PFOA in the blood of at least one female employee's baby with birth defects and in public drinking water in its plants' neighborhood communities but the company did not report these results. According to federal environmental laws, it was estimated that the agency can impose over \$300 million as the total penalty against DuPont (Weise, 2004).

The EPA's action in the United States quickly spread overseas through international media. Unlike the relatively weak response in the United States and European countries, where Teflon has been on the market for decades, an unanticipated crisis with profound impact was triggered on another side of the globe—China. On July 9, an Internet news report released by the finance news section of SINA.com (China's biggest and most influential Web portal) was among the first to report the issue. Entitled *U.S. EPA charges DuPont product contains health risks*, the news not only cited the EPA's administrative allegation and DuPont's denial, but also stated the EPA determined that PFOA, a synthetic chemical used to produce Teflon, may potentially affect human health.

Immediately following this report, news coverage on the EPA's announcement surged on almost all major Chinese newspapers as well as on the prime time news shows at Chinese Central Television (CCTV), China's government mouthpiece TV station. Many news reports questioned the safety of Teflon products by headlines such as "Teflon product may cause cancer" or "DuPont nonstick cookware may harm human health" without stating a definite conclusion. These news reports usually mentioned the EPA's

allegations and actions, sometimes together with EWG's charges and scientific findings disclosed by other media sources proving the harmful effect of PFOA. Chinese experts' opinions, or reactions from other stakeholders such as consumers, nonstick cookware manufacturers, and Chinese governmental agencies, were also cited according to specific news focus.

Media pressure forced the Chinese government to begin its own study on the safety of Teflon. On July 14, China State Administration of Quality Supervision and Quarantine (SAQSQ) announced that it would start its own investigation into the health concern of Teflon-coated cookware. At this stage, scientists or experts offered diverging opinions, whereas SAQSQ had just initiated its investigation without giving a decisive comment. However, the intensive news coverage already spurred a "mass panic" among Chinese consumers, which badly hit the Chinese nonstick cookware market. Concerns about the safety of non-stick cookware coated with DuPont Teflon material sparked consumer boycotts, reportedly forcing many department stores such as Sogo in Beijing and ParknShop in Guangdong Province to pull all non-stick cookware from their shelves, as well as leaving many other stores still selling Teflon cookware with sales plummeted (AFX European Focus, 2004).

Safety concerns considerably affected Chinese Teflon cookware makers by forcing them to either cancel or delay their new products' promotion plans. An official from Aishida, one of the largest cookware producers and Teflon authorized manufacturers in China, disclosed that the company suspended the promotion of its new non-stick frying pans due to consumers' increasing anxiety about nonstick cookware. But the official also insisted the Teflon controversy did not seriously affect

its nonstick cookware sales because 90 percent of its production is exported to other countries (Chung, 2004).

As for Zhejiang-based Supor Cookware Company, one of the largest pressure cooker makers in China and another Teflon authorized manufacturer, the company initially said it was hardly affected by the bad news because most of its products are shipped overseas. However, when the company opened flat at 12.21 RMB per share on its trading debut on the Shenzhen Stock Exchange Market, which was far lower than brokers' estimates of between 14 and 15 RMB, the firm attributed part of its poor performance to the negative influence from the Teflon scare (Chung, 2004).

Heavy follow-up stories on the Teflon issue remained on the media spotlight lasting for several months. On October 13, CAIQ released the test result declaring that after extensive tests no PFOA residue had been discovered in the tested items. CAIQ's test covered 28 different types of Teflon-coated pans currently sold on the Chinese market, which were made by 18 major manufacturers with a combined market share of more than 90 percent nationwide. Most news stories that reported the CAIQ test result acknowledged its authority and credibility. However, a few articles remained skeptical about some aspects of the test result, particularly with respect to the left concern about PFOA's environmental risk.

The crisis settled in November of 2004 with the release of Chinese government's test result. However, considerable damage has been inflicted upon the Chinese Teflon market as well as DuPont's reputation. Some news stories reported a still low motivation among Chinese consumers in purchasing Teflon-coated products. According to an online opinion poll by SINA.com on the likelihood to continue to trust and use DuPont products,

54 percent of the respondents said no, 34 percent said it would depend on specific occasions, whereas only 12 percent chose yes (SINA.com, 2004b).

Research Questions and Hypotheses

Based on the literature review and the case background, this paper looked at the following research questions:

***RQ1:** How would U.S. DuPont and DuPont China's crisis response discourse be identified using Coombs' (2004) three-posture typology throughout the life cycle of the Teflon crisis?*

***RQ2:** What were the characteristics of the English language and Chinese language news coverage of the Teflon crisis?*

***RQ3:** How would the Teflon crisis case be interpreted by propositions of the cross-national conflict shifting theory? Do the propositions need to be revised or are new propositions needed to fully explain the phenomenon?*

In addition to the RQ3 as a general research question, three more hypotheses were proposed for quantitative testing:

***H1:** The Chinese news coverage will differ significantly from the U.S. news coverage of the Teflon crisis in story features such as event location, story focus and primary problem attribution.*

***H2:** News outlets are more likely to refer to sources from their own country of origin than sources from other country of origin.*

***H3:** The Chinese news coverage will differ significantly from the U.S. news coverage in narrative features such as sources cited and direct quotes used.*

CHAPTER 4 METHODOLOGY

This thesis described, analyzed, and interpreted the recent DuPont Teflon crisis in China by examining DuPont's crisis response strategies as well as the English and Chinese language news coverage of the crisis. The credibility or fidelity of crisis communication could be evaluated through determining the response quality in internal coherence (Hearit, 1999; Ihlen, 2002). Thus DuPont's crisis response strategies throughout the life cycle of the crisis were identified with Coombs' (2004) three-posture typology. The internal consistency of DuPont's combined and changing strategies was then discussed. The Teflon crisis case was further investigated to illustrate, support, and expand the theory of cross-national conflict shifting (CNCS). Content analysis was employed upon the media coverage of the Teflon crisis to test three hypotheses. The external corroboration, or the media reception, of DuPont's crisis response discourse was obtained through the media content analysis.

Time-Series Analysis of DuPont's Crisis Response Strategies

Online News Releases

To answer the first research question regarding DuPont's self-defense strategies, DuPont's online news releases were retrieved from DuPont's websites in the United States and in China (www.dupont.com.cn and www.dupont.com) on December 2, 2004. A total of 16 non-duplicate news releases were found to involve the Teflon crisis including ten English language and six Chinese language news releases. Among the ten news releases on U.S. DuPont's website in reaction to the Teflon controversy, six pieces

were posted in 2003 and the rest four were posted in 2004. DuPont China's website contained six Chinese language news releases posted in 2004 due to the Teflon crisis in China. Half of them were the exact translation versions of English language news releases initiated from U.S. DuPont. The rest three news releases contained messages at least partially originated from DuPont China

A time-series identification analysis of crisis response strategies was employed upon DuPont's online news releases to analyze DuPont's discourse during the Teflon crisis. After examining issues involved and reading through the news releases, Coombs' (2004) typology, which has been specifically developed for public relations research indicating three apologia stances, was found to be the best choice to use for this study. Thus Coombs' typology, rather than Benoit's (1995a) 14-subcategory typology, was applied as a framework to categorize and identify DuPont's crisis response strategies.

Therefore the operationalization of crisis response strategies in this study was based on definitions provided in Coombs' typology. *Deny* posture contains strategies of clarification (denying the crisis happened and reinforcing the denial by explanations proving otherwise), attack (attacking accusers), and shifting blame (shifting the blame to others). *Diminish* posture includes deny intent/violation (claiming lack of information or control), minimizing (downplaying the crisis damage or threat), comparison (claiming not as bad as other similar crisis), big picture (placing the crisis in a larger and more favorable context), and misrepresentation (claiming not as bad as what others make it out to be). *Repair* posture, on the other hand, consists of strategies including suffering (claiming itself among the victims of the crisis), bolstering (stressing the positive characters and behaviors), praising others (praising its stakeholders to win support),

compensation (offering compensation to stakeholders), corrective action (promising actions to prevent the crisis from future occurring), and apology (accepting responsibility and asking stakeholders for forgiveness).

Telephone Interview

In addition, to understand the decision-making process of DuPont China's crisis response strategies, information was gathered by a 50-minute telephone interview with DuPont China's public affairs manager on October 27, 2004. According to the interviewee's request, the interview was not taped but detailed notes were taken to record the interview content in Chinese and later translated into English by the author to illustrate DuPont China's crisis management structure and strategies. Quotes were drawn from the interview transcript to explain DuPont's response strategies according to the researcher's interpretation.

Quantitative Content Analysis of the Media Coverage

To answer the second and third research questions and test the three hypotheses, quantitative content analysis was conducted on the media coverage of the Teflon crisis generated by China, the United States, and other countries. Both English and Chinese language news were included in the news sample. Chinese language news stories were collected from the archival news collection featuring the Teflon issue on SINA.com. English language news stories, on the other hand, were collected from the electronic database LexisNexis. A total of 211 news articles including English language and Chinese language news comprised the combined news sample. The unit of analysis was the individual full article as each article was coded with a standard coding sheet.

Time Span

The analyzed time period was a five-month period from July 1 to November 31, 2004. This time span was chosen because the Teflon crisis essentially went through the entire crisis phases during this period. July 1 was defined as the starting point of the timeline because the EPA's legal action against DuPont on July 8 was the triggering event of the crisis. November 31 was chosen as the end point for the news analysis because after China's State Administration of Quality Supervision and Quarantine (SAQSQ) announced the agency's test results on October 13, declaring no PFOA residue was found in Teflon-coated cookware sold on the Chinese market, the media coverage of DuPont Teflon issue gradually subsided in November.

Sample Profile**English language news**

English language news stories were collected through the LexisNexis database using terms of "DuPont" and "Teflon" with the "headline, lead paragraph(s)" parameter in World News and General News (in the major newspapers category) in the above-mentioned time frame. Articles with duplicated content were excluded as well as articles with less than 100 words considering too little information for coding. After preliminary screening 55 English language news articles were yielded.

As shown in Table 4-1, 36 articles (65 percent) out of 55 English language news stories are newspapers stories, 15 articles (27 percent) were distributed by news agencies such as China's Xinhua News Agency and Agence France Presse, while the rest are either newswire or magazine stories. News outlets from the United States, Europe, and China contributed 20 (36 percent), 16 (29 percent), and 11 (20 percent) stories,

respectively. The rest of the stories were initiated from Canada (5 stories) or other Asia-Pacific countries (3 stories).

Chinese language news

Under the defined time period, news coverage in Chinese language was gathered through SINA.com's archival news on the Teflon crisis. SINA.com was chosen to identify Chinese articles because it is China's largest and most frequently visited Web news portal, with 101.2 million registered users worldwide (SINA.com, 2004a). News reports that did not focus on DuPont Teflon products were excluded, so were transcripts of DuPont's crisis management events. The archived news after screening yielded 156 articles, including news stories and commentaries published by prominent Chinese newspapers (national and regional), magazines, and news sites.

Table 4-1. Sample profile of English language news and Chinese language news

Category and option	News Language*			
	English Language		Chinese Language	
	Frequency	Percentage	Frequency	Percentage
News Source Type				
Newspaper	36	65%	135	87%
Online			25	16%
News Agency	15	27%		
Newswire	3	5%		
Magazine	1	2%	1	1%
Press Country Origin				
China-Hong Kong	11	20%	155	99%
USA	20	36%	1	1%
Europe	16	29%		
Asia-pacific	3	5%		
Canada	5	9%		

* Number of English language news (NEL) =55; Number of Chinese language news (NCL) =156

Among the 156 Chinese news stories, 155 stories were originated from Chinese news outlets. The only exception was a news-abstract of *USA Today*'s July 8 story on

EPA's allegation against DuPont and the estimated fine, which was from the U.S. news source. The majority of stories (130 stories) were published by major Chinese newspapers, while 25 stories were prepared by influential online sources such as SINA.com, Xinhua Web and China News Web. In addition, there was also one magazine story in the sample (see Table 4-1).

Coding Sheet

The coding sheet was designed to facilitate the content analysis of news stories covering the Teflon crisis. The researcher first read through twenty articles from the news sample (ten English language news and ten Chinese language news) dated throughout the time span of the whole crisis phases to obtain some degree of familiarity of typical media patterns. Based on the researcher's experience, options were developed for each variable or category. Several tests using randomly selected news articles were conducted to expand and revise these options until options were matured. Then these variables and their corresponding options were included into the quantitative coding sheet. The coding sheet was used in the pretest and finalized as required inter-coder reliability was achieved.

Pretest and Inter-coder Reliability

To test the inter-coder reliability of the coding sheet, ten percent of the news stories were randomly selected from the news sample and coded by the author and another graduate student. They coded the small sample of articles independently following the coding sheet's guidelines. The inconsistency of the coding decisions were then assessed and discussed between the two coders. The inter-coder reliability coefficient (using Holsti's formula, 1969) was calculated to be 87 percent. After taking off two variables that led to the main disagreement between the two coders from the coding sheet, the

inter-coder reliability was improved to 92 percent, which confirms a relatively high level of internal validity of the final research instrument.

Coding Category and Option

The story features of the news articles were examined through coding event location (United States, China, both, or none of the above), main issue focus, and primary and secondary attributions of Teflon problems. Each news article was coded as primarily focusing on the EPA's accusation, DuPont's discourse or action, Teflon cookware makers' discourse or action, Chinese regulation agencies' discourse or reaction, consumer reaction or market impact, U.S. legal suit, Chinese legal suit, activist groups' discourse or action, or others. Then the primary and secondary attributions of the nature of Teflon-related problems were coded as Federal reporting rules dispute, PFOA/C8-related human health or environmental risk, Teflon cookware health risk, media problem, regulation concerns, business ethics concerns, crisis management problems, or none of the above or not identifiable.

The narrative features of the news articles were studied by coding the number of publics, sources and direct quotes and the selection of sources and direct quotes. Two nominal variable sets (i.e., "0" for no and "1" for yes) were used to code a series of players cited as sources and direct quotes, including DuPont, U.S. regulation agencies, Chinese regulation agencies, consumers, independent scientists/experts, financial analysts, Teflon cookware makers, activist groups, DuPont employees, DuPont neighborhood community/residents, other media, other chemical companies, or other sources.

DuPont's crisis discourse cited in the news article was coded as being employing the strategies of Clarification, Attack, Shifting blame, Deny intent/violation, Minimizing,

Comparison, Big picture, Misrepresentation, Suffering, Bolstering, Praising others, Compensation, Corrective action, and Apology, based on the definitions in Coombs' (2004) typology. To measure the media presentation of opposing arguments, inclusion of scientific evidence or opinion, either supportive or refutatory to Teflon-related risk, and whether the risk was named as controversial, were also coded. The coding sheet also included an identification number, language in which the story was written, month and date of publication for each news story, news source type, and news source origin of country.

Data Analysis

Data collected were then content analyzed using SPSS 10.0 for Windows. Frequencies and descriptive statistics were run to study the sample composition and variable characteristics. Independent-samples t-tests, Analyses of Variance (ANOVA), cross-tabulations, and Pearson product moment correlation were used to further test the relationships between studied variables.

CHAPTER 5 FINDINGS

Research Question 1

How would U.S. DuPont and DuPont China's crisis response discourse be identified using Coombs' (2004) three-posture typology throughout the life cycle of the Teflon crisis?

Initial Response to EWG allegations in 2003

The Environmental Working Group's (EWG) harsh criticism including its PFC review report PFCs: Global Contaminants, together with its EPA petition against DuPont received increasing media attention. In response to EWG's allegation that PFOA and Teflon products imposed harmful effect to human health, particularly to the health of those child-bearing aged women and young girls, DuPont posted two news releases on its U.S. website to counter the charges.

The March 31 news release basically employed Coombs' clarification and attack response strategies in a refutatory manner (see Table 5-1). First, DuPont insisted that "PFOA has been wrongfully represented as a health risk when, in fact, it has been used safely for more than 50 years with no known adverse effects to human health." According to DuPont, this view point was supported by "extensive scientific data, including worker surveillance data, peer-reviewed toxicology and epidemiology studies, and expert panel reports" while "no evidence or data" demonstrating the opposite.

As Benoit (2004) suggests, the accused organization could mitigate the damage to its reputation by undermining the credibility of the source of allegations. In accordance

with this strategy, DuPont attacked the credibility of EWG's allegation by declaring that the EPA documents EWG quoted were based on an "internal deliberative draft" that should not be cited or quoted without full EPA review. DuPont also insisted the evidence presented by EWG was unreliable considering the newly generated data, and that EWG's conclusion was a misinterpretation of data. In addition, DuPont mentioned the company's positive working relationship with the EPA in an effort for better knowledge of PFOA, which could be regarded as a minor bolstering strategy to strengthen DuPont's positive image.

Whereas the first news release slightly mentioned the safety of Teflon-branded cookware, the following April 8 news release was specifically designed to clear the names of the company's Teflon and Stainmaster brands. This time DuPont focused on bolstering strategy and clarification strategy without mentioning EWG's message.

DuPont stressed its commitment to "continuously evaluating the safety of its products and processes...as the global leader in fluorine chemistry" and "continuing to develop a comprehensive understanding of the distribution of PFOA in its products and in the environment." Meanwhile, DuPont asserted that Teflon-branded cookware does not contain PFOA and other industrial products only contain "trace or non-detectable levels of PFOA." As shown in Table 5-1, these interpretations could be identified as bolstering and clarification strategy, respectively.

In addition, by stating the essential function of PFOA in producing "high-performance fluoropolymers resins and finishes," DuPont used the big picture strategy to remind the audience the higher value PFOA brings to human beings. Coombs' big picture, or Benoit's transcendence strategy, if successfully employed, could place an

organization's allegedly wrongful act in a more favorable context by suggesting a new frame of reference to justify the accused behavior (Benoit, 2004).

Table 5-1. Crisis response strategies employed by U.S. DuPont before the Teflon crisis shifted to China

Response Timeline	Examples of Response Discourse	Strategies (Posture)
<i>Response to EWG's allegations (March-April 2003, USA)</i>		
	<ul style="list-style-type: none"> • PFOA has been wrongfully represented as a health risk; • PFOA has been safely used by DuPont for more than 50 years; • No evidence demonstrates adverse human health effect; • Teflon cookware does not contain PFOA. 	<i>Clarification (Deny)</i>
	<ul style="list-style-type: none"> • EWG's claim is based on "internal deliberate draft" that should not be cited; • EWG's risk calculation is based on a single data point; • EWG's conclusion is misinterpretation of data. 	<i>Attack (Deny)</i>
	<ul style="list-style-type: none"> • Committed to continuously evaluating the safety of products and process; • Extensive scientific research and testing supports the safety of PFOA; • Actively works with EPA in research on PFOA and its end-use consumer products. 	<i>Bolstering (Repair)</i>
	<ul style="list-style-type: none"> • Important societal benefits that society gains from fluoropolymers. 	<i>Big picture (Diminish)</i>
<i>Response to EPA's Preliminary Risk Assessment (April-June 2003, USA)</i>		
	<ul style="list-style-type: none"> • No evidence indicates adverse human health effects related to low levels of exposure to PFOA; • Teflon does not contain PFOA; Cookware made with Teflon is safe for everyday consumer and commercial use; • Use FDA-approved methodologies, • PFOA has not been detected in Teflon cookware. 	<i>Clarification with reserved wording (Denial)</i>
	<ul style="list-style-type: none"> • Share the EPA's desire to safeguard human health and the environment; • Voluntarily committed to supporting EPA's research on PFOA. 	<i>Bolstering (Repair)</i>
	<ul style="list-style-type: none"> • Some statements in media coverage following EPA's April announcement by EPA calling for an investigation of PFOA have been misleading and inaccurate. 	<i>Attack (Deny)</i>

Response to EPA Preliminary Risk Assessment in 2003

On U.S. DuPont's website, four news releases were posted from April through June in 2003 in reaction to the EPA's announcement, combining response strategies of clarification, bolstering, and attack (see Table 5-1). While reiterating the safety of Teflon-coated cookware and supporting the EPA's current position on unregulating PFOA, DuPont slightly changed its wording regarding PFOA in its clarification strategy. The company claimed no evidence was found indicating that adverse human health effects were related to "low levels of exposure" to PFOA.

Besides, DuPont continued to highlight its commitment to product safety and environmental protection and sharing the EPA's mission to ensure human health and the environment. DuPont reaffirmed its support for the EPA's plans to conduct a science-based risk assessment for PFOA. The company expected such assessment would lead to credible and reasonable regulation that assures public health and safety while allowing the continued use of PFOA. Such discourse continued to reflect DuPont's bolstering strategy.

In addition to clarifying some "misleading and inaccurate" statements in some media coverage, DuPont provided Web links to its fact sheets and FAQs regarding the safety of PFOA, Teflon-coated cookware, and related consumer products. DuPont blamed those accusers for misinformation and inaccurate interpretations. Meanwhile, it used big picture strategy by arguing that those accusers were ignoring the significant societal benefits PFOA enabled.

Response to EPA Administrative Allegation in 2004

U.S. DuPont posted its response news release on its website the same day as the EPA announced its administrative allegation on July 8, 2004. DuPont replied that it

would file a formal denial in 30 days to the EPA complaint. DuPont denied any violation of statutory reporting requirement and asserted no legal basis for the EPA's allegation. Instead of giving more details of counter-argument or refuting evidence, the news release emphasized the EPA's position on unregulating PFOA in case consumers or investors might be shaken by the announcement.

Delayed Initial Response by DuPont China in July

In contrast to the Chinese media's immediate reporting about the EPA's action on July 9, DuPont China did not post its response news release—the translation of U.S. DuPont's July 8 news release—until July 12 (after a weekend's break). The time delay in releasing its headquarters' announcements, as quoted from the interview with DuPont China's public affairs manager, was not unusual:

As a matter of fact, for news releases from U.S. DuPont, we usually would have a time delay of a few days. Because we have a routine internal process to go through each release, to first translate the English version to Chinese, and then confer to the legal department for facts checking. Also, for the communication purpose, we have to make sure in the final version we use layman terms but without mistaken technical interpretation. So the whole process just takes time. (Telephone interview, October 27, 2004)

DuPont China's explanation of its late response may sound reasonable. However, the damaging effect of such delay could be significant in a crisis situation. As DuPont China's public affairs manager admitted, when they unexpectedly found that the story was disclosed by many Chinese media in different versions ahead of them, particularly that some of the coverage was greatly unfavorable; the negative media impact was too enormous to reverse. Still, they chose to post the initial release on July 12 on DuPont China's website before deciding on the next step of action.

Late July Response to Escalated Teflon Scare

News coverage on Teflon cookware's potential human health harmful effects escalated, while DuPont China's executives and public affairs people were still deliberating on their crisis management plan. Despite the slow reaction in the early stage of the Teflon crisis, DuPont recognized the seriousness of the issue and sent out a "crisis team" comprised of senior DuPont executives from the United States, Hong Kong and Shanghai to Beijing to determine the crisis response strategies, attend news conferences, and meet with officials from the Chinese regulation agencies.

According to the interview with DuPont China's public affairs manager, they believed that the crisis was caused by the Chinese media's misleading reports and Chinese people's distrust attitude toward the safety of consumer products in general:

Because this incident was caused by the misinterpretation of the information concerning Teflon cookware's safety, we basically want to clarify the fact so as to remove the misunderstanding and relieve consumers' worries.

We had pretty good relationship with reporters in the past. But because of the volatility of the reporters, some reporters covering the issue were new-comers who were not familiar with DuPont as well as science reporting. And they don't use cross reference. That's part of the reason some reports, especially at the beginning stage of the incident, misinterpreted the original news from the U.S.

Many reporters didn't recognize the difference between a processing aid and a finishing product and PFOA here is only a processing aid which doesn't exist in the Teflon coating. And they missed the point that U.S. has different legal system from China and that EPA's action was purely an administrative charge instead of a safety concern.

Generally speaking, Chinese consumers right now have been easy to get agitated by negative media reports, especially when it comes to consumer product safety. Frequent media exposure of bad product quality and safety incidents, and of course, the imported milk powder scare due to mad cow disease, leaves people subject to doubt and mistrust with business. Instead, they tend to trust popular media although these media could make mistake in the reporting and send the wrong message. (Telephone interview, October 27, 2004)

Based on these observations, DuPont China determined that their basic message was to clarify the misinterpreted facts and reassure general publics the safety of Teflon-branded products. They implemented a series of recovery actions to improve relationships with key stakeholders, with media in particular. The ultimate goal was to ease public concerns and seek restoration in public confidence and company reputation. These actions included active interactions with reporters, holding frequent news conferences in China, inviting Chinese reporters to attend news conferences held in DuPont headquarters in the United States, and cooperating with the Chinese regulation agencies—State Administration of Quality Supervision and Quarantine (SAQSQ) and Chinese Academy of Inspection and Quarantine (CAIQ), among others.

In particular, DuPont China employed the tool of online medium in its crisis management efforts. DuPont China sent its Vice President together with its fluoro-products technical manager to join an online chat tour as an opportunity to come face-to-face with consumers. This chat tour was moderated by a facilitator from SINA.com's chat room. This event was organized considering the increasing popularity and influence of SINA.com's chat room among Chinese netizens. The chat tour created an easy, close and interactive atmosphere that allowed DuPont executives to directly answer a broad range of questions from common consumers' perspective. Moreover, it succeeded in generating positive news coverage for DuPont in several Chinese newspapers.

Later, DuPont China authorized SINA.com as a prior portal for real-time corporate news releasing and a platform to post complete transcripts of their news conferences. This action, according to the DuPont public affairs manager, was initiated in the hope that they “could make real-time releases directly to consumers without going through other

traditional media channel where reporters could somehow skew some of our original intentions.”

Interview with DuPont China’s public affairs manager illustrated its guiding principle of “active,” “open,” and “empathy” in crisis communication and relationship building:

To handle the Teflon accident, we’ve emphasized an “active manner” and an honest attitude throughout the management process. Instead of a “cold control” attitude, we took initiatives to communicate with various media, such as print, broadcasting and the Internet media, and other publics including government and consumers.

But we understand these journalists’ difficulties. They have their deadlines to meet. We understand reporters and consumers’ concern about the Teflon issue because it involves everyone’s safety and daily life. We understand that because we ourselves would have worries and concerns if we are not informed. So when we are working with the media, we respect their autonomy, we make sure we are friendly and candid and give them information they need and then leave it to their decision in their coverage rather than trying to swing their opinion.

DuPont has developed and maintained great working relationships with these Teflon cookware manufactures. During the whole incident, they’ve been very supportive, and they have confidence on DuPont and the Teflon brand. (Telephone interview, October 27, 2004)

DuPont’s active crisis management efforts had received a certain degree of positive effects in media coverage. For example, many news reports by the Chinese media, especially after July 20, covered DuPont’s crisis management events and its active effort in clarifying facts and communicating with its publics. Many newspapers gave more space or favorable coverage to DuPont’s positions and messages in their follow-up stories of the Teflon crisis.

DuPont China posted one news release on its website on July 12, which was the exact translation of DuPont U.S.’s July 8 news release. Besides, DuPont China Vice President’s July 15 chat tour with SINA.com, DuPont U.S. CEO’s July 19 interview

with *China Daily*, DuPont China CEO's July 21 Beijing news conference, and U.S. DuPont spokesperson's July 26 interview with *China Newsweek*, were also released by the media in the form of interview transcripts. Analysis of the above discourse illustrated that in addition to providing facts to respond to specific technical questions, the company basically used the strategies of clarification and comparison, sticking to the initial message held by U.S. DuPont (see Table 5-2).

Table 5-2. Crisis response strategies employed by DuPont after the conflict shifted to China

Response Timeline	Examples of Response Discourse	Strategies (Posture)
<i>July response to EPA's Administrative Allegation (July 2004, USA & China)</i>		
	<ul style="list-style-type: none"> Fully complied with EPA's reporting requirements (USA & China). 	<i>Clarification (Deny)</i>
	<ul style="list-style-type: none"> Not about the safety of our products, it is about administrative reporting (USA & China). 	<i>Clarification/ Comparison (Diminish)</i>
<i>August response to EPA's Allegation and Chinese Media Allegation (2004, USA & China)</i>		
	<ul style="list-style-type: none"> Fully and promptly reported to EPA all appropriate information regarding PFOA (USA & China). 	<i>Clarification (Denial)</i>
	<ul style="list-style-type: none"> Has been and will continue to provide industry leadership as part of EPA's investigation (USA & China); Has developed and implemented both manufacturing technology and emissions control technology in its plants that have reduced PFOA emissions by as much as 99 percent (USA & China); Reducing PFOA emission is guided by DuPont's strategic commitment to sustainable development which advocates the zero release goal in its manufacturing (China). 	<i>Bolstering (Repair)</i>
	<ul style="list-style-type: none"> Some Chinese media misinterpreted DuPont's effort in reducing PFOA emission as related to PFOA health risk, which was untrue and misleading (China). 	<i>Attack (Deny)</i>
	<ul style="list-style-type: none"> Media misinterpretation led to mass panic (China) 	<i>Shift blame (Deny)</i>

Table 5-2. Continued

Response Timeline	Examples of Response Discourse	Strategies (Posture)
<i>September response to West Virginia law suit settlement (September 2004, USA & China)</i>		
	<ul style="list-style-type: none"> • Pleased to reach an agreement that places the two parties' combined priorities where they belong – on the community and not on lengthy and contentious legal proceeding (USA & China). 	<i>Bolstering (Repair)</i>
	<ul style="list-style-type: none"> • No association between the lawsuit settlement and admission of liability on DuPont's part (USA & China). 	<i>Clarification/ Comparison (Diminish)</i>
	<ul style="list-style-type: none"> • Pay \$102.6 million to the residents and their lawyer in cash payments and expenditures (USA & China). 	<i>Compensation (Repair)</i>
	<ul style="list-style-type: none"> • Offer C-8 water treatment facilities for area communities (USA & China); • Create an expert panel to conduct a community study to assist it in evaluating whether there is a probable link between C-8 exposure and any human disease (USA & China). 	<i>Corrective Action (Repair)</i>
<i>October response to the release of CAIQ test results (October 2004, China)</i>		
	<ul style="list-style-type: none"> • CAIQ is the national authoritative testing institute; hope the result could help restore consumers' confidence in nonstick cookware (China). 	<i>Praising others (Diminish)</i>

August Response to Chinese Media Allegation

However, skepticism about the safety of Teflon products lingered on the Chinese market and so did media reports challenging DuPont's explanation. For example, when DuPont filed its formal response on August 12 to the three accounts in the EPA complaints, a few reports interpreted DuPont's promise to reduce 99 percent of its PFOA emission in its manufacturing plants in the United States as acknowledging the harmful effects of PFOA. This prompted DuPont on August 18 to hold a news conference again and post the first news release initiated from its Beijing office on its website. DuPont focused on clarification, attack, shifting blame, and bolstering strategies by reiterating its

previous positions to clarify the “facts” and disputing those negative associations interpreted in some media reports (see Table 5-2). DuPont then accused the Chinese media for inaccurately interpreting DuPont’s commitment to sustainable development and ultimate goal in “zero discharge.”

September Response to U.S. Lawsuit Settlement

On September 9, DuPont agreed to settle the 2001 class-action lawsuit filed by West Virginia residents accusing the company of contaminating drinking water supplies with PFOA. DuPont would pay \$102.6 million to the residents and their lawyer in cash payments and expenditures. In addition, the company could pay as much as \$235 million for a medical monitoring program if the EPA determines the link between PFOA exposure and human disease and birth defects. As part of the settlement, DuPont agreed to offer “C-8 water treatment facilities for area communities and creation of an expert panel to conduct a community study to assist it in evaluating whether there is a probable link between C-8 exposure and any human disease.” These actions, to some extent, reflected compensation and corrective actions strategies (see Table 5-2).

Learning from previous lessons, when DuPont settled the West Virginia class-action lawsuit on September 9, DuPont China posted the Chinese translation of its U.S. news release on DuPont China’s website on the same day. This news release was attached with an announcement letter, which explained DuPont’s decision and disputed any possible unfavorable interpretations of the company’s action (see Table 5-2). In DuPont’s message, the company stressed the settlement was a result of placing the combined priorities they belong—“on the community and not on lengthy and contentious legal proceedings” — and not any “admission of liability on DuPont’s part.” DuPont China’s news release declared no association between DuPont’s case settlement and the PFOA

reporting dispute with the EPA or the safety of Teflon-branded cookware. Meanwhile, the news release threatened with legal actions against “biased, inaccurate or misleading” speech by any individuals or organizations that might damage DuPont’s reputation and brand image.

October Response to CAIQ Test Result

The CAIQ test result released on October 13, to some extent, greatly relieved DuPont as well as Chinese Teflon cookware makers because the Teflon scare had already plunged 90 percent of their domestic sales in August and September (Business Daily Update, 2004). In the news release posted on its website on October 14, DuPont China welcomed the test result, praised CAIQ for its authority, and expressed hopes that the test result would help restore consumer confidence in Teflon cookware (see Table 5-2).

According to DuPont China’s public affairs manager, the Teflon crisis has relatively limited negative impact on their business operation and Teflon products’ global market. This is because over 90 percent of Teflon cookware is exported to other countries such as the United States, Europe, and Japan, where the markets have not been influenced considerably. However, they were deeply concerned about the incident’s damage to DuPont’s reputation and the loss of public trust in Teflon products in China:

Now test results from Chinese Academy of Inspection and Quarantine proved that Teflon products in the market are safe so that consumers’ doubt and worry would be relieved. And we can see that gradually the media picked up the stories less and less often. But we would still be working with these cookware companies for more market communication to restore the public confidence in Teflon products. (Telephone interview, October 27, 2004)

Research Question 2

What were the characteristics of the English language and Chinese language news coverage on the Teflon crisis?

English Language News

Story month and date

As shown in Table 5-3, with respect to story date, 28 stories (51 percent) were picked up in July which accounted for about half of the total stories. The maximum media interest in the Teflon case in July indicated the media pressure culminated at the beginning month of the Teflon crisis. August, September and October ran nine (16%), seven (13%) and ten (18%) stories each, revealing the prolonging of the crisis for several months. Only one story was found published in November and directly focusing on the Teflon/PFOA topic, suggesting the subsidence of the crisis in November (see Figure 5-1).

Table 5-3. Story month of English language news and Chinese language news

Category and option	News Language*			
	English Language		Chinese Language	
	Frequency	Percentage	Frequency	Percentage
Story Month				
July	28	51%	103	66%
August	9	16%	24	15%
September	7	13%	6	4%
October	10	18%	21	13%
November	1	2%	2	1%

*NEL=55, NCL=156

In terms of story frequency published on each single day, news stories peaked on July 9 with 12 stories, immediately after the EPA announcement of its administrative action and potential fine against DuPont. The second hit was on September 10, the following day of DuPont's Virginia class-action lawsuit settlement, which accounted for five stories.

Further, when the news sample was first categorized according to the news outlet's country origin and then compared, the frequency trends by story month slightly differed at different country sources (illustrated in Figure 5-2). Although stories from China, the

United States, and Europe all peaked in July, China and Europe had the second highest number of stories in October when Chinese regulation agencies released their Teflon cookware test results, in contrast to the United States' second peak in September for the West Virginia legal suit settlement. The divergent story frequency trends at different source locations suggested certain inherent difference might exist in their news patterns.

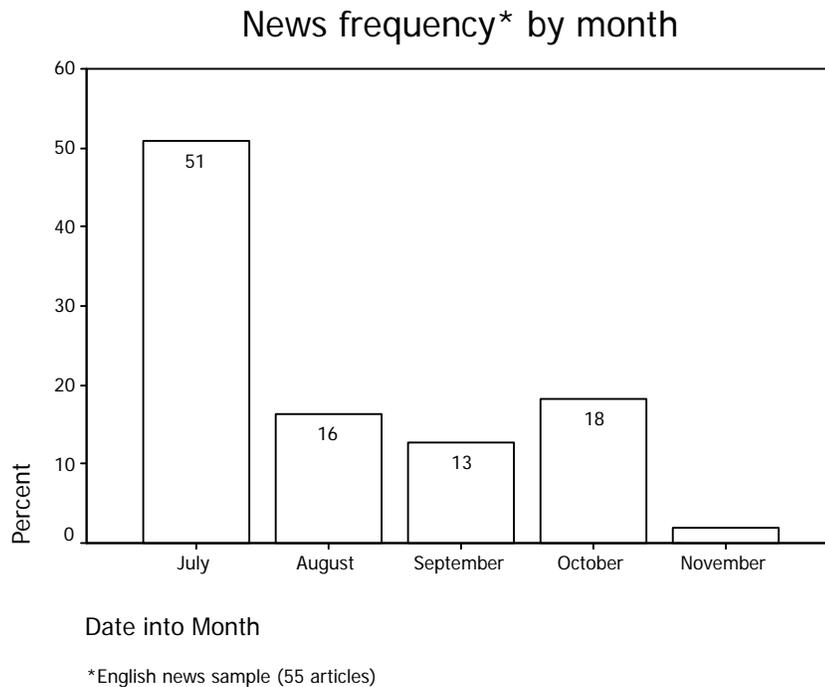


Figure 5-1. English language news frequency by story month

Story features

In terms of event location, over half of the stories (56%, 31 stories) covered topics only related to the United States, while 36 percent of the sample covered events associated with both the United States and China. As the news stories were grouped with respect to their story focus, stories with the main focus on the EPA's action/discourse accounted for the most part at 29 percent (16 stories). Stories initiated from DuPont's action/discourse and U.S. legal suits presented 22 percent (12 stories) and 16 percent (9

stories), respectively. The rest of the stories placed their main focus on Chinese regulation agencies' action/discourse (6 stories, 11%), consumer reaction/market impact (4 stories, 7%), Teflon cookware makers' reaction (3 stories, 6%), and others (see Table 5-4).

Analyzed from the perspective of primary problem attribution, 34 percent (19 stories) of the sample attributed the Teflon crisis to reporting rules dispute. This, to some extent, coincided with DuPont's message with regard to the comparison strategy. Because the examination of DuPont's response illustrated that the company seeks to frame the conflict as an issue of federal procedure disagreement rather than of PFOA's potential human health and environmental risk.

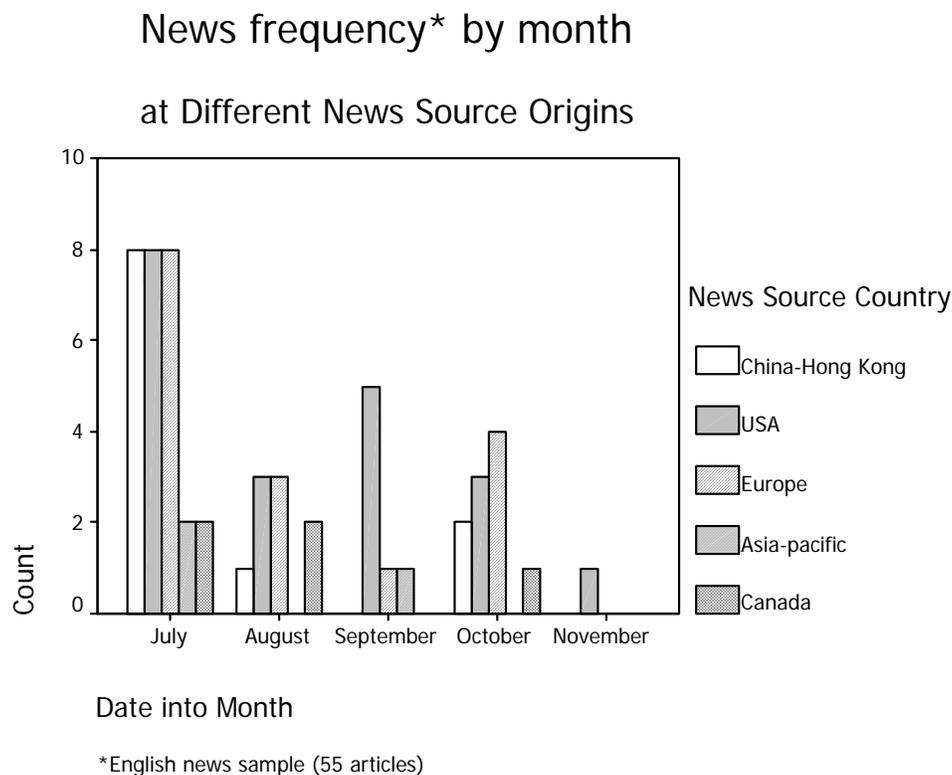


Figure 5-2. English language news frequency by story month at different country origins

However, still 27 percent (15 stories) of the English language news sample ascribed the problem to PFOA's potential harmful human health and environmental effect and 24

percent to the health risk of Teflon cookware. In addition, four articles mirrored DuPont's accusation that media misinterpretation was the primary cause to the Teflon scare.

Table 5-4. Story Features of English language news and Chinese language news

Category and option	News Language*			
	English Language		Chinese Language	
	Frequency	Percentage	Frequency	Percentage
Event Location				
China	2	4%	58	37%
USA	31	56%	7	4%
Both	20	36%	89	57%
Other	2	4%	2	1%
Main Focus				
EPA accusation	16	29%	7	4%
DuPont discourse/action	12	22%	40	26%
Teflon cookware maker	3	5%	14	9%
Chinese Reg	6	11%	31	20%
Consumer/market reaction	4	7%	27	17%
U.S. legal suits	9	16%	6	4%
Chinese legal suits	0	0%	15	10%
Activist group	1	2%	2	1%
Others	4	7%	14	9%
Primary Problem Attribution				
Reporting rules dispute	19	35%	14	9%
PFOA/C8 risk	15	27%	26	17%
Teflon cookware risk	13	24%	99	63%
Media problem	4	7%	6	4%
Regulation/policy concerns	1	2%	8	5%
Business ethics concerns	3	5%	2	1%
Crisis management problems			1	1%

*NEL=55, NCL=156

In terms of secondary problem attribution, results indicated that PFOA-associated risk accounted for about half of the stories (51 percent, 28 stories). This suggested that those stories focusing on reporting rules dispute as the primary problem tended to choose PFOA risk as their minor attribution. It should be noted that 13 percent of the sample (7 stories) oriented the story from the perspective of business ethics concerns, where charges

such as “covering up evidence” were used to suggest DuPont’s unethical behavior in deliberately disguising unfavorable evidence.

Narrative features

The English language news sample averaged 4.3 publics, 3.9 sources, and 2.4 direct quotes per news story. As shown in Table 5-5, the source most frequently cited was U.S. regulation agencies, as 95 percent (52 articles) of all stories used the EPA as an information source. DuPont source followed at 84 percent (46 stories), wherein 32 percent (15 stories) was labeled as DuPont China branch. Other sources that were used by over 30 percent of the stories included other media (40%), Chinese regulation agencies (33%), and activist groups (31%).

Table 5-5. Selection of Sources in English language news and Chinese language news

Category and option	News Language*			
	English Language		Chinese Language	
	Frequency	Percentage	Frequency	Percentage
Sources				
DuPont	46	84%	96	62%
DuPont China	15	27%	62	40%
U.S. Reg	52	95%	63	40%
Consumers			39	25%
Chinese Reg	18	33%	74	47%
Scientists/experts	13	24%	51	33%
Financial Analysts	2	4%	5	3%
Teflon cookware maker	7	13%	51	33%
Activist groups	17	31%	17	11%
Communities	15	27%	13	8%
DuPont employees	2	4%	8	5%
Other media	22	40%	55	35%
Other chem Company	7	13%	1	1%
Other sources	16	29%	44	28%

*NEL=55, NCL=156

In addition, community/residents and experts/scientists sources were presented by 27 percent and 24 percent of the stories. On the other hand, DuPont ranked first in the

number of direct quotes cited with 1.1 quotes per article, followed by averaged 0.4 direct quotes from U.S. regulation agencies and 0.2 quotes from activist groups.

Reception of DuPont response and presentation of arguments

As shown in Table 5-1, DuPont interpreted the EPA action as reporting rules dispute rather than a result of EPA's concern on PFOA's human health and environmental risk. This suggested both clarification and comparison strategies as it clarified the fact from DuPont's perspective as well as reduced the offensiveness of the allegation against DuPont. For the consistent purpose of the coding analysis, the coders chose to code the message into the clarification strategy category in priority.

Following this criterion, as the English language news stories cited DuPont's discourse, 64 percent (35 articles) of the news chose quotes reflecting clarification strategy. Another strategy commonly received by the media was bolstering strategy illustrated by 30 percent (16 articles) of the stories. Shifting blame and big picture equaled with 12.7 percent (7 stories) each, followed by praising others at 3.6 percent (2 stories). Both attack and compensation strategies were suggested by only one story at 1.8 percent of the entire sample.

In terms of presenting arguments from Pro-PFOA side and Anti-PFOA side, Anti-PFOA side slightly won over. 84 percent of the stories contained claims supporting the safety of Teflon/PFOA while 20 percent provided concrete evidence supporting this claim. In comparison, 95 percent of the sample presented refutatory statements while 53 percent offered scientific test results. When interpreting these tests, most stories (67%) didn't notify the inconclusiveness, or scientific uncertainty, of the available test results. Notably, within the stories suggesting the limitation of current scientific findings, 72 percent were balanced at presenting arguments from both sides.

Correlation findings

Correlation results were generated through running Pearson product moment test. Correlations were found between article length and number of sources, article length and number of publics, as well as article length and number of direct quotes. As shown in Table 5-6, high correlations existed between article length and number of sources ($r=.728$, $p<.000$), and between article length and number of direct quotes ($r=0.829$, $p<0.000$), while a moderate correlation was found between article length and number of publics ($r=0.679$, $p<.000$). In addition, the longer the article the more DuPont direct quotes were cited in English language news ($r=.573$, $p<.000$, moderate).

Table 5-6. Correlation test of article length by number of publics, sources, direct quotes, and DuPont direct quotes (English language news)

		Correlations				
		Length-Words	Number of Publics	Number of Sources	Number of Direct Quotes	Number of DuPont Direct Quotes
Length-Words	Pearson Correlation	1.000	.679**	.728**	.829**	.573**
	Sig. (2-tailed)	.	.000	.000	.000	.000
	N	55	55	55	55	55
Number of Publics	Pearson Correlation	.679**	1.000	.856**	.519**	.500**
	Sig. (2-tailed)	.000	.	.000	.000	.000
	N	55	55	55	55	55
Number of Sources	Pearson Correlation	.728**	.856**	1.000	.607**	.477**
	Sig. (2-tailed)	.000	.000	.	.000	.000
	N	55	55	55	55	55
Number of Direct Quotes	Pearson Correlation	.829**	.519**	.607**	1.000	.777**
	Sig. (2-tailed)	.000	.000	.000	.	.000
	N	55	55	55	55	55
Number of DuPont Direct Quotes	Pearson Correlation	.573**	.500**	.477**	.777**	1.000
	Sig. (2-tailed)	.000	.000	.000	.000	.
	N	55	55	55	55	55

** . Correlation is significant at the 0.01 level (2-tailed).

Chinese Language News

Story month and date

In this Chinese language news collection, 66 percent of the news articles (103 stories) appeared on the print media in July marking the crisis outset and climax. In August, the media interest dropped considerably and the sample yielded 24 stories (15

percent). The press pressure further subdued with only six stories in September. However, the release of Teflon cookware test result by the Chinese regulation agencies led to 21 (13 percent) stories, which somewhat revived the press interest and prolonged the press coverage of the Teflon topic. November news on the Teflon topic only amounted to two stories, demonstrating the seemingly end of the Teflon crisis (see Table 5-3 and Figure 5-3).

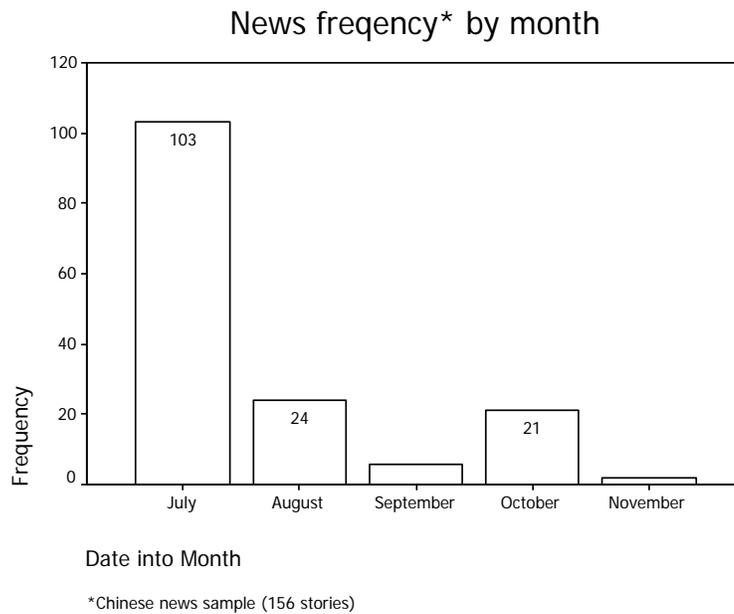


Figure 5-3. Chinese news frequency by story month

Story features

In the Chinese language news sample, 89 articles pertained to both the U.S. and Chinese stakeholders which accounted for 57 percent of the entire sample. Besides, 58 stories (37 percent) only involved China, while seven articles (4.5%) covered stories only related to the United States. Stories focusing on DuPont's discourse/action took the lead in main focus with 26 percent (40 articles), followed by Chinese regulation agencies' discourse/action at 20 percent (31 articles) and Consumer reaction/market impact at 17

percent (27 stories). Chinese legal suits, Teflon cookware makers' discourse/action, and the EPA's accusation presented 9.6 percent (15 stories), 9.0 percent (14 stories), and 4.5 percent (7 stories), respectively (see Table 5-4).

Among 156 stories, 99 stories were recognized as to primarily attribute the Teflon crisis to the human health risk associated with Teflon nonstick cookware, followed by human health and environmental risk presented by PFOA/C8 (26 stories, 16.7%). Only 9.0 percent of the sample (14 stories) focused on reporting rules dispute as the problem nature. This was in sharp contrast with the findings from the English news sample, wherein the majority of stories ascribed reporting rules disagreement as the primary nature. This distinction in media frames between the United States and China indicated, to some extent, both the cause and the effect of the change of crisis nature when the Teflon crisis shifted from the United States to China.

It should be recognized that eight articles ascribed regulation/policy concerns as the primary nature of the Teflon scare. The target issues and narrative tone illustrated by these articles reflected the existence as well as boundary of mild media criticism in China on domestic regulation systems. Although the freedom and influence of media over domestic public agenda was very restricted, its sheer existence might seem promising compared to the past.

Considering secondary attribution of problem nature, PFOA-C8 risk occupied the first place at 32 percent with Teflon cookware risk ranked second at 15 percent. The rest included regulation concerns at 7.7 percent and business ethics concerns at 7.1 percent.

Narrative features

The Chinese language news sample averaged 4.4 publics, 3.4 sources and 1.5 direct quotes per article. DuPont source ranked first as the most frequently used source by the

Chinese print media, when 96 stories (61.5%) cited DuPont's position (62 stories identified the specific DuPont source as the DuPont China branch). In contrast, 48 percent and 40 percent of the news stories referred to Chinese regulation agencies and U.S. regulation agencies for their facts and opinions, respectively. Other media (35%), experts/scientists (33%), Teflon cookware makers (33%), and consumers (25%) were also on the commonly cited source list, illuminating their key roles in the crisis evolution (see Table 5-5). In terms of number of direct quote, DuPont source topped again with an average 0.53 direct quote each article. Teflon cookware maker ranked second at 0.24, followed by experts/scientists and consumers at 0.13 each.

Reception of DuPont response and presentation of arguments

Similar to the English language news sample, the Chinese language news sample also yielded clarification strategy (85 articles, 54.5%) and bolstering strategy (81 stories) as the most discernable crisis response strategies employed by DuPont. Although a few articles also cited DuPont quotes that suggested strategies of shifting blame, attack, suffering, and praising others, the low frequency of occurrences (less than 5 percent) indicated relatively slim media reception.

However, in the Chinese news, arguments supporting the safety of Teflon/PFOA almost tied with those in the refutatory position in terms of occurring frequency, both in forms of evidence and simple statements. 70 percent of the articles cited claims in support of Teflon safety whereas 72 percent cited refutatory opinions. Similarly, 26 percent articles contained supportive evidence reflecting DuPont's stand as 21 percent presented evidence for the opposite side. Only 16 percent of the entire sample described the PFOA tests in scientific uncertainty terms, thereof 9.0 percent framed the issue from both sides in a relatively balanced manner.

Research Questions 3

How would the Teflon crisis case be interpreted by propositions of the cross-national conflict shifting theory? Do the propositions need to be revised or are new propositions needed to fully explain the phenomenon?

DuPont's Teflon crisis in China was initiated from the U.S. EPA's administrative action against DuPont in the United States. For the most part, in the United States, it involved concerns on PFOA's human health and environmental risk controversy. However, the controversy changed nature in China where it triggered a consumer product safety crisis in a lot greater scale and scope. The EPA's administrative action, EWG's allegation against DuPont, and DuPont's actions, not only affected publics in the United States (its home country where it is headquartered), but also had an impact internationally because DuPont's products are developed, manufactured, and consumed around the world. The conflict in the United States shifted internationally when the media reported the situation to publics in other country [proposition 9].

Molleda and Connolly-Ahern (2002, p. 4) suggested that "this impact seems to be greater at the home country involved, which could be explained by the relevance and proximity of organization for the home publics." Although this may still hold true for the general situations, in this specific case, the conflict resulted in a stronger impact in the host country—China, where it turned into a consumer product crisis and raised heavy public pressure. Indeed, DuPont's Teflon crisis in China symbolizes a category of reversed cross-national conflict shifting (CNCS) phenomenon. As the Teflon crisis case illustrated, the conflict, which involves a TNC, shifts from a home country to a host country through international media; and results in greater impact in the host country. The impact could potentially lead to repercussions in the corporation's home country.

Three hypotheses were tested by the combined sample of the English language and Chinese language news.

Hypothesis 1

The Chinese news coverage will differ significantly from the U.S. news coverage of the Teflon crisis in story features such as event location, story focus and primary problem attribution. (Supported)

Cross-tabulation results indicated U.S. and Chinese news coverage differed significantly in terms of event location ($X^2(3, N=166) = 115.892, p < .000$) (see Table 5-7 and Figure 5-4). U.S. media covered significantly greater news topics related only to the United States, whereas Chinese news tended to cover Teflon stories associated with both the United States and China. This is reasonable because Chinese media usually cited the U.S. EPA or U.S. DuPont's information as the context of the Teflon concerns. Besides, followed-up U.S. news on the Teflon case had resulted in greater impact in China than vice versa.

Table 5-7. Event location in the Chinese news and U.S. news coverage

		News Source Country of Origin*			
		Chinese Press		U.S. Press	
Category and option		Frequency	% in Chinese news	Frequency	% in U.S. news
Events Location	China	59	35%	1	5%
	USA	7	4%	19	90%
	Both	98	59%	1	5%

*NCP=166; NUP=21

Significant difference was also found in the main focus ($X^2(8, N=187) = 69.557, p < .000$) and main problem attribution ($X^2(6, N=31) = 49.956, p < .000$) between stories originated from the Chinese and U.S. news media. As shown in Table 5-8, Chinese news stories adopted a greater variation in terms of main focus. In particular, DuPont

discourse/action (26%), Chinese regulation agencies discourse/action (20%), consumer reaction/market impact (17%), Teflon cookware makers' discourse/action (10%), and Chinese legal suits (9.0%) represented the most popular story focus in the Chinese news coverage.

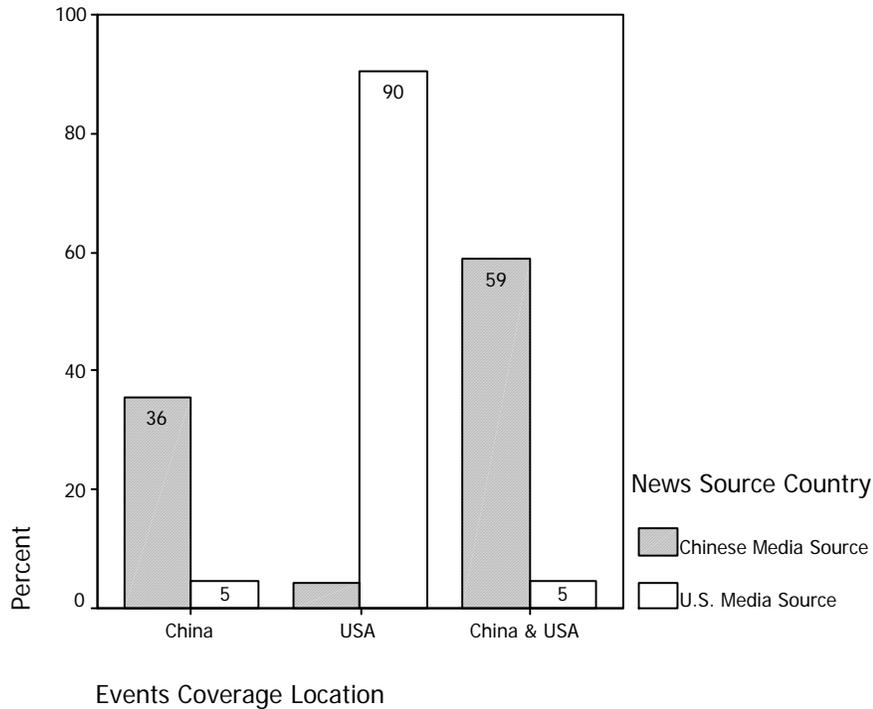


Figure 5-4. Event location in the Chinese and U.S. news coverage

In contrast, the majority of U.S. news stories chose to focus on either the EPA's action (33%) or legal suits in the United States (39%) (see Table 5-8). In terms of primary problem attribution, a significantly higher percentage of Chinese news stories (64%) attributed the Teflon crisis to Teflon cookware's human health concern than U.S. stories did. It was found that U.S. media stories mainly referred to either federal reporting rules dispute (43%) or human health and the environmental concerns raised upon PFOA (52%) as the problem origins. These trends were further demonstrated in Figure 5-5 and Figure 5-6.

Table 5-8. Main focus and primary problem attribution in the Chinese and U.S. news coverage

Category and option	News Source Country of Origin*			
	Chinese Press		U.S. Press	
	Frequency	Percentage	Frequency	Percentage
Main Focus				
EPA accusation	6	4%	7	33%
DuPont discourse/action	43	26%	2	10%
Teflon cookware maker	17	10%		
Chinese Reg	34	20%		
Consumer/market reaction	29	17%		
U.S. legal suits	6	4%	8	38%
Chinese legal suits	15	9%		
Activist group discourse	2	1%	1	5%
Others	14	8%	3	14%
Primary Problem Attribution				
Reporting rules dispute	14	8%	9	43%
PFOA/C8 risk	27	16%	11	52%
Teflon cookware risk	106	64%		
Media problem	7	4%		
Regulation/policy concerns	9	5%		
Business ethics concerns	2	1%	1	5%
Crisis management problems	1	1%		

*NCP=166; NUP=21

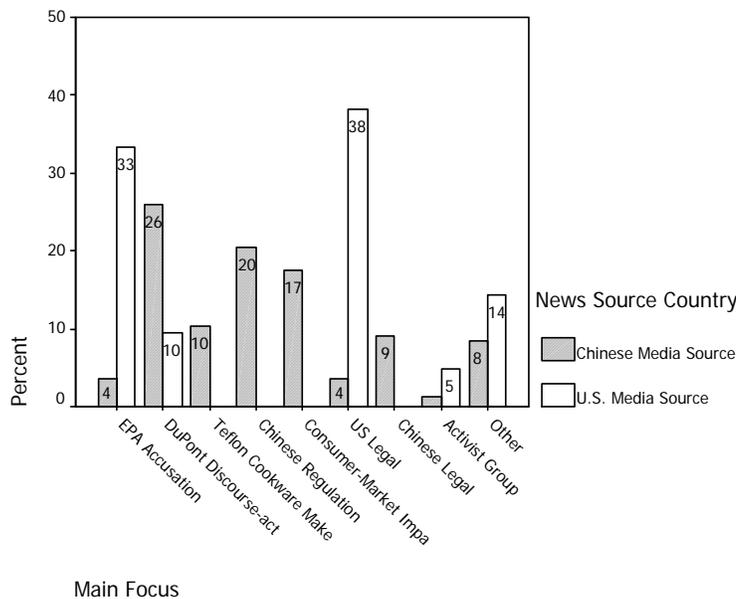


Figure 5-5. Main focus in the Chinese and U.S. news coverage

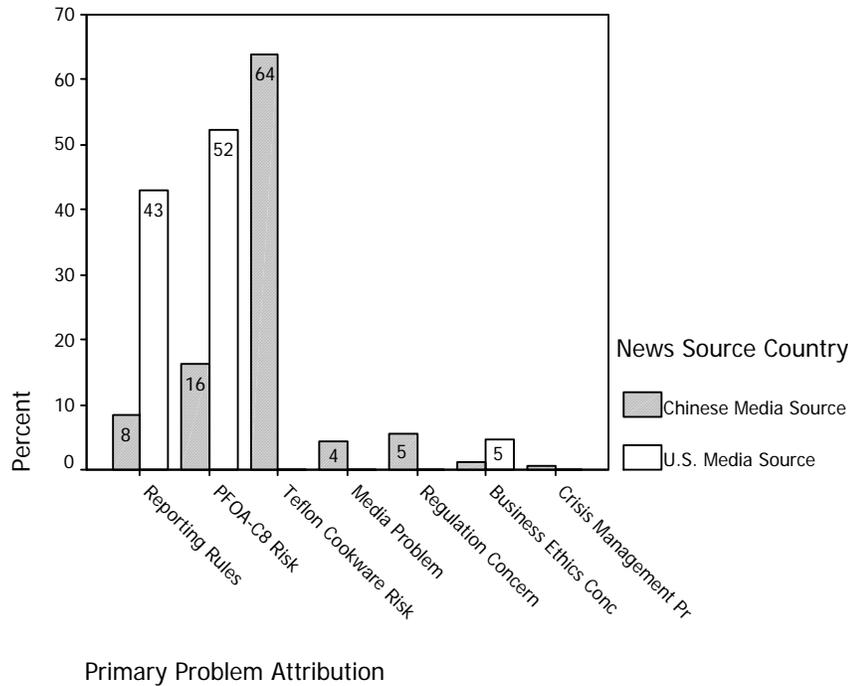


Figure 5-6. Primary problem attribution in the Chinese and U.S. news coverage

Hypothesis 2

News outlets are more likely to refer to sources from their own country of origin than sources from other country of origin. (Supported)

The origin of news media was crosstabulated with the type of sources with national characteristics, including DuPont China, Chinese regulation agencies, and U.S. regulation agencies, between Chinese news and American news coverage. American news contained significantly less use of DuPont China source ($X^2(1, N=187) = 14.154, p < .000$), less use of Chinese regulation agencies source ($X^2(1, N=187) = 15.048, p < .000$), but more use of U.S. regulation agencies source ($X^2(1, N=187) = 20.541, p < .000$), than news from China did (see Table 5-9).

Hypothesis 3

The Chinese news coverage will differ significantly from the U.S. news coverage in narrative features such as sources cited and direct quotes used. (Partially supported)

Independent-samples T-tests were run to explore the use pattern of sources and direct quotes by the Chinese and U.S. media. It was found the Chinese media used fewer sources as well as direct quotes than their U.S. counterparts (See Table 5-10 and Figure 5-7).

Table 5-9. Use of sources with national character in the Chinese and U.S. news coverage

Category and option	Chinese Press		U.S. Press	
	Frequency	% in Chinese news	Frequency	% in U.S. news
Source with national character				
DuPont China	70	42%	0	0%
Chinese Reg	82	49%	1	5%
U.S.Reg	71	43%	20	95%

*NCP=166; NUP=21

Table 5-10. T-test for the number of sources and direct quotes used in the Chinese and U.S. news coverage

Group Statistics					
	News Source Country of Origin	N	Mean	Std. Deviation	Std. Error Mean
Number of Sources	China-Hong Kong	166	3.43	2.14	.17
	USA	21	4.19	2.16	.47
Number of Direct Quotes	China-Hong Kong	166	1.53	2.00	.15
	USA	21	3.52	2.42	.53

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
Number of Sources	Equal variances assumed	.033	.857	-1.540	185	.125	-.76	.50	-1.74	.21
	Equal variances not assumed			-1.527	25.211	.139	-.76	.50	-1.79	.27
Number of Direct Quotes	Equal variances assumed	2.229	.137	-4.207	185	.000	-1.99	.47	-2.93	-1.06
	Equal variances not assumed			-3.621	23.566	.001	-1.99	.55	-3.13	-.86

An average of 3.43 sources and 1.53 quotes were used by the Chinese media, whereas averaged 4.19 sources and 3.52 quotes were cited by the U.S. news coverage. The T-test results indicated although no significant difference existed in the use of sources between Chinese and U.S. news at a medium effect size ($t(187) = -1.54, p = .125$ (two tailed), $d = -.35$), Chinese media cited significantly fewer direct quotes than the U.S.

media at a large effect size ($t(187) = -4.21, p < .000$ (two tailed), $d = -.90$). This result may indicate that reporters generally have better source access in the United States than in China. However, this may also be due to the fact that some inherent differences exist in reporting routines and narrative styles between Chinese and U.S. newsrooms.

Besides sources with clear national characteristics discussed in Hypothesis 2, other differences in terms of preferred sources were found between news media originated from China and those from the United States (see Table 5-11, Figure 5-8 and Figure 5-9 for selection of sources by Chinese and U.S. media).

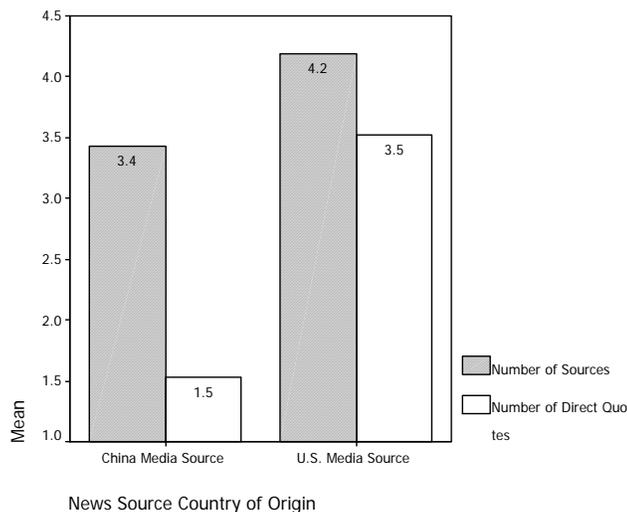


Figure 5-7. Mean of number of sources and direct quotes in the Chinese and U.S. news coverage

Cross-tabulation of selection of individual source by news media origin suggested that the Chinese media used significantly less DuPont source, $X^2(1, N=187) = 4.373, p = .037$, activist groups source, $X^2(1, N=187) = 31.296, p < .000$, and community/residents source, $X^2(1, N=187) = 33.072, p < .000$. On the other hand, the Chinese media cited significantly greater consumers source, $X^2(1, N=187) = 6.234, p = .013$, Teflon cookware makers source, $X^2(1, N=187) = 10.373, p = .001$, and other media source, $X^2(1, N=187) = 8.862, p = .003$.

Table 5-11. Selection of sources in the Chinese and U.S. news coverage

Category and option	News Source Country of Origin*			
	Chinese Press		U.S. Press	
	Frequency	Percentage	Frequency	Percentage
Sources				
DuPont	104	63%	18	86%
DuPont China	70	42%		
U.S. Reg	71	43%	20	95%
Consumers	39	23%		
Chinese Reg	82	49%	1	5%
Scientists/experts	53	32%	8	38%
Financial Analysts	5	3%	1	5%
Teflon cookware makers	57	34%		
Activist groups	17	10%	12	57%
Communities/residents	13	8%	11	52%
DuPont employees	9	5%	1	5%
Other media	62	37%	1	5%
Other chem Company	1	1%	5	24%
Other sources	48	29%	8	38%

*NCP=166, NUP=21

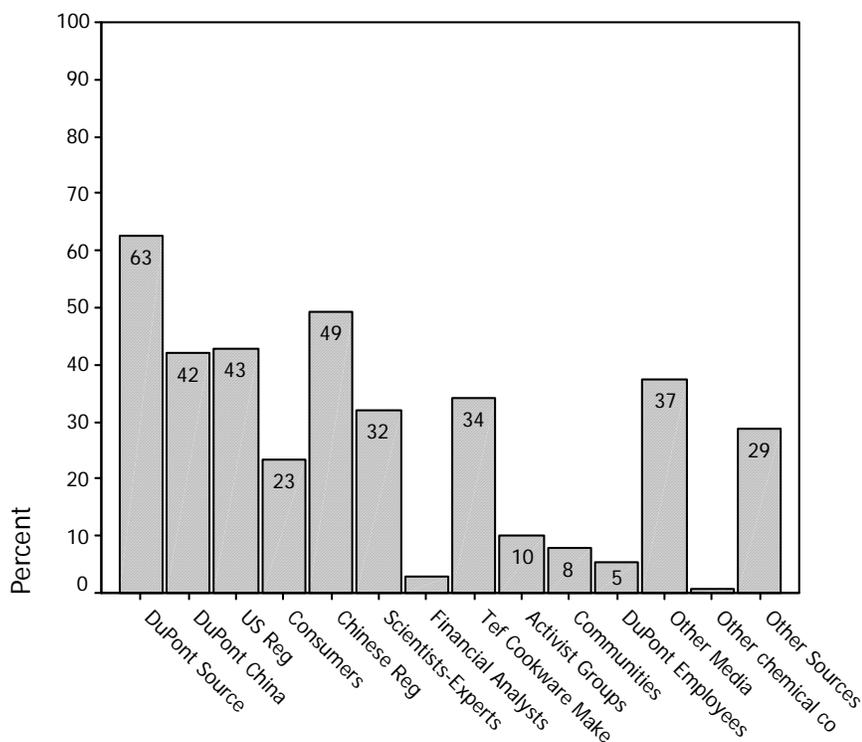


Figure 5-8. Selection of sources in the Chinese news coverage

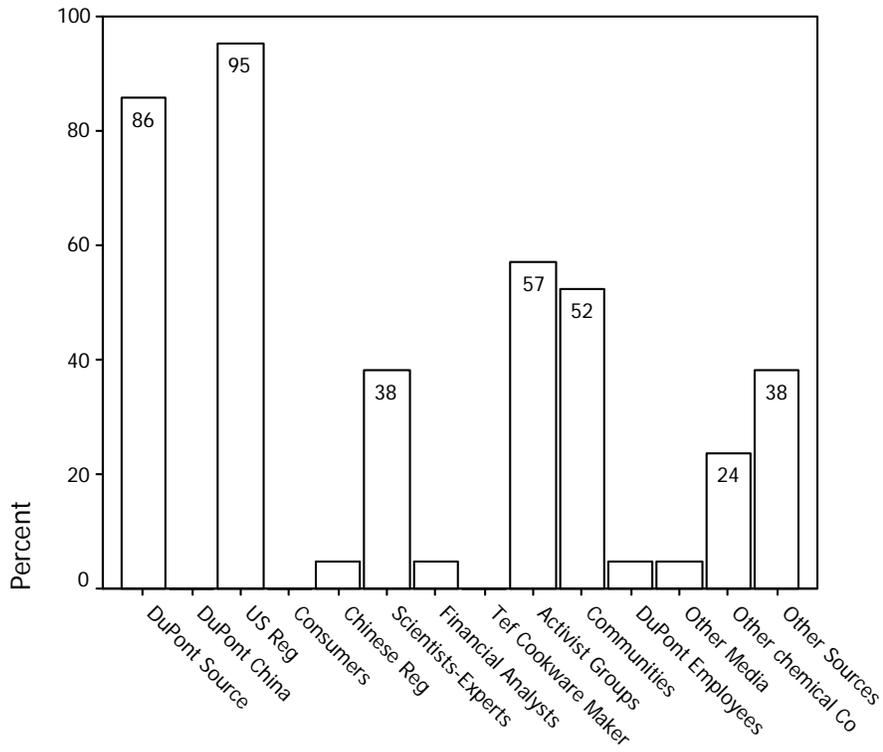


Figure 5-9. Selection of sources in the U.S. news coverage

The significant difference in source selection may indicate distinct news focus adopted by the Chinese and U.S. news coverage as well as the innate difference of key stakeholders involved in the conflict between the two countries.

In addition to testing the three hypotheses discussed above, ANOVA test was used to examine the Chinese language news sample in terms of different event locations. Table 5-12 suggests at the $p \leq .05$ level, news covering both the United States and China used significantly more sources (averaged 3.93) than those covering only China (averaged 2.71) and the United States (averaged 2.0) ($df=2/151$, $f=7.644$, $p=.001$). Similarly, news covering the two country locations involved significantly more publics (averaged 5.01) than those covering only China (averaged 3.74) and the United States (averaged 1.57) ($df=2/151$, $f=21.590$, $p<.000$).

Such a relationship also applied to the number of direct quotes cited in the news. Stories covering the two country locations, China, and the United States used an average of 2.31, 0.76 and 0.14 direct quotes, respectively ($df=2/151$, $f=11.018$, $p<.000$).

Table 5-12. One-way ANOVA for number of publics, number of sources, and number of direct quotes grouped by event location in the Chinese news coverage

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
Number of Publics	Between Groups	114.332	2	57.166	21.590	.000
	Within Groups	399.824	151	2.648		
	Total	514.156	153			
Number of Sources	Between Groups	66.783	2	33.392	7.644	.001
	Within Groups	659.613	151	4.368		
	Total	726.396	153			
Number of Direct Quotes	Between Groups	80.536	2	40.268	11.018	.000
	Within Groups	551.860	151	3.655		
	Total	632.396	153			

Based on the finding above, an additional hypothesis was proposed as below:

Hypothesis 4

News covering multiple countries as event locations will involve more publics and use more sources and direct quotes than news covering one single country. (Supported)

This hypothesis was supported by ANOVA test at the $p\leq.05$ level. In the combined news sample, news covering both the United States and China contained significantly more publics ($df=2/204$, $f=23.939$, $p<.000$), more sources ($df=2/204$, $f=10.300$, $p<.000$) and more direct quotes ($df=2/204$, $f=11.216$, $p<.000$) than those covering only China or the United States (see Table 5-13). These relationships were further demonstrated by the mean plots of number of publics, number of sources, and number of direct quotes by event location in Figure 5-10, Figure 5-11, and Figure 5-12.

Table 5-13. One-way ANOVA for number of publics, number of sources, and number of direct quotes grouped by event location in the combined news sample

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
Number of Publics	Between Groups	127.269	2	63.635	23.939	.000
	Within Groups	542.276	204	2.658		
	Total	669.546	206			
Number of Sources	Between Groups	81.232	2	40.616	10.300	.000
	Within Groups	804.459	204	3.943		
	Total	885.691	206			
Number of Direct Quotes	Between Groups	86.327	2	43.163	11.216	.000
	Within Groups	785.103	204	3.849		
	Total	871.430	206			

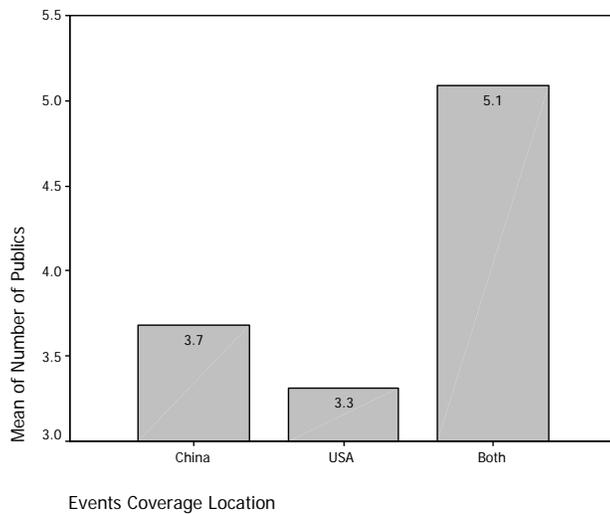


Figure 5-10. Mean plot of number of publics by event location

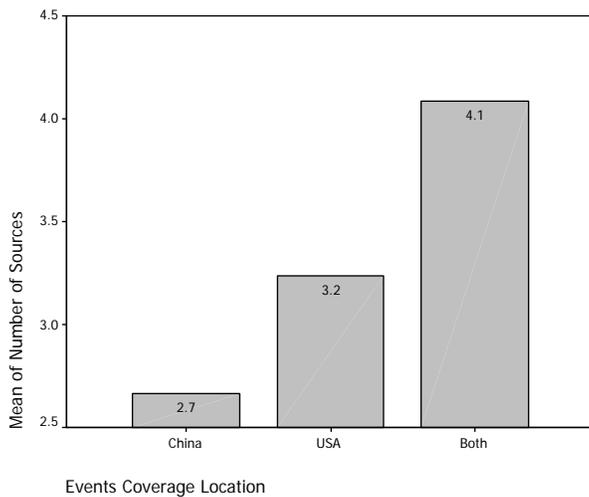


Figure 5-11. Mean plot of number of sources by event location

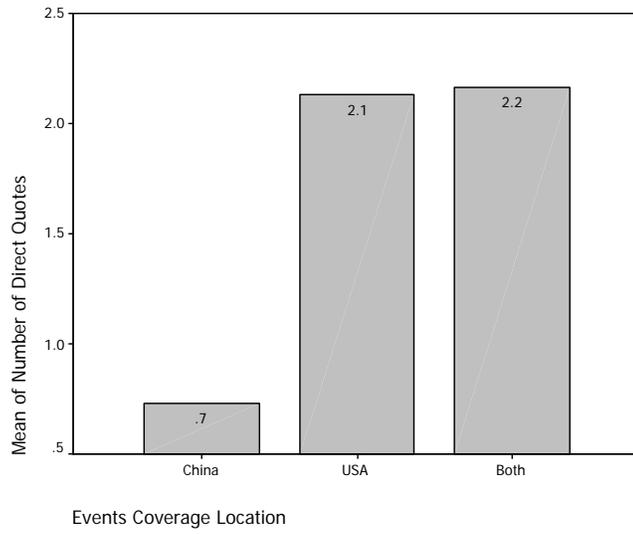


Figure 5-12. Mean plot of number of direct quotes by event location

CHAPTER 6 DISCUSSION

Summary of the Teflon Case

This descriptive and interpretive study examined the DuPont Teflon crisis evolution in China in terms of the interaction between DuPont's crisis response actions and strategies and the global media coverage. Before turning into a crisis, DuPont's Teflon products emerged as an issue in the late 1990s and were challenged by the EPA's investigation into PFOA, the environmental group EWG's criticism, and the West Virginia class-action lawsuit against DuPont. U.S. DuPont was found denying the charges consistently, which was acceptable in a situation as no conclusive evidence had been reached demonstrating the company should assume the responsibility or be blamed. However, as the news of the EPA's administrative action against DuPont in July of 2004 was transmitted through international media, the initial conflict in the United States shifted to China by heavy Chinese media coverage, triggering a consumer product crisis in a greater scale.

The study found DuPont China unprepared for the crisis in terms of early signal detection and prompt initial response. The escalated media coverage before DuPont China organized efficient crisis management actions spurred "mass panic" and consumer boycotts, which badly hit the Chinese Teflon cookware market. Further analysis suggested that DuPont China subsequently implemented a series of crisis management actions and strategies in accordance with U.S. DuPont's positions, which were partially corroborated by the Chinese media coverage. However, the damage to DuPont's

reputation and the loss of consumer confidence due to its crisis response lapses in the early stage could be hard to measure or to recover from in the short term.

Summary of DuPont's Crisis Response Strategies

Apologia Objective and Combined Response Strategies

Based on the information provided by the analysis of news releases and the interview with DuPont's public affairs manager, the company's decision-making process and its response strategies were found reflecting Hearit's (1994) first organizational apologia objective. DuPont offered a competing narrative with respect to the unfavorable perceptions held by its stakeholders to redefine the alleged acts to less offensiveness. To reach this objective, the company employed a strategy mix mainly combining clarification, comparison, and bolstering strategies, supplemented by strategies of attack, shift blame, and praising others based on Coombs' (2004) crisis response typology.

By clarification and comparison, DuPont denied all the charges and stressed the EPA's action was due to some reporting rules dispute rather than concerns about PFOA's human health and environmental risk, or any safety concern about Teflon products (see Table 5-2). Apart from these, as DuPont settled the West Virginia class-action lawsuit and offered monetary compensation and water treatment facilities, DuPont interpreted its decision as a result of benign purpose for the good of the neighboring community and not admission of apology, compensation, or corrective action. As shown in Table 5-2, bolstering strategy was another commonly employed strategy which appeared side-by-side with clarification strategy. DuPont applied bolstering to improve the company's positive image by highlighting its reputation of a socially responsible corporate citizen.

Supplementary strategies employed by DuPont included attack, shift blame and praising others (see Table 5-2). DuPont initially attacked the EWG for misinterpreting the EPA's risk assessment data about PFOA. As the conflict shifted to China with heavy Chinese media coverage, DuPont subsequently attacked the local media for misinformation. The company attributed the cause of the Teflon scare in China to the Chinese media's inaccurate and unfair interpretations, attempting to shift the blame to the Chinese media. After CAIQ released favorable test results, DuPont praised the Chinese regulation agencies for their credibility and authority in the matter. Praising others was used to maintain a good relationship with the Chinese regulation agencies, as well as to repair relationships with the media and the general publics from the Chinese government's endorsement.

Internal Coherence

Ihlen (2002) suggested assessing the argumentative/structural coherence, material coherence, and characterological coherence of organizational apologia. According to Ihlen, *argumentative/structural coherence* could be achieved by analyzing the studied organization's output discourse throughout the life cycle of the crisis. The organization's performance in responding to the facts, arguments, and positions presented in the media coverage demonstrates the response's *material coherence*. On the other hand, the organization's behavior in clinging to its initial narration of the problem reflects the apologia's *characterological coherence*.

Argumentative/structural coherence

Argumentative/structural coherence emphasizes the internal logic of the crisis response (Ihlen, 2002). In the Teflon crisis case, the potential human health and environmental risk of PFOA is still in a complex scientific debate, as no conclusive

evidence is available that is acknowledged by the whole scientific community. The EPA has not been able to fully ascertain PFOA's harmful effects to human health and the cause of the chemical's wide existence in human blood samples and the environment. Based on Sellnow's and Ulmer's (2004) discussion about the inherent ambiguity of crisis communication, DuPont's denial stance is argumentatively acceptable in such a situation with the lack of conclusive evidence. The same reasoning also approves DuPont China's denial statements before CAIQ released its test results, especially given that the results eventually supported DuPont's denial of PFOA's existence in Teflon products.

Further, when combining strategies, DuPont took multiple strategies from Coombs' (2004) denial and repair postures. The analysis of these strategies illustrated that the company managed to mix different crisis response strategies without sending out contradictory information. This also confirms good *argumentative coherence* of organizational apologia.

Material coherence

Material coherence of organization apologia requires the accused organization not to "overlook important facts, counterarguments, or relevant issues" (Ihlen, 2002, p. 192). In the Teflon case, DuPont faced different allegations due to different concerns from stakeholders in the United States and in China.

In the United States, DuPont was accused of manufacturing harmful products and covering up unfavorable test results by the environmental group EWG. The company was blamed for knowingly contaminating the water supplies of the neighboring community by plaintiffs in the West Virginia class-action lawsuit. Then it was charged of failing to submit information required the EPA according to federal reporting rules. As shown in

the study, U.S. DuPont responded to these charges promptly and consistently, providing competing arguments favorable to the company.

Unlike in the United States where Teflon products have been approved by the FDA and used by consumers for decades without safety concerns, Teflon cookware raised strong suspects in China due to concerns with its safety quality. The analysis found that key stakeholders in China such as the Chinese regulation agencies, the media, and consumers primarily attributed the Teflon problem to the human health risks of Teflon cookware (see Table 5-7).

In this cross-national conflict shifting (CNCS) case, the different social and cultural contexts between the United States and China have resulted in the added difficulty in crisis response. Whereas U.S. regulations agencies' approval on Teflon products might not be respected and accepted as their Chinese counterparts' decisions could effect, their allegations against DuPont on reporting rules violation added to Chinese people's confusion on the Teflon issue. This requires DuPont China to respond to the specific concerns from its stakeholders in China. Although delayed in the initial response, DuPont China, for the most part, managed to offer appropriate responses to answer charges from its targeted audiences in China.

Characterological coherence

Since CNCS cases involve multiple countries, the evaluation of the organization's *characterological coherence* has to take into consideration of the potential contradiction between discourse from the company's headquarters and its local branch in a host country. In the Teflon crisis case, DuPont's Chinese branch was found keeping its crisis response very consistent with the original messages employed by U.S. DuPont. Table 5-2 shows the response strategies DuPont employed after the

conflict shifted to China, which could be compared to the initial responses adopted by U.S. DuPont in 2003 (see Table 5-1). Throughout the entire Teflon crisis stages, DuPont denied the existence of PFOA in any Teflon-branded cookware and any violation of reporting rules, suggesting good *characterological coherence* of its self-defense discourse.

External Corroboration/Media Reception

Content analysis of the English and Chinese language news coverage of the Teflon crisis was used to study the external corroboration of DuPont's crisis response strategies. For the purpose of assessing media reception, the author suggested defining the news reception ranging above 60 percent as high, between 20-60 percent as moderate, between 5-20 percent as low, between 1-5 percent as slim, and below 1 percent as no reception. Based on this criterion, the content analysis finding concerning DuPont's response strategies was illustrated through Table 6-1.

Table 6-1. Media reception of DuPont's crisis response strategies

DuPont's Crisis Response Strategies	Media Reception			
	English Language News		Chinese Language News	
	Percentage	Evaluation	Percentage	Evaluation
<i>Clarification (including Comparison)</i>	64%	High	54%	Moderate
<i>Bolstering</i>	30%	Moderate	52%	Moderate
<i>Shifting blame</i>	13%	Low	4%	Slim
<i>Big picture</i>	13%	Low	<1%	No
<i>Praising others</i>	4%	Slim	2%	Slim
<i>Attack</i>	2%	Slim	4%	Slim
<i>Compensation</i>	2%	Slim	<1%	No
<i>Suffering</i>	<1%	Slim	4%	Slim

As indicated in the table, clarification (including comparison) was the best received strategy cited in the news coverage. This partly reflects DuPont's insistence on clarifying facts as its prime goal when interacting with reporters considering the company's unique organizational culture. On the other hand, the media are more willing to cite factual information if available, while clarification and comparison strategies are more likely to contain seemingly concrete arguments. Moreover, DuPont's bolstering was moderately accepted in both the English language and Chinese language news coverage. Specifically, the Chinese language news accepted DuPont's message that stressed its positive characteristics better than the English language news. This could, to some extent, demonstrate DuPont China's active crisis communication efforts after the crisis scope alerted the company.

Further, it should be noted that shifting blame and attack strategies were accepted poorly by the media coverage. This indicates that DuPont's accusation against the Chinese media for inaccurate reporting were not accepted by the Chinese media and generally ignored in the Chinese language news.

Attacking the media in a crisis situation might prove ineffective because the charge tends to be rejected by the media coverage. Also, the attack could potentially endanger the relationship between the organization and the media which represent a key stakeholder in a crisis situation. However, this does not necessarily mean a company under the media attack could not fire back. In this case specifically, DuPont's allegation against the Chinese media was at least received partially by the English language news coverage. This may indicate that news media outlets are more willing to

include allegations of a corporate crisis in terms of unfair coverage by news media outlets from other countries as a controversial aspect of a transnational conflict.

A Reversed Cross-national Conflict Shift

The examination of the Teflon crisis case under the framework of Molleda et al.'s (2005) cross-national conflict-shifting (CNCS) theory illustrated a reversed conflict shift phenomenon: the conflict involving a transnational corporation (TNC) shifts from a home country (USA) to a host country (China) through international media, and results in greater impact in the host country. The impact could potentially lead to repercussions in the corporation's home country.

The study tested four hypotheses. The results supported the first hypothesis that the Chinese news coverage differed significantly from the U.S. news coverage of the Teflon crisis in story features such as event location, story focus and primary problem attribution. The Chinese news covered significantly more events involving both China and the United States, whereas the U.S. news tended to focus on issues only related to the United States. In terms of story focus, Chinese news covered a more diverse range of topics while the majority of U.S. news chose to focus on either the EPA's action or legal suits. Considering the primary attribution of Teflon problems, a significantly higher percentage of Chinese news ascribed the Teflon crisis to Teflon products' safety concerns than the U.S. news did. In contrast, the U.S. news coverage mainly referred the problem to either federal reporting rules disputes or PFOA's human health and environmental risk.

The second hypothesis was also supported that news outlets were more likely to refer to sources from their own country of origin than sources from other country of origin. This is reasonable because the media tend to rely on sources reflecting local characters considering the news values of proximity and prominence.

The findings partially supported the third hypothesis that the Chinese news coverage differed significantly from the U.S. news coverage in narrative features such as sources cited and direct quotes used. The Chinese news coverage was found using fewer sources and direct quotes than the U.S. news. The Chinese press cited significantly fewer direct quotes than its U.S. counterpart. However, the study found no significant difference in the number of sources used. This result may indicate reporters in the United States have better source access than those in China, especially considering the emphasis on transparency in the entire U.S. social system. In addition, significant difference was found in terms of preferred sources, indicating the distinct news focus as well as key stakeholders involved in the conflict between the two countries.

Further tests on the coding data yielded an additional hypothesis. The fourth hypothesis was supported that news covering multiple countries as event locations involved more publics and used more sources and direct quotes than news covering one single country.

Based on the findings from the examination of DuPont's crisis response discourse and the content analysis of the news coverage, multiple factors were found contributing to such a reversed CNCS phenomenon. The author suggested discussing the distinct outcome of the DuPont Teflon crisis from three perspectives: the *crisis management performance* of the involved TNC, the *level of media interest* in the involved issue, and the unique and complicated *social and cultural context* of the involved country.

Crisis Management Performance

An important factor that aggravated the crisis was DuPont China's crisis management lapses—the unpreparedness in crisis prevention and quick response. The

failure in early signal detection and delay in initial response subjected the company to an unfavorable situation facing negative perceptions by its stakeholders.

As the case revealed, the PFOA controversy was originated several years ago. The company's U.S. headquarters had handled the problem rather smoothly, equipped with ample response materials such as news releases, fact sheets, position statements, and relevant Web links. The Chinese branch could have performed a lot better had the company implemented an efficient crisis management mechanism integrated across nations. However, the company obviously failed to anticipate the possibility that the media in a geographically remote host country could react this strongly to an unfavorable news story from another side of the globe.

Moreover, the interview with its public affairs manager revealed the inherent barriers in DuPont's organizational structure, which could slow the information flow and dissemination in cross-border practices. Consequently, DuPont China failed to recognize the problem signal and react fast enough to the critical coverage by the domestic media. It is normal that news media outlets tend to rely on more accessible sources and interpret a story from a more sensational perspective, which in turn, resulted in the elevation of the crisis scope.

As demonstrated from the findings, DuPont China later acknowledged the seriousness of the situation and actively employed turnaround strategies, managing to restore public confidence and corporate image to some degree. However, according to many crisis management scholars' expertise, an organization's poor response performance in the early stage of a crisis could result in long-term negative impacts very hard to offset (Coombs, 1999).

Level of Media Interest

The news media have played an important role in the process of CNCS [proposition 9]. The results of this study found that the elevated magnitude of the Teflon crisis in China was partly due to the aggravated Chinese media coverage. In general, the media interest in the Teflon issue was high according to Molleda and Quinn's (2004) CNCS propositions. The conflict directly involved a leading transnational corporation DuPont, its world-famous brand Teflon, and a great number of involved parties [propositions 4, 7 and 8].

Specifically, the Teflon case engendered greater human interest in China because the U.S. media was found focusing on the perspective of the company's social performance, whereas the Chinese media attributed the problem to the safety concerns about some important, boycottable consumer products used in people's daily life [propositions 1, 6 and 10]. The distinct news focus in a crisis situation between the two countries may predict the different scales of impact that the media coverage could lead to.

Social and Cultural Context

The results of this study found that a unique China context has affected the crisis evolution by subjecting DuPont's Teflon products to stricter scrutiny and leaving it more susceptible to attacks. China has undergone a transformation from a highly centralized system to a market-driven economy. Despite China's stunning economic growth and considerable reform, its market regulation and surveillance systems are still very immature. Plus, the government has long implemented disempowering policy toward any forms of activist and advocacy groups. In such a social context, complaints about businesses' poor consumer services and outbreaks of product safety incidents are frequently exposed by the media. Consumers' increasing dissatisfaction and distrust with

business in general have left these companies prone to crises, as the general publics are easily agitated by negative media coverage of product safety incidents.

Unlike many developed countries, China has a relatively short history of using some Western-invented consumer products. When some non-traditional product, Teflon cookware in this case, is challenged, consumer anxiety and boycott actions are more likely to occur. In some cases when the Chinese regulation agencies do not have developed testing measures and regulation policies readily available to ensure the suspected product's safety, rumors and challenges could easily spur crises.

Apart from these, the Chinese culture has a tradition of low tolerance for uncertainty. Old decision styles such as "Rather trust the suspicion," "Prepare for the worse possibility," and "Never take a risk" are still influencing many people's behavior patterns. Therefore, as the media framed the Teflon cookware as "potentially harmful to human health," the normal reaction by many consumers would be to expect the worst and avoid any Teflon-associated products entirely.

In addition, as consumer products involve people's daily lives, different cultures might predict different life styles that crisis planning and response have to consider. For instance, the Chinese cuisine uses higher temperatures than Western cuisine, easily exceeding 260 degree centigrade, which DuPont used to cite as a safety criterion for Teflon cookware use. If presented to western audiences, DuPont's argument is compelling that the safety of Teflon products is assured at certain range of cooking temperatures. However, in the eyes of the Chinese consumers, such explanation was considered flawed and unreliable, and could backlash DuPont's credibility.

Implication, Limitation and Future Work

The descriptive and interpretive nature of the case study enabled rich details to derive from multiple data sources. The study indicated the importance of balancing integrated and localized crisis management considering the interconnectedness of the System Age and complicated contextual variances across different regions. With the globalization trend, TNCs have to be especially cautious about the potential effects of the CNCS phenomenon. To be proactive in transnational crisis management, it is advisable that TNCs evaluate their organizational structures to ensure the facilitation of flexible and dynamic information dissemination and transnational crisis defense mechanisms. Such structures should allow their crisis managers in different country outlets to exchange and share information, experience, and expertise timely and conveniently. On the other hand, local crisis managers have to be familiar with its specific environmental factors in order to achieve maximum internal coherence and external corroboration in crisis response discourse.

Findings and lessons learned in this study may prove useful in illustrating and predicting typical trends shared by other CNCS cases, especially those related to the Chinese market. For instance, the recent “Sudan I” crisis is another CNCS case with similar characters of the Teflon case. The Sudan I crisis started from the United Kingdom with the British Food Standard Agency’s decision in February of 2005 to force the withdrawal of over 500 food products in the British market, which allegedly contained Sudan I, a potential carcinogen used in dye (BBC, 2005). With international media and the Chinese media’s coverage of the Sudan I concern, the conflict quickly spread to China in March 2005 as the Chinese government initiated its own investigations. It was found that some KFC and Heinz products sold in the Chinese market contained the

suspected chemical, which forced the two companies to apologize and recall their products off the Chinese market (Novis, 2005).

Nonetheless, the supported hypotheses in this thesis were by no means conclusive or could be generalized to other situations. Due to the transnational character of such phenomena, multiple cultural and social contexts can add to the inherently uncertain and unpredictable nature of organizational crises. This makes planning and implementing crisis defense mechanism in TNCs a lot more complex and challenging than the scope a single case study could possibly involve.

Although this study used multiple sources including online documents, archival media records, and an intensive interview, the majority of data were still collected from secondary sources. Besides, the media analysis was limited to the selected news samples retrieved from either Lexis-Nexis for the English language news or SINA.com for the Chinese language news. Accordingly, the specific criteria these databases adopted in collecting and archiving news may well influence the profile of the news samples. Thus results based on these news items may not simulate broader media coverage. Furthermore, both the English language and the Chinese language news coverage were coded with the same English language coding sheet. This resulted in potential coding difficulties considering the ambiguity and subtlety of the Chinese language. These factors could have reduced the objectivity and accuracy of data collection and interpretation.

Further research on CNCS is imperative to illuminate challenges facing TNCs with respect to conflicting ethical codes, cultural clashes, and government intrusion (Coombs, 1999). Possible work will include case studies with different sampling strategies to test and refine hypotheses supported in this case study. To incorporate more primary data

sources, other research methods are suggested such as interviews, focus groups and surveys with organizational representatives and their key stakeholders. Based on more extensive case studies and grounded theory research, a more thorough model or questionnaire could be developed which could be used to analyze and evaluate the performance of integrated crisis management system in transnational organizations.

APPENDIX
CODING SHEET

Column Record 1	Variable Name	Variable Label	Value Labels
1-3	ID	Identification Number	101-998
4		Blank	
5	LANGUAGE	News Story Language	1=Chinese 2=English
6-9	DATE	Story Date	0708-1130
10	NTYPE	News Source Type	1=Newspaper 2=Online 3=News Agency 4=Newswire 5=Magazine 9=D-K
11	ORIGIN	News Source Country of Origin	1=China-Hong Kong 2=USA 3=Europe 4=Asia-pacific 5=Canada
12-15	LENGTH	Length-Words [Only for English news item]	0000-5000
16	LOCATION	Events Coverage—Location	1=China 2=USA 3=Both 4=Other
17	FOCUS	Main Focus	1=EPA Accusation 2=DuPont Discourse-action 3=Teflon Cookware Makers 4=Chinese Regulation 5=Consumer-Market Impact 6=U.S. Legal 7=Chinese Legal 8=Activist Group 9=Other

18	ATTRIB1	<p>Primary Problem Attribution</p> <p>[Primary and secondary attribution could be identified according to the priority order in decreasing sequence: mentioned in the headline, mentioned in the first paragraph, coverage space]</p>	<p>1=Reporting Rules Dispute 2=PFOA-C8 Risk 3=Teflon Cookware Risk 4=Media Problems 5=Regulation Concerns 6=Ethics Concerns* 7=Crisis Response Problems 9=None-D-K</p>
19	ATTRIB2	<p>Secondary Attribution</p>	<p>1=Reporting Rules Dispute 2=PFOA-C8 Risk 3=Teflon Cookware Risk 4=Media Problems 5=Regulation Concerns 6=Ethics Concerns* 7=Crisis Response Problems 9=None-D-K</p>
20-21	NPUBLICS	<p>Number of Publics</p> <p>[Options for Publics are US Regulation Agencies, Chinese Regulation Agencies, Consumers, Communities/residents, Scientists/experts, Financial Analysts, Activist Groups, Current/Former Employees, Teflon Cookware Makers, media, other chemical companies, industry trade unions, etc.]</p>	00-20
22		Blank	
23-24	NSOURCES	<p>Number of Sources</p> <p>[Specific info. within the story must be attributed to people or organizations or anonymous sources]</p>	00-20

25	DUPONT	DuPont Source [management, spokespeople, scientists, engineers, lawyers]	0=No 1=Yes
26	DUPONTC	DuPont China	0=No 1=Yes
27	USREG	US EPA – FDA [officials, scientists, spokespeople]	0=No 1=Yes
28	CONSU	Consumers [i.e. individuals and their lawyers]	0=No 1=Yes
29	CHNREG	Chinese Regulation Agencies	0=No 1=Yes
30	SCIENTIS	Scientists-Experts [independent scientists, universities scholars, etc]	0=No 1=Yes
31	FINANCIA	Financial Analysts [e.g., investment firm analysts]	0=No 1=Yes
32	COOKMAK	Teflon-coated Cookware Makers	0=No 1=Yes
33	ACTIVIST	Activist Groups	0=No 1=Yes
34	COMMUN	Communities/Residents [i.e., individuals or community groups and their lawyers]	0=No 1=Yes
35	EMPLOYE	DuPont Employees [current or former workers]	0=No 1=Yes
36	MEDIA	Other Media [e.g. newspapers, broadcasting stations, journals]	0=No 1=Yes
37	CHEMCO	Other chemical companies [e.g. 3M]	0=No 1=Yes
38	OTHER	Other Sources	0=No 1=Yes
39		Blank	

40	QUOTES	Number of Direct Quotes [Quotes contained within the same source even if broken up by text will be considered one quote. Similarly, a long quote from the same source that starts in one paragraph and continues in a second paragraph will also be considered as only one quote]	0-9
41	QDUPONT	Number of DuPont Direct Quotes	0-9
42	QDUPC	DuPont China	0-9
43	QUSREG	US EPA – FDA	0-9
44	QCONSU	Consumers	0-9
45	QCHNREG	Chinese Regulation Agencies	0-9
46	QSCIENT	Scientists-Experts	0-9
47	QFINAN	Financial Analysts	0-9
48	QCOOKM	Teflon Cookware Makers	0-9
49	QACTIV	Activist Groups	0-9
50	QCOMMU	Communities/Residents	0-9
51	QEMPLOY	DuPont Employees	0-9
52	QMEDIA	Other Media	0-9
53	QCHEMCO	Other chemical companies	0-9
54	QOTHER	Other Sources	0-9
55		Blank	
56	CLARIFIC	Clarification Strategy Use [denies the crisis happened and reinforces the denial by explaining why the event could not have happened]	0=No 1=Yes
57	ATTACK	Attack [levels charges against the accusers to prompt the stop of making charges]	0=No 1=Yes
58	SHIFTING	Shifting Blame [admits a crisis event did occur but places the blame outside the organization.]	0=No 1=Yes

59	DENY	Deny Intent [claims the organization can't control events leading to the crisis]	0=No 1=Yes
60	MINIMIZ	Minimizing [claims the crisis creates no/little damage and pose no/little threat to stakeholders' interest]	0=No 1=Yes
61	COMPAR	Comparison [claims the crisis is not as bad as similar crisis]	0=No 1=Yes
62	BIGPIC	Big Picture [places the crisis in a larger context and argues that such crises are the price that must be paid for reaching some larger, desirable goal]	0=No 1=Yes
63	MISREP	Misrepresentation [argues that the crisis is not as bad as others make it out to be]	0=No 1=Yes
64	SUFFER	Suffering [stresses that the organization is also a victim in the crisis]	0=No 1=Yes
65	BOLSTER	Bolstering [reminds stakeholders of the good deeds an organization has done in the past]	0=No 1=Yes
66	PRAISING	Praising Others [uses flattery toward a stakeholder to win that stakeholder's approval of the organization]	0=No 1=Yes
67	COMPENS	Compensation [offers stakeholders gifts designed to counterbalance the crisis]	0=No 1=Yes

68	CORRECT	Corrective Action [seeks to restore the crisis situation to normal operation and/or promises to make changes which will prevent a repeat of the crisis in the future]	0=No 1=Yes
69	APOLOGY	Apology [has the organization accept responsibility for the crisis and ask stakeholders for forgiveness]	0=No 1=Yes
70		Blank	
71	SUPPORT1	Support Evidence Use [use of scientific evidence supporting the safety of Teflon and/or Teflon products]	0=No 1=Yes
72	SUPPORT2	Support Statement Use [use of statement claiming the safety of Teflon and/or Teflon products]	0=No 1=Yes
73	RUFUTE1	Refute Evidence Use [refuting risks of Teflon and/or Teflon products]	0=No 1=Yes
74	REFUTE2	Refute Statement Use [refuting safety of Teflon and/or Teflon products]	0=No 1=Yes
75	CONTROV	Controversy [Is the Teflon/Teflon products Risk framed as a controversy?]	1=No 2=Yes, one-sided 3=Yes, two-sided, not balanced 4=Yes, two-sided, balanced

Explanation of Specific Term or Phrasing:

- 1 Business Ethics Concerns: Concerns regarding unethical business values and behaviors. The article is coded into this category when phrasings similar to “covering up unfavorable evidence” or “withholding unflattering evidence” are used.
2. Number of Publics: Individuals mentioned in the article are first categorized into various publics which they are members of in terms of DuPont stakeholders; then the number of public(s) is counted and recorded.
3. Number of Sources: If the news article cites source A’s quote of source B, both source A and source B are counted (i.e., number of sources is counted as 2). But note that scientist or engineers identified, in the article, as working for DuPont are categorized into DuPont’s voice or Source 1. In the same token, test result published by EPA is categorized into EPA’s voice or Source 2, while test result published by DuPont belongs to Source 1. However, DuPont’s internal document disclosed by EPA but not recognized by DuPont is categorized into EPA’s voice.
4. Is Teflon/Teflon Products’ Risk Framed as a Controversy? When an article contains risk-related tests or comments with exemplars such as “unclear,” “can not be replicated,” and “controversial,” the Teflon/Teflon products risk is framed as controversy. When controversy is framed and the article contains sources from both DuPont side and EPA side, it is two-sided, otherwise one-sided. It is considered balanced when the article devotes about same space to each side.

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BIOGRAPHICAL SKETCH

A native Chinese, Yimin Wang was born and raised in Beijing, China. She majored in chemistry at Peking University in Beijing and earned her B.S. degree with honored thesis, which was later published in *J. Mater. Sci. Lett.* (London).

Right after college graduation, Yimin Wang attended the University of Florida to pursue a PhD degree in chemistry. Due to personal interest, she later changed her program to Master of Science in Teaching, which allowed her to study in the Chemistry Department as well as the College of Education. After she earned her master's degree in chemistry, she attended the College of Journalism and Communications at the University of Florida majoring in public relations. During the summer semester, she attended a studying abroad program at Regents College in London to study international public relations. She also interned at the H-Line Ogilvy Communication Company in Beijing, China.

Yimin Wang recently completed her thesis and plans to graduate with her Master of Arts in Mass Communication degree in August, 2005.