

SARS:

How the News Media Cause and Cure
an Epidemic of Fear

SARS:

How the News Media Cause and Cure
an Epidemic of Fear

By

Neil Rao

A thesis presented for the B. A. degree
with Honors in
The Department of English
University of Michigan
Spring 2007

To the things that make folks tick.

Acknowledgements

First and by all means foremost, I must thank Anne Curzan, for whom, after having fretted over what I would say here for quite some time, I will say this: beyond making this project possible and allowing and enabling me to learn and always telling me the truth that I needed to hear, Anne, with the quality of person she is, has presented me a project I will still be struggling to complete long after this one is forgotten.

Additionally, there are a number of people who have made significant contributions to this thesis who also deserve mention, even if their assistance might not appear as readily. For one, I would like to thank Joshua Miller and Susan “Scotti” Parrish for dedicating themselves as wise shepherds to our cohort; I would also like to thank the rest of my flock for being strong souls as we saw each other through the last seven months. I would also be remiss not to thank Lisa Curtis and everyone else in the English department for being warm and supportive as the department office became my second home. Lastly, I would like to thank the University of Michigan and the University of Michigan Libraries for their vast collections and aid in finding precisely the information I needed, even if most of that material proved inconsequential by the end.

Finally, Adam Hogan deserves recognition for proofreading this thesis, for being there for the last three years, and for helping me realize that being an English major is not a shame. And there is my family who might come last here but is by no means least.

SARS: How the News Media Cause and Cure an Epidemic of Fear

Using the 2003 SARS outbreak as a case study, this thesis examines the news media's coverage of an emerging infectious disease epidemic to understand how the media frame and affect the public's understanding of these diseases. The evidence from the media coverage of SARS suggests that an epidemic spawned as a corollary to the viral epidemic: an epidemic of fear. This second epidemic exists in the news coverage of crises and, particularly during novel situations for which the public lacks a programmed response, occurs in a cycle: the news media first 'afflict the comfortable' and then 'comfort the afflicted'.

During the early news coverage, the news media afflict the comfortable by 'creating news' that carries additional, frightening meanings; this causes the public to fear SARS. Complicating this situation is an initial paucity of knowledge about the disease, its symptoms, and its effects. SARS was a novel disease, and the scientific community had no immediate answers. Thus, lacking conclusive information or other means of understanding to offer, the news media use existing references to explain the disease. The principal frame of reference becomes the science/thriller genre; the media imitate both the content and the language of these texts and offer direct references to them. Screaming headlines about a "killer bug," comparisons to AIDS, Ebola, and other terrible diseases, the use of metaphors that grant the viral agent agency, and other framings all become means to spark fears of SARS as a threat to personal health. Moreover, the news media present terrifying narratives to allow the public to personalize fears of SARS. An analysis of the aggregation of the news coverage reveals the result of an epidemic of fear: the conception of 'communities of fear'.

Yet once the public reaches this state, the media reverse themselves to provide palliative coverage that attenuates fears. As the public now recognize framings that alleviate their fears, this coverage facilitates the transformation of 'communities of fear' into, using the appropriate sociological term, 'communities of fate'. During the SARS epidemic, the news media present two competing narratives for the 'communities of fate' to understand themselves by: Major League Baseball and the Chinese 'Other'. The 'communities of fate' are provided ways to identify with the former and distance themselves from the latter; in doing so, they are encouraged to see themselves as recovered from the epidemic of fear and, by dissociating themselves from the diseased 'Other', feel safe from a potential relapse.

This completes the cycle of news coverage. Yet, the news media cannot simply end here: to do so would implicate them as 'the boy who cried wolf', fear-mongering without legitimate cause. Instead, the news media devote significant coverage, particularly towards the end, to the economic implications of SARS and its concurrent epidemic of fear. This becomes the lasting memory of SARS, an economic crisis caused by irrational fear that resulted from the public's reactions to the news.

Table of Contents

Short Titles	i
 <u>Part One: Two Epidemics</u>	
Chapter One	2
<i>The News Media, the Public, and an Emerging Infectious Disease</i>	
Chapter Two	20
<i>SARS: The Experience</i>	
 <u>Part Two: The News</u>	
Chapter Three	48
<i>'Communities of Fear': How the News Cause an Epidemic of Fear</i>	
Chapter Four	95
<i>'Communities of Fate': Alleviating Fears with Friends and Foes</i>	
Chapter Five	129
<i>Hitting Where It Actually Hurts: SARS as an Economic Contagion</i>	
Epilogue	140
<i>Looking Back for Lessons while Awaiting Pandemic Flu</i>	
Works Cited	143

Short Titles

The following short titles encode the substitutes given to many of the various newspapers from which articles discussed in Part Two of this thesis were taken.

AJC – Atlanta Journal Constitution
BG – Boston Globe
BH – Boston Herald
IHT – International Herald Tribune
MG – Montreal Gazette
NYDN – New York Daily News
NYP – New York Post
NYT – New York Times
OC – Ottawa Citizen
Star – Toronto Star
TS – Toronto Sun
USA – USA Today
WP – Washington Post

The remaining newspapers are presented without short titles.

Part One:

Two Epidemics

Chapter One

The News Media, the Public, and an Emerging Infectious Disease

^{6:1}And I saw when the Lamb opened one of the seals, and I heard, as it were the noise of thunder, one of the four beasts saying, Come and see...^{6:8}And I looked, and beheld a pale horse: and his name that sat on him was Death, and Hell followed with him. And power was given unto them over the fourth part of the earth, to kill with sword, and with hunger, and with death, and with the beasts of the earth. (Revelations 6:1, 6:8, King James Version)¹

In 2003, SARS emerged as a viral outbreak, an event that spawned a concurrent epidemic of fear. This infectious disease became an international epidemic that captivated the public and the news media, with the meanings ascribed to it mounting as the case and death tolls rose.² SARS became the Fourth Horsemen of the Apocalypse for some, sent to cast a pandemic destined to decimate the human race.

As SARS spread, the *New York Times* warned that “the four horsemen are arriving one by one.”³ The *Guardian* (London) similarly described SARS as one of the Four Horsemen of today, and the *Toronto Star* lamented that “we are...in a world where the Four Horsemen of the Apocalypse still ride.” The *Economist* headlined its SARS coverage with: “Four horsemen of the Apocalypse?” The *British Medical Journal* trumped all these accounts, declaring, “The four horsemen of the apocalypse – conquest, war, famine, and death – are currently rampant upon the earth....Death, who rides the fourth pale horse, kills through ‘sword, famine and plague, and by the wild beasts of the earth.’ Plague – or, less poetically, infection – is the dominant theme in this

¹ Described in the Book of Revelations, the Four Horsemen of the Apocalypse hold specific significances: the white horse and its rider, who carries a bow, represent conquest and the coming of the antichrist, respectively; the red horse represents slaughter and its rider, carrying a sword, hails war; the black horse, representing desolation, has a rider equipped with scales who levies famine on humanity; the pale horse, presented in this quote, represents pestilence and its rider is “Death.” The Devil follows the fourth horseman. Cliff, Haggett, and Smallman-Raynor offer a similar interpretation in *Deciphering Global Epidemics* (1998, 1-2).

² Throughout this thesis, the term “news media” refers only to print publications of news; this includes newspapers, magazines, and other periodicals. Additionally, the media will be discussed as plural.

³ The respective citations for the articles referenced in this paragraph are: *NYT*, 4/6; *The Guardian*, 6/8/04; *Toronto Star*, 4/27; *Economist*, 5/1; *BMJ*, 4/17. Also, regarding the dates recorded in the in-text citations: the dates have been listed in month/day/year format; the year has been omitted for any news media piece published during 2003.

BMJ. Severe acute respiratory syndrome (SARS) could be killing tens of thousands long after the war in Iraq is forgotten.”

The Fourth Horseman of the Apocalypse is merely one among many tropes the news media use in their coverage of the SARS epidemic. In this case and the others, the news media’s reporting encourage the public to understand SARS with connotations that the causal agent of the SARS epidemic, a virus, cannot bear. With the Fourth Horseman, for example, the news media frame SARS as having a religious significance; SARS becomes a moral punishment, obscuring scientific facts. SARS also gains agency via this metaphor: as the Fourth Horseman, SARS can arrive and strike and kill. This neglects the scientific fact that viruses are obligate parasites reliant on hosts to survive, move, and replicate. While SARS travels, seemingly on its own, most news articles do not mention that the viral agent of SARS cannot act alone. Indeed, the news media cast SARS in such a light that the vision of a dragoon slaughtering human masses hardly seems imagined.

This type of coverage is not innocuous. The repetition of the Fourth Horseman trope entrenches a set of undesirable connotations as part of how the public understands SARS. As French sociologist Emile Durkheim explains, “by shouting the same cry, saying the same words and performing the same action in regard to the same object, [people] arrive at and experience agreement” (1995, 232). This is relevant because of the news media’s ability to perform “agenda-setting”; media critic Michael Parenti calls this the media’s ability to regulate the public’s thoughts, observing that “The media may not always be able to tell us what to think, but they are strikingly successful in telling us what to think about” (1986, 23). Singer and Endreny corroborate Parenti’s view, concluding that the media determine what is significant for the public (1993, 4). Thus, in telling the public what to think about and by repeating this message daily,

information can become common understanding.⁴ In this way, the news media can shape and even determine the public's understanding by incessantly reporting on what it should think about and, perhaps more importantly, the terms the public should think in. Among others, psychologist Otto Wahl notes the importance of figurative language when discussing the news media's ability to influence public discussion. He writes that the news media's language, particularly in tabloids and newspaper headlines, creates a model for the public's communications on a topic (2004, 66).

Sociologist Peter Baehr offers an empirical account of this process as he relates Durkheim's observation to the SARS epidemic, commenting that the media provided the public with means of conceptualizing and understanding its experience of SARS that included consistent use of war metaphors and rhetoric (2005, 192; 198). Other prominent metaphors used to depict SARS included a "killer," as a "bug," and as a "culprit." Even if the public internalizes the Fourth Horseman trope only partially, the content and language of the news media's coverage decidedly influence the public's conceptualization of SARS to include more than only the physical contagion. As a result, the public's level of fear escalates as the threat becomes more menacing. The *Christian Science Monitor* recognizes this reality: "Responses to outbreaks of disease are ultimately shaped by more than just the disease itself" (6/5); in this account and others, the news media suggest that the public do not understand disease without additional meanings, as verified by their reactions to disease.

SARS has unavoidable denotative meanings that can create fear: SARS poses a real biological threat. But, as illustrated with the rendering of SARS as the Fourth Horseman, a disease can gain meanings from the news media that enhance its virulence. During the late 1970s

⁴ This idea is related to what psychologists identify as the availability heuristic. Glassner explains this when noting that "We judge how common or important a phenomenon is by how readily it comes to mind. Presented with a survey that asks about the relative importance of issues, we are likely to give top billing to whatever the media emphasizes a reasonable correspondence between emphases in the media and the true severity of social problems, the availability heuristic would not be problematic" (1999, 133).

and 1980s, literary critic Susan Sontag recognizes this danger. In *Illness as Metaphor* and *AIDS and Its Metaphors*, she offers a simple dictum: avoid using figurative language when discussing disease and do not confer meaning to disease beyond relating precisely what it is.⁵ Doing so would allow the public to understand and assess the disease appropriately. While removing all figurative language from public discussion of disease is unrealistic, examining the content and the figurative language that does appear is critically important: such an analysis helps elucidate not only how the public understands disease but also what the public fears from it.

This study investigates how the news media presented SARS to the public and considers the ways they can shape the public's understanding of the situation, particularly with regard to how their framings can cause fear responses. A central complication to this study is the complexity of perceptions of reality and, as a corollary, perceptions of risk. Sociologist W. I. Thomas, presenting a foundational theorem in his field, contends that, "If men define situations as real they are real in their consequences" (Thomas and Thomas 1929, 572). The public must decide what their reality is; facing SARS, the public is in limbo between two competing camps: a denotative, strict reality that Sontag would advocate for or an expansive reality replete with additional meanings and associations to explain events, which is the reality the news media present. Importantly, if the public selects the former, then they will only recognize the biological consequences of the virus; if the public selects the latter, which it did with SARS, an epidemic of fear results as the news media's coverage defines what the public perceives as real.

This analysis predicates itself on the established importance of the news media's coverage in shaping the public's understanding of emerging infectious diseases and the risks they

⁵ In particular, Sontag focuses her critique on military metaphors. The mixing of military metaphor within discourses on medicine and science, similar to the use of the biblical Four Horseman of the Apocalypse in articles that also discuss SARS as a medical condition, concerns Sontag. Additionally, Sontag recognizes that certain metaphors were already entrenched in the societal consciousness and that their use will not change. Her goal is to minimize this abuse if at all possible.

pose. As media commentators Eleanor Singer and Phyllis Endreny remark, “Most perceptions of risk are mediated by one of three sources: personal experience; direct contact with other people; and indirect contact, by way of the mass media” (1993, 2-3). For certain classes of events, such as epidemics of novel infectious diseases, the authors go on to explain that, “information about risk is likely to come neither from personal experience nor from any other interpersonal source but, rather, from the symbolic environment of the mass media” (1993, 2-3).⁶ Introducing connotations such as the Fourth Horseman, the coverage of the news media can cause the public to consider disease in apocalyptic terms, prompting the public to assess its level of risk improperly. As the *New York Times* points out, “These diseases that pose less of a threat to people than many things they do in their daily lives, like riding a car, nevertheless cause anxiety above and beyond what is warranted; It’s the psychology of risk perception. People have far less concern about risks they think they understand” (4/6). The scarcity of factual information about SARS, along with the plethora of meanings the news media introduce, leaves the public beset by flawed understandings, resulting in rampant speculation and wildly inaccurate risk assessment.

Yet this distortion is practically unavoidable. When confronted with complex material, particularly complex decisions involving risk assessment and multiple probabilities, the public resort to simplifying rules that misdirect understanding and produce irrational and objectively incorrect decisions (Kahneman and Tversky 1984).⁷ Not surprisingly, journalists are no different. When reporting about SARS, journalists resort to simplifying tactics, such as translating jargon into common vernacular or offering conclusions instead of explanations, which result in

⁶ An ancillary issue is that the media does not explicitly direct its presentation of information for risk assessment. As Singer and Endreny note, “Whether we like it or not, most of the information we have about risks comes to us by way of the mass media. But it does not, for the most part, come as explicit reporting about risk” (1993, 159)

⁷ The news media also act in a seemingly illogical manner in their coverage. As Glassner comments, “When researchers from Emory University computed the levels of coverage of various health dangers in popular magazines and newspapers they discovered an inverse relationship: much less space was devoted to several of the major causes of death than to some uncommon causes... They found a similar inverse relationship in coverage of risk factors associated with serious illness and death” (1999, xxi).

misunderstandings about the disease. Recognizing this, along with the fact that the news media establishes a model for public discourse, suggests that rigorous analysis of the language of the news media is crucial to understanding how the media can propagate fears of SARS.

A news media discourse emerges in the coverage of the SARS epidemic. Discourse, according to linguist Norman Fairclough, is a collection of representations and is the “language used in representing a given social practice from a particular point of view” (1995, 56). Linguist Stephen Riggins cites this definition and contends that: “Discourses do not faithfully reflect reality like mirrors (as journalists would have us believe). Instead, they are artifacts of language through which the very reality they purport to reflect is constructed” (1997, 2). Moreover, Riggins notes that the discourses and representations that originate from reality are “a mix of “truth” and fiction” (1997, 2). Speaking to this, former *Washington Post* reporter John Schwartz identified a “Cuisinart effect” to creating news; he observed that the public wants something that requires mashing together images and story lines from fiction and fact (*Post*, 5/22/95). From the late nineteenth-century to today, the public’s desires have obliged the news media to introduce elements of fiction into news and dramatize events (Roggenkamp 2005, xviii-xix). The public now craves news translated into tragic, comedic, thrilling stories that contain aspects of fiction designed to captivate its attention (Roggenkamp 2005, xvi; Siegel 2005, 74). This is reflected in the news media discourse, which is closely related to popular vernacular and narrates the news in terms the public can understand and identify with.

Profit motive compels the news media to alter the meaning of the events by using a particular discourse when reporting. Media studies scholar Martin Conboy elaborates on this, observing that newspapers “[build] upon the language of [their] readers, represented in a stylized communal idiom” and write “as much as possible in a language with which the audience would

be familiar” (Conboy 2006, 1-2). Newspapers strive to create the largest community of readers possible; as a corollary, this implies that the language in reporting will be imprecise because all jargon and erudite diction that might help accurately communicate information will be absent. Moreover, the public require that newspapers be easily accessible and quickly digestible (Conboy 2006, 4).⁸ Writing in common idiom and simplifying events are just two tools to manage this.

In translating events into news stories, the news media often sacrifice facts or obscure them in fiction. Political scientist W. L. Bennett describes this problem: “The need to make a story ‘newsworthy’ results in several recognized strategies of news reporting that give news stories characteristics of ‘drama’ and ‘personalization’ that tend to distort the information conveyed” (1996). Additionally, myth, imagination, prior experience, and cultural context all influence mass media professionals’ ways of thinking, describing, and representing disasters (Eid 2004, 132). With this in mind, the public’s fictions and referenced meanings become central to the news media’s reporting and the public’s understanding.

The news media draw heavily upon metaphors, historical allusions, and iconic images, sometimes to deleterious ends: these tropes become a crutch and “[simplify] a crisis beyond recognition and certainly beyond understanding” (Moeller 1999, 315). Two issues emerge here. First, the news media’s content and language merge denotations and connotations of disease, making it difficult to disentangle factual information from the media’s interpretations. Second, the news reporting allows the public to understand information through these familiar labels. As sociologist Susan Moeller points out, the result is that “it becomes easy to dismiss the event itself by rejecting the label... Since labels, to be effective, must be a part of a culture’s common

⁸ This is nothing new, either. As the founder of the *Star*, a British tabloid, noted in 1889, “We live in an age of hurry and multitudinous newspapers... To get your ideas across through the hurried eyes into the whirling brains... [when] reading [the] newspaper there must be no mistake about [its] meaning” (quoted in Conboy 2006, 4).

language, a person will have a history of response to that label” and will dismiss it by saying, “I know about this. I’ve seen this before” (1999, 48). By using existing associations and categorizing new information with labels to which the public is fatigued, the new becomes easy to ignore.

Yet the converse is also true. The public can fear events that it only reads or hears about, worried over events it might never experience, because of the undying memories of prior fears (Siegel 2005, 25). The public cannot reject the label of fear and, as a result, the news media repeatedly use it, triggering fears and inciting public fear responses. As sociologist Sheldon Ungar remarks, “So firm is the perceived link between the media and the creation of public fears that scientists and policy makers are wont to complain about it, while media pundits engage in self-reflection” (1998, 36). In an earlier era, Richard Nixon elucidated the reason for the news media’s reliance on this label: “People react to fear, not love.”

To focus the analysis, this study draws on sociologists William Gamson and Andre Modigliani’s idea of ‘interpretative packages’ (1989). Gamson and Modigliani base this idea on the premise that “[t]here is an ongoing discourse that evolves and changes over time, providing interpretations and meanings for relevant events”; they contend that figurative language – including metaphors, catchphrases, iconic images, exemplars, stories, depictions, and other symbolic devices – is central to this discourse (1989, 1-2). Various tropes, they argue, cluster to form ‘interpretative packages’ by which the public and constructs their understanding of crises.⁹

Gamson and Modigliani note that ‘interpretive packages’ rely on organizing frames to function properly and that “a package offers a number of different condensing symbols that

⁹ Gamson and Modigliani also recognize the inevitability of polysemic understanding of an event due to the multitude of public responses to these ‘interpretive packages’: “Individuals bring their own life histories, social interactions, and psychological predispositions to constructing meaning; they approach an issue with some anticipatory schema” (1989, 2).

suggest the core frame and positions in shorthand, making it possible to display the package as a whole with a deft metaphor, catchphrase, or other symbolic device” (1989, 3). As this study demonstrates, the frame the news media base the ‘interpretive package’ of their coverage of SARS around is fear. Fear then becomes the foundation for how the public interprets the news and constructs its understanding of SARS.

The news media do not participate in the process of adding and creating meaning unwittingly. As a former AP, ABC, and *New York Times* correspondent admits, “We do mislead... We have to use symbolism. Symbolism is a useful psychological tool, but it can be terribly misused. It can be misleading... but all of those things are components of entertainment” (quoted in Moeller 1999, 14).¹⁰ This revelation is particularly concerning in regards to emerging infectious diseases. As Moeller explains:

The public which generally lacks knowledge about international affairs is at an even greater disadvantage when trying to follow the story of an outbreak of disease abroad, because it often lacks basic knowledge about the functioning of science and medicine as well. Therefore, in these instances, media audiences are especially dependent on the media as information sources and for guidelines about how to feel and how to react. (Moeller 1999, 57)

During the SARS epidemic, the public often lacked a wide range of knowledge; Guangdong province and coronavirus seemed to be equally foreign terms. In this vacuum, the news media’s choice to use coverage that has fear as its core idea raises the public’s fears unchecked.

Yet the public cannot simply blame the news media and claim innocence. The news media communicate in ways that play on fears because this is precisely what the public desires; as horror film directors can attest, the public is fascinated by its fears. *The Guardian* also reflects

¹⁰ The choice to use symbolism – and, as a result, mislead – has effects that pervade the news media’s coverage: “Once a story commands the attention of the media – or once the media deems a story worthy of attention – reporting styles, use of sources, choice of language and metaphor, selection of images and even the chronology of coverage follow a similar agenda” (Moeller 1999, 14). These repeated symbols and language uses become, as Durkheim explains, the “agreed experience” of SARS and, as a result, the public’s understanding of SARS.

on the public's desire for a certain brand of news: "At breakfast and at dinner, we can sharpen our own appetites with a plentiful dose of the pornography of war, genocide, destitution and disease. The four horsemen are up and away, with the press crops stumbling along behind" (7/25/94). The motivation for the news media to chase the Fourth Horseman is simple: fear sells.¹¹

Returning to the Fourth Horseman, the news media present apocalyptic accounts of disease for multiple reasons. For one, as the *Washington Post* explains in an article entitled, "Horsemen of Fear; The World's New Plague Spreads an Epidemic of Panic," society can rationalize the effects of disease only in this severe way: "Viewing disease in apocalyptic terms is the only way to justify all this suffering. This is not about reality; it's about fear" (4/12). The primary motive here, however, is profit: the news media emphasize fear in their coverage of SARS because their audiences instruct them to do so, communicating in dollars and cents.¹²

A Pew Research Center for the People and the Press report on news media practices found that journalism's fundamental problem is that ever increasing financial pressures control the industry (Pew 1999).¹³ This manifests in numerous ways. Complaints included that the line between entertainment and news has seriously eroded, that the press drives controversies rather

¹¹ Explaining this observation, Moeller notes that, "Media moguls have long known that suffering, rather than good news, sells. "People being killed is definitely a good, objective criteria for whether a story is important, said former *Boston Globe* foreign correspondent Tom Palmer. "And innocent people being killed is better...." In [the American] cultural context, suffering becomes infotainment..." (1999, 34-5).

¹² According to John Ruggie, the former Dean of Columbia University's School of International and Public Affairs who voiced the opinions of many, the workings of the marketplace are the reason for why the media act as they do. The media try to anticipate the wishes of their audience. Since the media is driven by the profit motive, "[they] cover what the editors think that their audience is interested in." (quoted in Moeller 1999, 232-3).

¹³ The Pew Research Center for the People and the Press is a branch of the Pew Research Center. As stated on the Center's website, the Pew Research Center is a nonpartisan "fact tank" that provides information on the issues, attitudes and trends shaping America and the world. It does so by conducting public opinion polling and social science research; by reporting news and analyzing news coverage; and by holding forums and briefings. The Center is non-profit. For this and more information, access: <http://pewresearch.org/about/>. Also, it is worth noting that the expectation in the news media industry, particularly among newspapers, is double-digit annual profit percentages. While tremendous financial pressures exist and newspapers scrape relentlessly for every dollar, the industry is nowhere near reporting net losses.

than just reporting on them, and that the news media are rapidly losing credibility with the public.¹⁴ Those involved never neglect to return to the real problem, though. Among national news media members surveyed, a majority said that financial pressures seriously harm the quality of news.¹⁵

Additionally, the public's belief in what they read in newspapers has fallen drastically over the last two decades (Pew 2005).¹⁶ An icon in risk communication studies, Peter Sandman offers a reason for why this occurred when he notes that "a pattern of exaggeration and oversimplification breeds mistrust" (1993, 51); Sandman implies that when newspapers sensationalize and simplify their coverage and the public notice, trust erodes. A news media veteran, Bill Sloan offers another explanation for both the industry and the public's disillusionment with the state of the news media. Sloan writes that "[the news media] structure their papers around a couple of basic, undeniable truths about the news business: (1) In its most socially powerful and financially successful form, journalism is at least as much about playing on the reader's emotions as about disseminating information. (2) The best way to sell lots of papers is by entertaining the masses, not by enlightening them" (2001, 18).

¹⁴ Regarding the opinion that the news media moved too far into entertainment, the margin among national news media staff was 74% to 21% in agreement, with 5% abstaining. Separately, one contributing factor in this loss of credibility, among those discussed later on, is the study's finding that "Most members of the news media concede that they are out of touch with the public" (Pew 1999). The report also states that the news media blame themselves more than the public for declining audiences. Perhaps the one bright spot came with the statistic that the majority of the news media members believed they did an "excellent/good" job making important events interesting for the public. Additionally, a majority of the public no longer have a favorable opinion of the leading national newspapers and "believe [that] the news media gets in the way of society solving its problems" (Pew 2006; Pew 1997); for instance, only 20% of respondents reported that they believe all or most of what they read in the *New York Times* while 19% reported that they believe almost nothing (Pew 2006).

¹⁵ The magnitude of this problem bears out in the statistics. Between 1995 and 1999, the percent of national TV members who felt bottom line pressure "hurt" the industry grew 150% (37% to 53%) while nearly doubling for local TV (24 to 46%). Also, poignantly framing the problem, the report quotes a programming director who laments, "We are negligent in our duties because of budgetary constraints... We don't do our jobs if it costs too much" (Pew 1999).

¹⁶ In 1985, 84% of respondents felt that they could believe most of what they read in their daily newspaper; in 2004, that number fell to 54%.

Reporters act upon the truism that ‘fear sells’, producing “coverage of foreign events [that] is coverage of the deaths of the famous, of famines and plagues and genocide” because, “Watching and reading about suffering...has become a form of entertainment” (Moeller 1999, 34).¹⁷ The news media’s merging of information and entertainment is a reality; the news media now operate as the entertainment industry does, dedicating their efforts to capturing and captivating the public’s attention.¹⁸ Critics have noticed the more flagrant results: “media portrayals consistently emphasize people rather than issues, crisis rather than continuity, the present rather than the past or the future. News stories fragment reality into isolated, decontextualized units” (Maher and Chiasson Jr. 1995, 219). Yet, none of the criticisms come with solutions, perhaps because of an unspoken truth: the lost brand of reporting is difficult to produce while infotainment, particularly when the goal is to report only the devastating and shocking events of the day, is easy.¹⁹

Returning to the topic of figurative language, it is clear that, while entertaining, metaphors and allusions and other tropes fail to convey purely factual understanding. Sontag elucidates the point that metaphors describe neither fact nor reality and extend the scope of a topic, ultimately provoking emotional response (Rollyson 2001, 113; 150). Additionally, metaphors obstruct understanding by simplifying events that are more complicated than what a

¹⁷ The need to sensationalize events, even historically, has been for to satisfy a desire for profit. As one scholar notes, “A determined drive for higher circulation and profits was the primary purpose behind the methods of the “yellow press.” At times, there was little regard for journalistic ethics, and objectivity certainly took a backseat to circulation and profits...Sensationalism sold newspapers, and the cause was a popular one” (Wiggins 1995, 117). Additionally, media critic Klaus Schönbach offers a detailed account of how newspapers have dedicated themselves to making their product more appealing to the public, driven to do so by profit demands and increasing competition in the industry. See “Does Tabloidization Make German Local Newspapers Successful?” In *Tabloid Tales: Global Debates over Media Standards* (2000, 63-74).

¹⁸ Media critic Dick Rooney presents a detailed account of the collapse of boundaries between news as information or entertainment in “Thirty Years of Competition in the British Tabloid Press: the *Mirror* and the *Sun* 1968-1998,” a chapter of *Tabloid Tales: Global Debates over Media Standards* (2000, 91-110).

¹⁹ Moeller attributes this transition towards simplicity in coverage to compassion fatigue. She writes, “Compassion fatigue reinforces simplistic, formulaic coverage. If images of starving babies worked in the past to capture attention for a complex crisis of war, refugees and famine, then starving babies will headline the next difficult crisis.” (Moeller 1999, 2)

metaphor can possibly reveal (Moeller 1999, 47). In either case, tension builds with the undesirable meanings that this and other aspects of the news introduce to the public's understanding of an event. Two simple cases demonstrate the dangers of figurative language and the existing connotations associated with certain words. As Ungar comments, in the 1990s, "Both 'outbreak' and 'hot zone' [joined] 'andromeda strain' (which has lingered, since 1969, in the collective memory) as potent metaphors in public discourse" (1998, 42); he notes that 'outbreak' conjures memories of the film *Outbreak*, a sensationalized account in which a viral hemorrhagic fever consumes a California town and seemingly threatens human existence, and that 'hot zone' reminds readers of Richard Preston's nonfiction thriller *The Hot Zone*, a dramatized account of the 1989 Ebola episode in Reston, Virginia. Despite the dangers, the news media use these and other references for one reason: the bottom line wins out.²⁰

The influence of economic pressures on the news media distills into two major trends. First, the news media increasingly focus on entertaining instead of strictly reporting on events. Second, the news media simplify the information they report, obliged to ensure that an uninformed public can both access and identify with the coverage.²¹ These trends provide context for this study, which examines the content and language of the news media's coverage, as well as their potential effects on the public's understanding of the events covered.

As the case of the Fourth Horseman demonstrates, "The media not only [give] these diseases coverage, but [turn] the disease outbreaks into iconic news images. The outbreaks [become] more than medical emergencies, they [become] symbols of larger forces and greater

²⁰ Metaphors and other tropes also aid the bottom line by saving space and ink in the print format. Moeller elaborates on the subject, stating that "metaphorical expression can more succinctly describe a face or a place or a moment in time than can paragraphs of narrative. Narrative is time and space-consuming. And when space in print and time on air are expensive and in finite quantities, the reporting of any crisis...has to be constricted" (1999, 47).

²¹ Political commentator Walter Lippmann offers a commentary on the implications of newspapers' simplification of events. Evaluating this act, he comments that the press rely on stereotypes and thereby "signalize events" instead of conveying a broader, more precise truth that would allow the public to take responsible action (1992, 226).

problems” (Moeller 1999, 59). In the interest of profit, the news media let loose a contagion that becomes more devastating than the real disease. Marc Siegel, a physician and medical correspondent for various print and television news media outlets, concludes: “For SARS, fear was the central pathogen, where the risks of acquiring the new mutated cold virus were far less than the fear of being infected. Uncertainty about what the risk really was promoted the panic – seeing SARS in the news caused us to personalize it... In reality, SARS was a garden-variety respiratory cold virus, nothing sexy, nothing sinister” (Siegel 2005, 147). President Franklin Roosevelt’s bold declaration that “We have nothing to fear but fear itself” almost seems true, as the news media perform two functions: they communicate factual information on the epidemic and simultaneously spread a separate epidemic, an epidemic of fear.²²

Repeating an aphorism from news media studies, the news media’s role is to ‘afflict the comfortable and comfort the afflicted’. This saying explains the paradoxical duality of the public’s engagement with the news media: while the public turns to the news media for information to affect a sense of control that is prerequisite for feeling comfortable, it simultaneously seeks a stimulation of its fears from this source. When the news media successfully ‘afflict the comfortable’, the public exists in one of two states: bewildered by the instability and the unknowns of this situation or, more realistically, scared and certain of only one reality – that they should be very afraid.

Siegel is one of many scholars who lament the purported fact that America has become saturated with fears. He comments that, “fear invades our homes like never before, affecting

²² The notion of an ‘epidemic of fear’ that occurs in unison with the disease epidemic itself has been associated with emerging infectious diseases for the last twenty years, since the early days of the HIV/AIDS epidemic. Newsweek, in 1986, bluntly wrote that, “Those on the front lines of the war against AIDS are convinced there are two enemies to fight. One is the epidemic itself; the other is fear. Despite that, experts on the disease are nearly unanimous, at least publicly, in stressing their belief that the epidemic can be held in check. But there is no doubt that AIDS will pose profound questions to American society, and it will surely test the nation's reserves of compassion and common sense” (11/24/86)

more and more people” (Siegel 2005, 1). Moreover, examining the presence of fear in the news media today, he remarks that “Newspaper headlines are apocalyptic warnings. Media obsessions fuel our cycles of worry, which burn out only to be replaced by more cycles... news infiltrates our sleep and may be as damaging to our health as cigarette smoke is to our defenses against cancer” (Siegel 2005, 1). Sociologist Barry Glassner attributes this to western culture and the public’s many latent fears; he contends that, “The success of a scare depends not only on how well it is expressed but also...on how well it expressed deeper cultural anxieties” (Glassner 1999, 208). Glassner suggests that the news media conceives an epidemic of fear by identifying the public’s fears and including them in news reporting; this then attracts the public’s attention and compels them to purchase papers. The means the news media use to ‘afflict the comfortable’ and later to ‘comfort the afflicted, here termed ‘creating news’, are the subject of this thesis.

This notion of ‘creating news’ requires clarification. This thesis operates on a precise definition of what constitutes news. To be news, an item must satisfy three criteria: the news media must report it; it must contain information that affects the status quo or the public’s perceptions of the status quo; and it must be new. In sum, ‘creating news’ is the news media’s act of reporting anything new that influences the status quo and does so with either content or figurative language that can add meanings to the public’s understanding of the news.

SARS presents a unique situation for considering the act of ‘creating news’. Compared to the hype, very little happened. Arriving as the Fourth Horseman and seemingly capable of challenging humans’ place on the planet, SARS claimed a mere 774 lives from only 8,096 cases. As *The Economist* reported on May 1st, after the epidemic peaked, malaria still kills ten times as many people in one day as SARS had in total. Not a single death from SARS occurred in the United States or the United Kingdom. Yet, SARS still lived strong as a story in the news media.

The news media's coverage of SARS should have died quickly once it became obvious that fears of the biological threat were irrationally overblown. The public should have recognized that reality in this case was not the one it constructed based on its interpretation of the news media's coverage. Yet this realization never occurred. Instead, the news media managed to captivate the public's interest. As Moeller explains more generally:

Compassion fatigue ratchets up the criteria for stories that get coverage. To forestall the I've-seen-it-before syndrome, journalists reject events that aren't more dramatic or more lethal than their predecessors. Or, through a choice of language and images, the newest event is represented as being more extreme or deadly or risky than a similar past situation. . . . Compassion fatigue encourages the media to move on to other stories once the range of possibilities of coverage have been exhausted so that boredom doesn't set in. Events have a certain amount of time in the limelight, then, even if the situation has not been resolved, the media marches on. Further news is pre-empted. No new news is bad news." (Moeller 1999, 2)

The news media coverage of SARS could not have survived as long as it did with one theme, one trope, or one tone; the public required more to remain captivated. Thus, the news media offered articles that stimulate a range of fears and make the news of the SARS epidemic startling in a variety of contexts. Headlines, comparisons, metaphors, and narratives in the news all ascribed additional meanings and understandings to the disease and ensured that the public did not fatigue to news that implicitly commands them to remain in a state of fear.

Analyzing the content and language of the news media's discourse on SARS reveals how they report on emerging infectious disease epidemics more generally. Yet this is only the secondary product of this investigation. The fruit of this study is its insights into how the news media cause and cure the epidemic of fear that spawns as a corollary to the viral epidemic. As this study will reveal, the news media initially design their coverage to 'afflict the comfortable'; after this is done, the content and language of the coverage shift to alleviating fears and providing the public with a palliate as the media transition to 'comforting the afflicted'. This

process and how the news media coverage develops and reconstitutes the public's understanding of disease become clear as this thesis follows the cycle of news coverage.

Overview

This thesis has two parts. Part One, titled "Two Epidemics," presents much of the theoretical basis of this study and the background information necessary to proceed. Chapter One, "The News Media, the Public, and an Emerging Infectious Disease," is now reaching its conclusion. Chapter Two, entitled "SARS: The Experience," has a series of constituent parts. The chapter begins with a discussion of the relationship between humans and the microbe agents of infectious diseases over the past half-century and continues by describing the SARS coronavirus and the disease biologically. Afterward, the chapter traces the coverage through a timeline of events and then recounts the coverage of the earliest days of the international SARS epidemic, March 15-17, 2003. Chapter Two then concludes with a discussion of previous scholarship in the humanities and social sciences about SARS and with the methodology of this study.

Part Two, simply titled "The News," includes precisely what its title would suggest: comprised of Chapters Three, Four, and Five, this section presents an analysis of the news media's coverage of SARS. Chapter Three, "'Communities of Fear': How the News Cause an Epidemic of Fear," examines how the news media 'afflict the comfortable' through the content and language of their coverage. The chapter begins with an analysis of various health authorities' messages as relied by newspapers. Mired in the uncertainty that these messages produced, the public sought other sources for understandings; this chapter continues with a discussion of the science/thriller genre and considers how fiction and understandings of science based on popular culture can influence understandings of actual diseases. The chapter then considers headlines,

comparisons, a language of uncertainty, and narratives and how the news media use each of these to frame understandings of the disease. The chapter concludes with an explanation of how the media, in both explicit and implicit ways, cause ‘communities of fear’.

In direct response, Chapter Four, “‘Communities of Fate: Alleviating Fears with Friends and Foes,’” considers how the news media ‘comfort the afflicted’. This chapter first details how the news media can promote the formation of ‘community of fate’ and how news media accounts frame certain communities’ experiences as those of a ‘community of fate’. Afterward, the chapter considers how using humor and the competing narratives of Major League Baseball and the Chinese ‘Other’ enable the media to ‘comfort the afflicted’. Once this is achieved, the cycle of coverage is complete.

Yet neither the news coverage nor this thesis end there. Chapter Five addresses the news media accounts of the economic implications of SARS and its concurrent epidemic of fear. This chapter, titled “Hitting Where It Actually Hurts: SARS as an Economic Contagion,” discusses what becomes the lasting memory of the SARS epidemic as the news media frame SARS as an economic crisis caused by irrational fear that resulted from the public’s reactions to the news. Finally, the Epilogue briefly considers what might occur in future interactions with emerging infectious diseases. Titled, “Looking Back for Lessons while Awaiting Pandemic Flu,” the epilogue offers a few parting words regarding both future study and what might be expected from the news media during future infectious disease outbreaks.

Chapter Two
SARS: The Experience

Emerging Infectious Diseases

It is time to close the book on infectious diseases. The war against pestilence is over.

- William Stewart, US Surgeon General, in 1967²³

He [William Stewart] could not possibly have been more incorrect... We will never be free of emerging diseases.

- Anthony Fauci, Director
 National Institute of Allergy and Infectious Diseases
 National Institutes of Health, in 2003

William Stewart was not a fool. Speaking in 1967, the recent successes of medical science supported his claim that humankind had triumphed over its enemy. Smallpox, often labeled the “ancient scourge” and still raging during the 1950s with an estimated 50 million cases worldwide each year, was nearing its end. The United States had not seen a case since 1949 and the WHO was just beginning an extensive vaccination effort to rid the world of the virus. Poliomyelitis had already met its end. Salk introduced his polio vaccine in 1955 and a superior replacement that actually killed the virus was on the market soon after. Expansive vaccination campaigns soon vanquished polio in most modern nations. Bacterial diseases also seemed to have met their match. With vaccines recently developed for diphtheria and pertussis and with more than 25,000 antibiotic products on the market by 1965, it appeared to Stewart that America had won the war against infectious diseases. His belief echoed one expressed nearly a half-century earlier, in a 1924 *Scientific American* editorial which proclaimed that, “the natural outcome of the struggle between mankind and microbe always favored mankind” (quoted in Tomes 1998, 264).

Opening Quotes:

Stewart, William H. 1967. "A Mandate for State Action," presented at the Association of State and Territorial Health Officers, Washington, DC, Dec. 4, 1967; *Financial Times*, May 24, 2003, p. 14.

Stewart was not alone in his conclusion. Twenty years prior, Secretary of State George C. Marshall declared that the conquest of all infectious diseases was imminent, predicting that all the earth's microscopic scourges would be eliminated (Garrett 1994, 30-31). Sir Frank Macfarlane Burnet, the recipient of the 1960 Nobel Prize in Medicine, also emphasized the coming end of infectious diseases: "One can think of the middle of the twentieth century as the end of one of the most important social revolutions in history, the virtual elimination of the infectious disease as a significant factor in social life" (1962). He reiterated this position in 1972, concluding that "the most likely forecast about the future of infectious diseases is that it will be very dull" (*NYT* 3/14/04).

We now know that these men were wrong. While their faith was placed in the march of science and the trends of their times, medical science failed to deliver on these impossible promises. As Dr. Julie Gerberding, Director of the Centers for Disease Control and Prevention, noted during the SARS epidemic, "I don't want to be alarmist, but I think history's already teaching us that that's the case. Emerging infectious diseases are a part of our lives..." (*BH* 4/20). Statistics reveal this harsh reality. Despite scientific progress, infectious diseases remain the third leading cause of death in the United States and the second leading cause of death worldwide each year. Of the 57 million deaths that occur worldwide each year, over a quarter result directly from infectious diseases and millions more are from secondary effects of infections (Fauci, Touchette, and Folkers 2005; WHO 2004). Numbers, however, fail to provide the entire picture.

In a reversal that would have seemed drastically far-fetched forty years ago, even when compared to Stewart and Burnet's claims, the microbes have seemingly launched a

counteroffensive against the march of science.²⁴ As Dr. Joshua Lederberg, recipient of the 1958 Nobel Prize in Medicine, noted in 2003, “There’s a renewed recognition that our human species is still locked in a Darwinian struggle with our microbial and viral predators” (*Star* 3/24). Due to a series of factors that include complacency, degradation of the public health infrastructure, over-prescription and over-reliance on antibiotics, and the failure of medical research to advance beyond penicillin and find further ‘miracle drugs’ to combat infectious diseases, progress toward eliminating infectious disease agents has slowed. International attempts to vanquish the microbes have also suffered setbacks and to this day smallpox remains the only agent that the WHO identifies as eradicated.²⁵ While health organizations have been unsuccessful in these endeavors, the microbial agents have been adapting, responding to their new environments. Drug-resistant tuberculosis and an array of other antibiotic-resistant bacterial infections attest to this. As Dr. Lederberg remarks, humans will continue to engage in a struggle to adapt and overcome infectious diseases.

Nancy Tomes mentions in the preface to *Gospel of Germs* that children raised in America during the 1950s to the 1970s did not concern themselves with germs, accepting that a vague connection existed between good health and good manners – like washing hands after using the toilet – without understanding why (1998).²⁶ While their grandparents spoke in terror of

²⁴ The presence of drug-resistant bacteria and the diminishing effectiveness of penicillin and other antibiotics due to overuse is perhaps the best demonstration of how the public’s abuse of the gifts of science has resulted in a situation where the public once again faces microbes and illnesses it once thought it was rid of.

²⁵ Despite the WHO designation, stores of smallpox still exist. Currently, only two laboratories in the world are known to have small pox; these are the Centers for Disease Control and Prevention in Atlanta, Georgia, and the State Research Center of Virology and Biotechnology in Koltsovo, Novosibirsk Region, Russia (Barnes 2005, 234). Quantities of smallpox may remain, illegally, in unknown laboratory stores. The possibility also exists that smallpox remains in a natural reservoir.

²⁶ Tomes defines the “Gospel of Germs” as “the belief that microbes cause disease and can be avoided by certain protective behaviors.” Furthermore, she reminds readers that “we colloquially refer to a variety of organisms as ‘germs’ including bacteria, viruses, rickettsiae, parasites, and fungi” (Tomes 1998, 2).

infectious diseases in days gone by, these children were born in an era living under the protection of penicillin and other wonder drugs, safe from this threat. As Tomes observes,

“Ours was a charmed existence, protected from diseases that had decimated families and communities for millennia... Growing up with the security of the antibiotic miracle drugs, we baby boomers were released from the anxieties... [and] regarded the older generation’s obsessions with germs and disinfectants as mildly amusing” (xiii-xiv).

Yet, as time passed, the attitudes evident from the 1950s to the 1970s came to an abrupt end.

Beginning in the early 1980s, microbes returned to the focus of public consciousness. The confidence and complacency of the previous decades was stricken, jarred by the sudden emergence of a rash of “superbugs” with terrifying capacities. Acquired Immunodeficiency Syndrome (AIDS) arrived as the standard-bearer yet the human immunodeficiency virus (HIV) was far from alone in what was seemingly an epidemic of infectious disease epidemics.²⁷ For one, Ebola appeared and scarred itself into public discourse and memory. Commenting on this period, Tomes remarks, “Newspapers, magazines, television and movies are filled with stories about menacing germs” and “Suddenly, we feel vulnerable again to the world of the microorganism” (Tomes 1998, xiv-xv). In the 1990s, germs became a societal preoccupation, highlighted by an eruption of films, television series, and books on the subject.²⁸ The public craved germ stories and the mass media was more than willing to provide them.

²⁷ For an abridged list of emerging diseases from the past two decades: Australian bat lyssavirus; Babesia, atypical; Ehrlichiosis; Hendra or equine morbilli virus; Hepatitis C; Hepatitis E; Human herpesvirus 8; Human herpesvirus 6; Lyme borreliosis; Coronaviruses/Severe Acute Respiratory Syndrome (SARS); Nipah virus; Additional Hantaviruses; Tickborne hemorrhagic fever viruses; Crimean Congo Hemorrhagic fever virus; Tickborne encephalitis viruses; Multi-drug resistant TB; Influenza; Other Rickettsias; Ebola Reston (Preston 1995, 406; National Institute of Allergy and Infectious Diseases 2006)

²⁸ Paradigmatic examples in each genre include: Film – *Outbreak* (1995), starring Dustin Hoffman, Rene Russo, and Morgan Freeman, imagines a scenario of an epidemic of a deadly airborne virus; Non-Fiction – *The Coming Plague: Newly Emerging Diseases in a World out of Balance* (1994) by Laurie Garrett, discusses the current state of the relationship of humans and infectious diseases; Fiction – *The Cobra Event* (1998) by Richard Preston, details an outbreak of a lethal manmade virus.

The surges in both popular awareness and emerging infectious diseases did not go unnoticed. The Institute of Medicine released a report in 1992 that warned the public of a “mood of complacency” among the scientific community with regards to emerging infectious diseases (IOM 1992).²⁹ The IOM report goes on to discuss why the microbes are returning, focusing on how scientists’ optimism and complacency in previous decades had hindered their ability to prevent or control microbial diseases. The report also predicts that emerging infectious diseases will appear and increasingly afflict the US unless drastic changes occur.

The optimism of the 1960s has now been replaced by an overwhelming pessimism. Dr. Richard Krause, the former Director of the National Institute of Allergy and Infectious Diseases of the National Institutes of Health, lamented that we must now accept that, “Plagues are as certain as death and taxes” (Hickman 2000). Forecasting the future, most scientists feel assured that a pandemic is inevitable; when this pandemic occurs, however, is entirely uncertain.³⁰

The sheer number of people on Earth today convinces scientists that a pandemic is certain to occur. As early as 1914, bacteriologist Charles-Edward Amory Winslow wrote an article titled “Man and the Microbe” for *Popular Science Monthly* that claims that, “it is people, primarily, and not things that we must guard against” (quoted in Tomes 1998, 237). A new twist on this human threat exists today. As Richard Preston discusses near the end of the nonfiction thriller *The Hot Zone*,

Earth is mounting an immune response against the human species. It is beginning to react to the human parasite, the flooding infection of people....The earth’s immune system, so to speak, has recognized the presence of the human species and is starting to kick in. The earth is attempting to rid itself of an

²⁹ The Institute of Medicine (IOM) of the National Academies was chartered in 1970 as a nonprofit organization. The IOM is both an honorific organization and serves to provide science- and evidence-based advice on matters of biomedical science, medicine, and health. The IOM’s mission is to serve as an advisor to the nation to improve health. (IOM 2006).

³⁰ Regarding the inevitability of a pandemic and the uncertainty of when it will occur, refer to: Altman, Lawrence K. “US Issues Its First Plan for Responding to a Flu Pandemic.” *The New York Times*, August 26, 2004, p.20.; Altman, Lawrence K. “New Microbes Could Become the ‘New Norm’.” *The New York Times*, May 9, 2004, sec. F, p.6.

infection by the human parasite. Perhaps AIDS is the first step in a natural process of clearance. (1995, 406-7)

Preston concludes his book with a similarly powerful flourish, claiming, “[Ebola] will be back,” after spending the measure of the text detailing the horrors of this hemorrhagic fever (1995, 411).

Preston is not alone in his opinion either. Ethne Barnes, author of *Diseases and Human Evolution*, ends with this premonition,

Nature has rules for keeping order and balance among all living things. Whenever the balance is upset, laws of nature see to it that the balance gets restored to equitable levels. We humans have broken the rules. The human population is horribly out of balance with nature. . . . The most likely scenario will be that our natural predators in the microbe world will quickly restore human populations to more sustainable levels. That means reducing the global population by more than half its present size of over 6 billion, to less than 3 billion. . . . By design, accident, or natural intent, the next pandemic will most likely be the deadliest one in human history. It is not a question of if, but when. (2005, 426-8)

If Preston and Barnes and the scientists who decry the unsustainable growth of the human population and seem convinced of the inevitability of a pandemic infectious disease are correct and if the public take their visions to heart, each emerging infectious disease could be the end. This is why the appearance of each new mystery bug or atypical pneumonia or killer virus scares the public. This is why the outbreak of Severe Acute Respiratory Syndrome (SARS) terrified the public and prompted fears, perhaps irrational ones, that SARS would bring the end.

The SARS Coronavirus and the Biology of SARS

Severe Acute Respiratory Syndrome is the affliction of a person who bears a series of symptoms that indicate infection by the SARS coronavirus. As a class of viruses, coronaviruses are diverse yet distinct, possessing a crown-like shape. In humans, coronaviruses tend to cause upper-respiratory illnesses of mild to moderate severity.

Scientists began researching the causal agent of SARS in March 2003. At this stage, medical science had no knowledge of or treatment plan for the condition only later identified by the name SARS. Attempts to define the causal agent began with tremendous confusion. During the initial phases of research, scientists jumped on every lead and branded the causal agent as a number of things: many labeled the viral agent an atypical influenza; Chinese researchers reported that a Chlamydia-like disease caused SARS; scientists in Germany and Hong Kong thought the agent was a paramyxovirus, while others in Canada believed it to be a metapneumovirus. Only later did the Pasteur Institute in Paris and the University of Hong Kong correctly identify the agent as a coronavirus. This result, confirmed by the WHO after they received proof that the coronavirus fulfilled Koch's postulates for viral causative agents, was a first step leading to further frustrations.³¹

Coronaviruses had received little research funding in the decades prior to the SARS outbreak. The medical community did not perceive coronaviruses as a danger. The little information that was available at the outset of the SARS outbreak disheartened scientists. Coronaviruses undergo frequent mutation, which makes devising a vaccine prohibitively challenging; in the time it would take to vaccinate a population, a coronavirus is likely to change and render such treatment worthless. As an optimistic corollary, however, many hoped the viral agent would simply mutate into a non-virulent form, as imagined in Michael Crichton's *Andromeda Strain*. In the novel, a shockingly lethal bacterial agent mutates into a harmless form, a stroke of luck that effectively saves humanity from a sure end. Other scientists reached a very

³¹ German biologist Robert Koch, winner of the 1905 Nobel Prize in Medicine, one of the founders of bacteriology, and the man to discover anthrax, devised four criteria that he said were necessary to establish a causal relationship between a causative microbe and a disease. These four are: the organism must be found in all animals suffering from the disease, but not in healthy animals; the organism must be isolated from a diseased animal and grown in pure culture; the cultured organism should cause disease when introduced into a healthy animal; the organism must be reisolated from the experimentally infected animal.

different conclusion. Speaking of an equal yet opposite result, these scientists feared that the viral agent would mutate into a more viral or lethal form that would prove more catastrophic.

When discussing viral agents, it is important never to forget that these are microscopic organisms. Viruses are astonishingly small: one hundred million crystallized polio viruses can fit in the space of the period at the end of this sentence. Furthermore, the viral agent of SARS posed another complication because research suggested that the agent was a zoonose, a disease of animals that now appeared in humans. This transition between hosts has persisted as scientists' worst nightmare. An avian influenza strain that adapted into a human strain caused the 1918 Spanish Influenza pandemic and many predict that a similar change will cause the next great pandemic, as most scientists agree the agent will be a variant of the H5N1 avian influenza virus that achieves human-to-human transmission capacity.

Perhaps the most troubling aspect of the SARS epidemic for scientists was the frustrating and inherently inexact diagnostic process. As opposed to small pox or hemorrhagic fevers, which show distinct physical symptoms, the symptoms of SARS are common to a variety of respiratory ailments, including the common flu. Even a trained clinician would not be able to spot a case of SARS until the last stages of illness. Moreover, scientists lacked a prompt, effective laboratory test to diagnose cases of SARS during the outbreak. Left without the capacity to quickly identify and isolate cases of the illness, many public health officials lamented that containing the virus would be an impossible task.

Once scientists reached an empirical basis for diagnoses, the WHO published guidelines for identifying cases of SARS. The WHO stipulated that a clinical case of SARS included all of the following: a history of fever or documented fever greater than 100.4°F; one or more symptoms of lower respiratory tract illness, such as coughing, difficulty breathing, and shortness

of breath; radiographic evidence of lung infiltrates consistent with pneumonia or Acute Respiratory Distress Syndrome (ARDS) or autopsy findings consistent with the pathology of pneumonia or ARDS without identifiable cause; and no alternative diagnosis that can fully explain the illness. While the variability of this final point concerned many, this was the reality of the SARS epidemic: insufficient knowledge led to ambiguity and uncertainty.

Scientists later coupled the WHO guidelines with more detailed accounts of the illness's natural progression in afflicted individuals. After infection, the virus remains in incubation for two to ten days and then erupts; nearly all patients demonstrate their symptoms within two weeks of contraction. During the first week, patients generally display headache and fever. The severity of the case elevates significantly during the second week. Infected individuals advance to non-productive coughing, diarrhea, and respiratory stress, and they can contract complicating cases of pneumonia that can prove fatal.

Final WHO analyses of the 2003 outbreak report the overall case fatality rate for SARS was 9.6 percent.³² During the outbreak, however, reports claimed the case fatality rate for the overall population neared fifteen percent and that, for the elderly, the case fatality rate was greater than fifty percent (*CNN* 5/8/2003). To contextualize these figures, most retrospective accounts cite the overall case fatality rate of the 1918 Spanish Influenza pandemic as a mere one to three percent.

Despite this stark statistic, many officials stated the case fatality rate as a lesser concern. Instead, authorities and medical professionals focused on two observations: health care workers became SARS patients at a rate alarmingly higher than that of the general population;

³² The case-fatality rate is the number of cases which end in fatality divided by the number of cases overall. For the SARS epidemic between Nov. 1, 2002, and July 31, 2003, the numerator is 774 deaths, and the denominator is 8,096 cases, resulting in a case-fatality rate of 9.6 percent overall. Regarding specific nations, Hong Kong and Canada had case fatality rates of seventeen percent, Singapore finished at fourteen percent, and China reported a seven percent figure. Officials still debate the validity of China's reported cases and fatalities.

and hospitals, marred by difficulties controlling the transmission of the virus, morphed from destinations for care to sources of contagion. Scientists and public health workers feared that a scenario similar to the one imagined in Robin Cook's *Outbreak* had come to life; puzzled, they wondered who would care for the population if SARS managed to eliminate the health care workforce and also worried that individuals afflicted with the SARS coronavirus would now avoid hospitals, making containment of the disease impossible.

Aside from the difficulty in ascertaining diagnoses, scientists voiced fears regarding the observed transmission mechanism of the SARS coronavirus. Primarily spread through close personal contact, the SARS coronavirus can 'jump' from an afflicted individual to an uninfected one, spreading via casual contact. This made protection against SARS, particularly in densely populated areas such as Beijing, Hong Kong, or Singapore, unfeasible without drastic and often draconian measures.

The vector for transmission of the SARS coronavirus is respiratory droplets. These droplets release whenever an infected person sneezes or coughs and these droplets can spread in the air over a short distance and can land on the mucous membranes of another person's mouth, eyes or nose. These droplets, carrying the virus, can result in this second person contracting the virus. Furthermore, the SARS coronavirus is remarkably resilient; infected droplets can persist on surfaces that an uninfected person may touch and, upon inadvertently transferring the infected droplets to a mucous membrane, this uninfected person can develop the illness without ever having been near the infected individual.

Transmission events can be remarkably simple. Imagine that Joe, an infected individual, sneezes into his hand and subsequently uses a public pay phone, holding the phone with that hand. After Joe departs, Jane uses the same phone and, upon hanging up, uses the hand she held

the phone with to rub her eyes. Eight days later, Jane emerges with the symptoms of SARS without the slightest clue of how she contracted the illness, having done so through an entirely inadvertent process.

This scenario is hardly far-fetched. For this reason, the Centers for Disease Control and Prevention (CDC) offered practical advice regarding hygiene in an attempt to limit the spread of the SARS epidemic. The CDC recommendations called for common-sense precautions, emphasizing that individuals should wash their hands frequently and cover their hands with a napkin when sneezing or coughing in order to prevent casual transmission. Many individuals took these recommendations to extremes, wearing respiratory masks when in public and quarantining themselves in their homes.

In the aftermath of the SARS epidemic, research continued as scientists sought to understand its origins. After months of research, scientists concluded that suspicions were correct and that the SARS coronavirus was in fact a zoonose. Researchers then sought to identify the reservoir for the SARS coronavirus. Pinpointing an animal host, tests proved that domestic cats and ferrets carry the virus and that three culinary delicacies in southern China – the Himalayan masked palm civet, the Chinese ferret badger, and the raccoon dog – were reservoirs as well. Scientists also learned that when the SARS epidemic first emerged in southern China, over a third of the cases appeared in food handlers. While no evidence will ever demonstrate exactly how the SARS coronavirus reached human populations, all reasoned judgment points to the following scenario: a food handler in a Chinese meat market contracted the SARS coronavirus from an infected animal and then, once in a human host, the virus mutated to allow for human transmission and, being spread by this human host, found other hosts and emerged as a worldwide outbreak.

Timeline of the SARS Epidemic: November 2002 – June 2003

Unacknowledged at the time, SARS emerged in November 2002 in China's Guangdong province.³³ The first known case of SARS, originally diagnosed as a case of atypical pneumonia, appeared on November 16th and resulted in a local outbreak. A second such outbreak began on January 2nd, 2003, again in Guangdong province. The world was still oblivious to this information. Only later would scientists learn of the emergence of this new infectious disease, months after China first encountered the viral agent.

After initially concealing knowledge of these outbreaks, China reported the incidents to the WHO on February 14th. China claimed that an outbreak of an atypical pneumonia had affected 305 persons and resulted in five fatalities and that there was nothing of further concern. Only later, after being subjected to substantial pressure from the WHO and others who believed these were only partial truths, did China amend its figures to reveal what is now, with certain doubts, closer to the truth. In March 2003, China reported that these early outbreaks of the unknown agent caused 792 cases with 31 fatalities.

On February 21st, the illness shifted venues. After treating patients in his rural hometown, a doctor who had fallen slightly ill traveled to Hong Kong; he thought he had nothing more than a common cold. In Hong Kong, this doctor checked into Room 911 of the Metropole Hotel and subsequently became the catalyst for the international SARS outbreak. In the days that followed, patrons who stayed on the ninth floor of the Metropole Hotel spread the SARS coronavirus around the world, using air travel to launch SARS suddenly around the globe. Cases of SARS sprung up in Hanoi, Hong Kong, Singapore, and Toronto, cities that became SARS "hot zones" due to local explosions of atypical pneumonia cases, particularly among health care workers.

³³ Sources for this timeline include *SARS Reference* (Kamps and Hoffman, 2003), WHO and CDC press releases, and newspaper articles both during and after the epidemic.

On February 28th, Dr. Carlo Urbani, a WHO official in Vietnam, noticed three cases of an atypical pneumonia in Hanoi. Urbani's concern was of an avian influenza outbreak. One week later, news reports of severe atypical pneumonia outbreaks emanated from Vietnam. Then, on March 11th, Hong Kong health officials reported an outbreak of an acute respiratory syndrome among hospital workers. The following day, the WHO issued a global alert regarding this severe atypical pneumonia. The alert stated that the cause of the illness was unknown and that the illness seemed to target health care workers. Two days later, Canada reported two cases of an atypical pneumonia in Toronto. Singapore did the same the next day. The index case at each location was a former guest of the Metropole Hotel, Hong Kong.

By March 15th, the WHO had received over 150 notices regarding cases of this new disease. In the face of a rapidly escalating crisis, the WHO issued both an emergency travel advisory warning against travel to Southeast Asia and a global alert to international travelers, health care workers, and health authorities. This was the first such action in the fifty-five history of the WHO. The WHO also gave this illness a name: persons displaying the symptoms indicative of this ailment now suffered from Severe Acute Respiratory Syndrome, or SARS.

On March 17th, the WHO called upon eleven leading research laboratories in nine countries to unite to form a network with the goal of understanding the etiology of SARS and developing a diagnostic test and, if possible, a treatment. This was the first step toward identifying the cause of the disease. One week later, on March 24th, scientists at the CDC and in Hong Kong announced the isolation of a novel coronavirus from a SARS patient. After another week, the WHO released a new case definition for SARS and alerted travelers to the significant dangers of international travel, offering precautionary suggestions.

Meanwhile, the crisis continued to afflict the “hot zones.” Canada’s Ontario province declared a public health emergency on March 26th and immediately requested that thousands of citizens in the greater Toronto area quarantine themselves in their homes. Toronto hospitals barred visitors, fearful because nosocomial infections were the primary means of spreading the virus. On April 2nd, the American Association for Cancer Research cancelled its annual meeting of over 12,000 scientists and 16,000 delegates, scheduled to take place in Toronto, due to fears of SARS. China, in contrast, rejected SARS as a danger or threat, at least publicly; on April 3rd, the Chinese Minister of Public Health reported that all travel to China was safe and that the outbreak was under control.

Then, on April 8th, three separate research groups published reports repeating the suggestion that a novel coronavirus might be the etiological agent of SARS. Canadian researchers followed this by reporting the successful sequencing of the purported etiological agent’s genome. Concluding this identification process, the WHO official announced on April 16th that this pathogen, a coronavirus novel to humans, was the cause of SARS.

Yet, while scientists were now generating information to demystify the viral agent, the public and government authorities showed a continued fear of the unknown. On April 10th, Canadian Prime Minister Jean Chrétien dined at a Chinese restaurant in an attempt to dispel fears about SARS. On the same day, eleven new cases of SARS appeared in Toronto. Canadian Blood Services then declared that it would not take blood from anyone who recently traveled to Southeast Asia, despite the fact that no evidence shows that SARS can enter the bloodstream; the agency said it was a necessary precaution to slow the spread of SARS. Towards the same end, Hong Kong began screening passengers at its airport for SARS and instituted random checks for those entering from China. Private schools in Britain, going a step further, decided on April 19th

to bar the return of students who spent their spring break in specific SARS “hot zones,” singling out Singapore, Hong Kong, and China’s Guangdong province.

Drawing further ire from the international community, China proceeded on April 20th to reveal further cases of SARS that it had not previously disclosed. In the days prior, China reported only 22 total cases of SARS; on April 20th, China updated their figures to show 339 confirmed cases and 402 suspected cases in Beijing alone. By April 27th, China reported having nearly 3,000 cases overall. At this point, China closed all theaters, cafes, discos, and suspended all marriages in order to prevent public gathering and situations where SARS could easily spread. China’s failures in containing SARS starkly contrasted the successes seen elsewhere. On April 28th, Vietnam became the first nation to contain its SARS outbreak after having no new cases appear for twenty days.

On May 13th, the WHO reported that the outbreaks at all of the initial “hot zones” showed signs of coming under control. This indicated that the global outbreak was being contained. Then, on July 5th, after nearly two more months of localized outbreaks, quarantines, and worldwide attention, the WHO declared that the last human chain of SARS transmission had broken.

In the wake of the SARS outbreak, the WHO reported that a total of 8,096 persons in 26 countries had contracted cases of SARS accompanied by pneumonia or respiratory distress between November 2002 and June 2003.³⁴ Of these persons, 774 died. In the United States, only eight persons ever fell ill with SARS; each of them contracted the virus while visiting a ‘hot zone’. At the end of July, the WHO declared the end of the global SARS epidemic.

³⁴ This is the only way to count such a figure. Individuals who did not suffer from the pneumonia that often accompanies SARS would never feel the need to go to the hospital and therefore would never enter the medical system and therefore would never be identified as a SARS case.

Since July 2003, SARS has reappeared four times. On each occasion, laboratory accidents were the cause. According to the WHO and the CDC, the most probable source of SARS coronavirus infection among humans is now via laboratory exposure or from animal reservoirs, such as bats, that retain the strand of SARS coronavirus that initiated the 2003 outbreak. Since April 2004, there have been no known cases of SARS.³⁵

Early Coverage of SARS Epidemic

The first words from the American print media regarding SARS provoke concern about the epidemic. The *New York Times* broke the story on March 15, 2003, and the public then learns from a prominent headline that a “Mysterious Respiratory Illness Afflicts Hundreds Globally.” The uncertainty of the situation is obvious; the first quoted authority remarks, “It is not a very good situation....It is not clear what is going on, and it is not clear what the extent of spread will be.” The source, Dr. David L. Heymann, is credentialed as a top expert in communicable diseases at the World Health Organization (WHO). Shortly following is a quote from Dick Thompson, a spokesman for the WHO, whose remarks could instigate concern even in those whose initial reactions were calm; he states that “one might think we are overreacting....But when you do not know the cause, when it strikes hospital staff and it certainly is moving at the speed of a jet, we are taking this very seriously.” Quite simply, it seemed as though a killer was on the loose and the authorities were clueless and directly telling the public to be concerned.

The *Washington Post* makes this conclusion explicit the following morning. The front page of the *Post* screams the headline, “Flu-Like Illness That Kills Spurs Global Alert” (3/16). The first line continues to raise alarms: “The World Health Organization issued an emergency global alert yesterday, warning that a mysterious, sometimes fatal pneumonia-like illness posed a

³⁵ The CDC and WHO continue to monitor the SARS situation globally. The CDC SARS Situation page has not changed since May 3, 2005; to view that page, access: <http://www.cdc.gov/ncidod/SARS/situation.htm>.

worldwide threat after spreading from Asia to Europe and North America.” Dr. David Heymann then appeared, quoted in this article as well. Dr. Heymann, now credentialed as the Head of Communicable Diseases for the WHO, observes, “It’s always worrisome when you can’t put a diagnosis on a disease.” The article goes on to detail the international spread of the disease, the fact that “there are already cases from Hanoi to Toronto,” and the inability of clinicians to find a suitable treatment as “the disease has not responded to antibiotics.” Ending with commentary from another authority, the *Post* emphatically signs off on our panic. Citing Stephen Morse, introduced as a Columbia University infectious disease expert, “the outbreaks were worrisome because of fears that this could be the beginning of a global flu pandemic” and because “New flu viruses historically have first emerged in Asia.” As to how the public should respond to situations such as SARS, Morse says: “Whenever something unknown appears, and appears to be spreading, it’s a cause for concern.”

On March 17th, *The Guardian* (London) followed in a similar vein, highlighting that, ““An unusual and lethal variety of pneumonia that first appeared in Asia but is now traveling the globe has become ‘a worldwide health threat’, according to the World Health Organization, which issued an unprecedented warning yesterday” (Boseley, 3/17). Along with reiterating many of the frightening quotes and details that appeared in the *New York Times* and *Washington Post* from the days before, *The Guardian* ran the most succinct assessment of the situation, offered by Dick Thompson: “It is a highly contagious disease and it is moving around by jet. It’s bad.”

It is on March 17th that a key catchphrase appears as SARS becomes a “killer.” The *Scotsman* announced in an article titled, “Global Killers: Invisible Threat of Mutant Bugs,” that “The as-yet-unidentified strain of severe acute respiratory syndrome could be the latest global killer virus. Health experts said it was only a matter of time before a powerful new bug emerged

to cause a pandemic, after a 35-year gap since the last.” In addition to contributing to individuals’ fears of death associated with SARS, this article raises the potential for SARS to become the pandemic that scientists had warned of; this enormity of scope raises further fears as individuals can feel small and hopeless in comparison and might now believe that preventative measures are futile.

Following in kind, the *New York Times* presented the idea of SARS as a pandemic to a larger public and media audience the very next day. Demonstrating their dedication to chase the compelling news story the virus offered, the *Times* reported in an article titled, “On the Trail of a Mystery Illness,” that,

The mystery disease that has sickened hundreds of people in Asia and a handful of victims elsewhere is worrisome chiefly because so little is known about it. Public health experts cannot say for sure whether this is the opening stage of a lethal pandemic that will claim great numbers of victims around the world, or the emergence of a less worrisome disease that will fizzle out before it can become a major killer.

The *Times* article emphasizes two crucial aspects of the outbreak. First, the public’s fear is primarily due to a lack of information. Without information, the public cannot appropriately assess its position, its risks, and therefore cannot find the appropriate course of action. Second, SARS could be the ‘slate-wiper’, the end game. The public does not have any assurance that it is not. With this assertion in the *Times*, the standard bearer for newspapers worldwide that carries “All the News That’s Fit to Print,” the reality of the SARS epidemic became clear: the infectious disease outbreak had already started and now an epidemic of fear emerged as well.

The public’s fears stemmed from a fundamental human fallacy. We lack the ability to assess risk properly. For one, individuals have an unrealistic optimism about their future life events and tend to believe that others might experience harmful effects due to their behaviors while they escape repercussions (Weinstein 1980; Weinstein 1984). As a result, individuals tend

to underestimate their risk for hazards that occur more frequently, such as contracting a sexually transmitted infection (Rothman, Klein, and Weinstein 1996). The opposite also holds true. Individuals have a penchant for overestimating their vulnerabilities to hazards that have lower probabilities of occurring, such as chronic liver disease, and tend to overpersonalize risk, even if the danger exists for someone else (Rothman, Klein, and Weinstein 1996; Siegel 2005, 26). Of course, a low probability hazard that fits this model is the possibility of succumbing to an emerging infectious disease. As was obvious by late June 2003 after the WHO declared the end of the SARS epidemic, humans, from individuals to nations, overwhelmingly exhibited a tendency to overestimate their vulnerability. Yet, while the public experienced the outbreak and was unable to properly assess the risks associated with the outbreak, wearing a surgical mask seemed more like an additional precaution than an unwarranted waste, and masks even became a fashionable accessory. Only later would the public realize how unnecessary and silly their actions were.

The first days of the outbreak produced little besides panic, a few hundred afflicted patients, and recognition of the importance of knowledge and communication as tools in combating both the physical microbe causing the infectious disease and the fear the microbe elicits among the general population.³⁶ During the first days of the international epidemic, the apparent uncertainty caused individuals to inaccurately assess their level of risk and react inappropriately. As the course of the epidemic played out, public health officials sought answers, medical researchers searched for treatments, infectious disease experts tried to hunt down the agent causing this mysterious ailment, and the print media narrated the events to the public.

³⁶ Regarding the function of information, research on the subject of trauma concludes that coping and healing requires accurate information (Ross 2003, 149).

Whether the print media communicates with the public appropriately in situations of emerging infectious diseases is another matter entirely. Complimenting the media, some scholars assert that the media succeed at disseminating warnings of disaster but remain ineffective at conveying a proper sense of risk (Burkhart 1991, 120; Maher and Chiasson Jr. 1995, 219). While the latter contention is generally agreed upon, the first faces vehement opposition. For one, Marc Siegel, a physician and columnist for the *New York Daily News* and medical correspondent for multiple television networks, claims in *False Alarm: the Truth About the Epidemic of Fear*, that,

[T]he worldwide interconnection of our media outlets via satellite and Internet practically assures that the bug du jour, or the scare of the moment, will instantly escalate into worldwide concern via the media megaphone...No matter how safe we are, all we need to hear is the word *danger* or *threat*, and the cycle of worry starts. When one cycle is extinguished, another takes its place...As more of our sense of what threatens us comes from the news media and the internet, we lose track...We have lost the ability to assess risk. We worry so much about danger that doesn't exist that our ability to judge real danger is impaired. (Siegel 2005, 59; 75)

Reviewing the literature, neither Siegel's diatribe against the media nor scholars applause of the media's efforts seems entirely appropriate. Moreover, leveling a value judgment on the work of the print media is not the goal of this thesis. Instead, we can draw two important conclusions from this. First, perspectives on the media and the work of media outlets themselves vary greatly, a point demonstrated by this analysis of the print media discourse on SARS. Second, the print media fails to provide the public with a proper sense of risk. The result of this failure is a plaguing uncertainty among the public and a crippling sense of fear.

Previous Scholarship

Prior scholarship on the news media's coverage of SARS is sparse. Most publications on SARS in the humanities and social sciences focus on quantitative analyses and topics not pertinent to a discussion of language; only a select few articles investigate either the content

shared or language used by the news media when covering SARS or the public response to communications about the epidemic. Yet, while these are helpful in corroborating the analysis and arguments of this thesis, none of these works deals completely or directly with the ideas and materials considered here.

Assessing the existing scholarship reveals chasms in the present knowledge of this subject area: no prior studies consider the economic pressures of the news media industry and their impact on the coverage of SARS; none consider the news media's framing of communities' experiences during the SARS epidemic; and, most importantly, no prior studies engage in any sort of qualitative inspection of the news media coverage of the SARS epidemic in the United States. In introducing the idea of 'creating news' to this area of study, as well as examining and attempting to fill these gaps in current scholarship, this study adds to the scholarship discussing the SARS epidemic and its implications and strives to be useful for future encounters with emerging infectious diseases, an instructional guide of sorts to explain some aspect of how and why the news media frames the epidemic as it does initially and how and why these framings shift over time.

Previous studies primarily detail the results of surveys of the public's reaction to the coverage of SARS in the researchers' home country.³⁷ Select conclusions from these studies are useful for this discussion. For example, one team notes that the surveyed population felt that the coverage was excessive yet, when tested on their knowledge, seven in ten failed to answer

³⁷ For example: Bergeron and Sanchez studied the media's effect on students at Canadian universities during the SARS outbreak (2005); Rezza, Marino, Farchi, and Tarano recount the appearance of articles mentioning SARS in the Italian press during the epidemic (2004); Brug, Aro, Oenema, Zwart, Richardus, and Bishop look at SARS risk perception, knowledge, precautions, and information sources in the Netherlands (2004); Chan, Jin, Rousseau, Vaughn, and Yu perform a survey of newspaper coverage in Canada, Hong Kong, China, and Western Europe (2002/3); Wilson, Thomson, and Mansoor review the print media response to SARS in New Zealand (2004); and Drache, Feldman, and Clifton summarize their results from a study of the media coverage of the 2003 Toronto SARS outbreak, devoting the majority of their efforts to Toronto's local press (2003). One note worth mentioning is that Chan, Jin, Rousseau, Vaughn, and Yu's study found that similarities existed between the Chinese and US print media accounts of SARS, suggesting the potential universality of the conclusions reached in this thesis.

simple questions about SARS correctly (Bergeron and Sanchez 2005). Another, considering the SARS coverage in the Netherlands, reports that the public perceived newspapers as a trustworthy source of news, that individuals felt highly aware of SARS, and that the print media did not spur any fears (Brug, Aro, Oenema, Zwart, Richardus, and Bishop 2004). This observation helps substantiate the validity of Siegel and others' contentions that information might be the best vaccine for fear and suggests that the public's increasing distrust of newspapers may be causally associated with particularly American fears.³⁸ A third team examines at the coverage in the Toronto newspapers and two major US newspapers.³⁹ Their report documents the diversity of coverage on SARS, with articles focusing on health, economics, and politics; it also contends that all individuals heard the same messages during the SARS outbreak, regardless of what source they accessed, an important point when considering the diverse news sources considered in this study. Finally, a fourth quantitative analysis, this time of the New Zealand print media, finds that certain words or associations appeared at alarming rates, such as "quarantine" in one-third and "China" in sixty-five percent of the articles on SARS (Wilson, Thomson, and Mansoor 2004). Moreover, these scholars explicitly suggest that someone perform an analysis of the print media's coverage "to provide a broader and deeper understanding of the response to SARS."

Prior scholarship recognizes the fact that the response to SARS is rooted in connotative understandings. As one researcher notes, "Like any other disease, SARS (Severe Acute Respiratory Syndrome) has no deep-rooted meaning. It is caused by a mere virus...[but] it has defied accurate comprehension and conquest. SARS acquired enormous significance and meaning from its cultural and ideological contexts" and "it shook the lives of millions, elicited

³⁸ Addressing the differences between the Dutch and US print media or a historical analysis of the shifting public trust in newspapers is beyond the scope of this thesis. Analyzing these topics, however, would be important to reach firm conclusions on this point.

³⁹ The papers used in this study include: the *Toronto Star*, the *National Post*, the *Globe and Mail* and, from the United States, the *New York Times*, and the *USA Today*.

diverse public reactions, expressed underlying dark fears and redefined segregation and interventionism” (Sharma 2004, 332). Acting upon this, sociologist Peter Baehr analyzes these connotative understandings from his discipline’s perspective, discussing the sociology of SARS in Hong Kong (2005).⁴⁰

The two publications most closely linked with this thesis discuss representations of SARS and the figurative language used by British newspapers. Science and technology studies scholar Peter Washer examines how UK newspapers depict SARS, focusing on containment discourse and the mechanism of ‘Othering’ used in the print media (2004). Washer asserts that “Examining the reporting of new infectious disease in the newspapers highlights wider contemporary public anxieties, in particular anxieties *both* about the apparent inability of technology (and biomedicine) to contain new threats *and* concerns about globalisation” Washer concludes that the coverage of SARS resonates with that of other infectious disease epidemics throughout history and that the tactic of ‘Othering’ remains strong in disease discourse, as he finds that “we lay the blame for the new threat on those outside one’s own community, the ‘other’” (2004, 2562; 2570).

Fellow science and technology studies scholars Patrick Wallis and Brigitte Nerlich, acknowledging Washer’s work, examine how the language and metaphors used in the British media’s coverage introduce the public to this novel infectious disease (2005). Wallis and Nerlich find that the British news media avoided using the war and plague metaphors that normally dominate disease discourse and instead rely on metaphors of a killer and control; they also observe that the print media construct their representations of SARS through narratives, metaphors, clichés, and analogies. After completing their analysis, Wallis and Nerlich conclude

⁴⁰ Baehr primarily examines SARS impact on Hong Kong and the appearance of what he calls a “mask culture” in Hong Kong during the SARS epidemic and how this culture was a way to keep the disease contagion away. He also discusses Hong Kong as a “community of fate” from a sociological perspective.

that the coverage of SARS might signal a shift in perception and policing of emerging disease as well as contribute to a transition in “the theorizing of metaphor itself, away from seeing it purely as a rhetorical or cognitive device towards seeing it as a cultural and political one” (2005, 2638).

Methodology

This qualitative analysis of the news media’s coverage of the SARS epidemic examines a variety of news media sources. In particular, I analyzed and drew examples from articles printed in newspapers and magazines between March 1st and June 30th, 2003, for the body of this study; articles from a subset of newspapers between July 2003 and January 2007 were also examined, with examples extracted when appropriate.

Newspapers

The newspapers examined for this study fit into three identifiable categories:⁴¹

International / National Newspapers

New York Times (605)

International Herald Tribune (513)

USA Today (184)

Local Newspapers / North American Tabloids

Toronto Star (1229)

New York Post (93)

New York Daily News (84)

Boston Herald (83)

Newsday (New York) (0)

British Tabloids

Mirror (290)

Sun (184)

Daily Mail (126)

Daily Star (79)

⁴¹ The value in parenthesis is the number of articles found for that source via a Lexis-Nexis keyword search for “SARS” between March 1st and June 30th, 2003. This figure is slightly inflated as compared to what I have considered in this study: this figure includes all articles on SARS whereas I only examined news articles on SARS that appeared within the general categories of news, business, sports, and editorial coverage.

Archives of each of these newspapers are accessible through the Lexis-Nexis Academic database. Articles for this study were gathered using a Lexis-Nexis Academic keyword search for “SARS” whenever possible. Additionally, newspaper sources outside of this limited cross-section appear in this study as further examples to demonstrate the extent to which certain uses extend throughout the news media’s SARS coverage. Lexis-Nexis keyword searches were used to locate articles with these specific cases as well. If the source did not appear in the Lexis-Nexis Academic database, then I accessed the pertinent articles through the sources’ dedicated archives. These newspapers include:

Additional Newspapers Include:

Atlanta Journal-Constitution
Boston Globe
Chicago Sun-Times
Daily Telegraph (Sydney)
Globe and Mail (Toronto)
Guardian (London)
Herald Sun (Melbourne)
Los Angeles Times
Minneapolis Star-Tribune
Montreal Gazette
Ottawa Citizen
San Antonio Express-News
San Diego Union-Tribune
Scotsman
Seattle Times
St. Petersburg Times
Washington Post

Magazines

Only magazine articles referenced in newspaper articles are included in the study.

Comparative Accounts

In addition to these news media articles, I examined scholarly journals that addressed the SARS epidemic and four texts whose plots center on the emergence of an infectious disease epidemic.

Scholarly Journals

Materials from the following journals were examined for this study:⁴²

Science
New England Journal of Medicine
Journal of the American Medical Association
British Medical Journal
Emerging Infectious Diseases
American Journal of Epidemiology

Books

Three *New York Times* bestsellers from the genres of science fiction and medical thriller whose plots center on emerging infectious disease outbreaks are examined. These texts are:

The Andromeda Strain by Michael Crichton⁴³
Prey by Michael Crichton
Outbreak by Robin Cook⁴⁴

Additionally, a *New York Times* nonfiction bestseller based on an emerging infectious disease outbreak is examined.

The Hot Zone by Richard Preston⁴⁵

To conclude, one quote helps accurately express why examining this limited subset of media on an infectious disease epidemic might allow for reasonable generalizations to be drawn. Former CBS Evening News anchor Dan Rather offers this insight: “Television... frequently takes its cue from what some of the larger newspapers decide is news” (quoted in Moeller 1999, 98).

Examining the words on newspapers’ pages, even in a limited set, is worthwhile since these words guide the coverage of other media outlets and regulate the public’s understanding.

⁴² Since SARS was a novel virus and since the research and peer-review processes often take months if not longer to complete, very few peer-reviewed articles were available for inclusion in this study. Nevertheless, these sources were valuable since they also contained reports on news and key events; these articles are primarily what I examined from these sources.

⁴³ In 1971, *The Andromeda Strain* released as a motion picture based on Crichton’s text.

⁴⁴ In May 1995, National Broadcasting Company (NBC) Television aired “Robin Cook’s Virus,” a mini-series based on *Outbreak*.

⁴⁵ *The Hot Zone* inspired *Outbreak*, the 1995 film directed by Wolfgang Peterson and starring Dustin Hoffman, Morgan Freeman, and Rene Russo (Dinello 2001).

Part Two:

The News

Chapter Three

'Communities of Fear': How the News Cause an Epidemic of Fear

The process of translating and transmitting information from scientific fact to public knowledge fails in the case of emerging infectious diseases. While scholars claim that information can alleviate existing fears and inoculate the public from future fears, they often fail to mention that not all information can achieve this: information, conveyed through the news, can also scare. Novelist and physician Michael Crichton and others decry the processing information undergoes as the news media adapt it for consumption (Crichton 1999). They do so with good reason: the news that results is a product that incites fears, particularly fears of disease and death.

Health studies scholar Peter Curson blames the power of language for why “We’re more at risk from the epidemic of fear than we are from the actual SARS virus,” and for the public’s classic response of fear and hysteria to the new disease (*Australian Magazine* 5/10). As Curson remarks,

Look at the headlines – ‘Killer virus’, ‘Killer on the loose’. People see it all as it happens and they take the messages they get very personally...People have always been both fascinated and repelled by death and disease, particularly by those dramatic confrontations with epidemic disaster, where the likely outcome is unknown. And it’s interesting that human reactions of fear and panic, which are deeply embedded in society, are very rarely correlated to the severity of the disease, in terms of actual cases and deaths.⁴⁶

This chapter examines how individuals come to understand SARS. An identifiable process exists. Individuals begin with an innate fascination with viruses and infectious disease. Responding to this interest, the news media perform the first half of their axiomatic function:

⁴⁶ Siegel notices this illogical oddity as well. He remarks: “But a strange disease that kills only a few people still makes for good headlines if the story is strategically hyped...If we didn’t fundamentally misunderstand the risk, we probably wouldn’t watch” (2005, 19). He explains that this occurs because “the mass media tend to magnify the latest health concern and broadcast it to millions of people at once. This has the effect of elevating an issue to a grand scale and provoking panic way out of proportion to the risks” (2005, 17).

they ‘afflict the comfortable’. To do so, the news media create an ‘interpretive package’ centering on fear, emphasizing fears of disease and death with phrasings like “killer virus.” Individuals overpersonalize and entrench fear as their means of understanding SARS in response to certain references, such as those cited by Curson.

As the SARS epidemic began, the news media and the public first sought information from various health authorities.⁴⁷ This proved unfulfilling; the authorities themselves had no knowledge to share; the novelty of the disease left them capable of nothing more than speculation. As a result, the news media and the public opt for other means of understanding the disease epidemic: they turn to popular references and science/thriller literature that relate to emerging infectious disease epidemics. They can readily access these sources of understanding; in fact, science/thriller literature and the news media emulate each other in crafting their accounts.

The news coverage almost immediately frames SARS as disease out of a science/thriller novel. Importantly, the news coverage of real events now imitates a science/thriller that seeks to ‘afflict the comfortable’ to achieve the temporary scare, the thrill that brings readers to those texts. This is apparent in headlines, comparisons to fatal diseases, and metaphors used to inform the public about SARS, like the Fourth Horseman. Moreover, the news media present narratives that, as the public read them, personalize their fear of SARS. Reacting to this coverage bears consequences: as Ross observes, individuals cannot cope with fears alone when they lack the capacity to rationalize or explain fear (2003, 18); in these situations, individuals succumb to

⁴⁷ Information can cure fears. As Siegel proclaims, “The best vaccine for SARS [is] information, seeing the new disease in its context. ... We had to treat the perception that we could get SARS rather than any real risk of it” (2005, 147). Ross similarly asserts that the media can help individuals avert trauma and can even heal them with accurate information (2003, 107; 149). Yet there is a prerequisite quality to information that Siegel and Ross do not mention. For it to be an efficacious treatment, information must ‘comfort the afflicted’. This, as demonstrated throughout Chapter Four, is not always the case.

helplessness as they are unable to satisfy their human need for control of their fears (2003, 18). Individuals suffer as these fears of disease and death sicken them (Ross 2003, 14).

Health Authorities

Individuals' perceptions regarding health authorities matter, particularly when the public is vulnerable and searching for understanding. Addressing medical situations, the *New York Times* quotes a medical historian who says: "If you want the public's cooperation, honesty and frankness is much better [than hiding the truth]" (3/26/06). Regarding individuals' fears, the *Times* notes that "An obvious scapegoat is the media, which is often accused of being alarmist about medical news. But a more important factor was simpler: fear waxed or waned according to whether the public thought government was being honest" (3/26/06). The conflicting messages that the news media attribute to authority figures during the SARS epidemic signal dishonesty: for contradictory accounts to exist, at least one group of these authorities must be lying. These lies provoke fear among the public as they leave individuals uncertain of which account is true and of whom they should trust.

Throughout the coverage, the news media frame health authorities as attempting to control the public during the epidemic despite being confused themselves and without concrete, factual answers; the news media tell the public that, while the authorities are calling for calm, the microbe is winning its war against them. The media effectively expose health authorities as a flawed source to rely on for understanding and go as far as to indicate that they are attempting to cover-up the situation. Noticing how the media do this, how they process the accounts of health authorities to portray them as deceitful or incompetent instead of in their more traditional image as protectors of the public is crucial to the propagation of fear.

The media consistently alter the form and content of health authorities' quotes when 'creating news'. Moreover, the news media construct the content of the news in a way that conveys information that 'afflicts the comfortable'. Presenting advice from various health authorities, the news media attribute contradictory messages to them from the outset. As the *New York Times* initially reports, quoting Toronto's director of communicable disease control, "[SARS] is not a mild illness" (3/16); her quote appears amidst coverage suggesting the possible magnitude of the SARS threat. The very next day, the *Times* notes that the same official now "urged calm [saying] 'There's no reason to panic'" (3/17). While the *Times* language remains consistent and cautious, still reporting that SARS is a legitimate threat with the potential for great devastation, the *Times*' inclusion of this account and others to demonstrate the wild swings of authorities' opinions depict these authorities as cavalier in their duties, if not reckless when communicating with the public. If not this, then the authority's drastic shift smacks of a cover-up. Either way, Sandman offers an important idea to explain the effects of this official's latter statement to the *Times*: the public invariably responds with an elevated level of panic to authorities' assertions (Sandman 1993).

Newspapers found numerous ways to adapt content from the health authorities, often to the point that each newspaper's account had its own rendition of the news. For instance, the *Montreal Gazette* claims, "Rare illness not a major worry; MDs don't believe SARS contagious enough to create a worldwide pandemic" (3/18). Other accounts rebut the *Gazette*. The *Minneapolis Star Tribune* reports that "Officials worry that the illness could become an international threat" and that, as Gerberding mentions, "We really do live in a global village, and an emerging problem in one part of the world will soon be an emerging problem for all of us" (3/18). If this is the case, the threat is immediate for everyone; fear responses, even among those

who feel removed from the threat, seem warranted. Making this point, Thomas Thompson, the Secretary of the Department of Health and Human Services during the epidemic, warns in the *New York Times* that “The current outbreak is of concern for everyone” (3/18). Yet, with the news media depicting health authorities as claiming that the public should be calm, which the public would likely infer to mean that there is no “killer virus” on the loose for them to fear, it appears to the public that these officials fail to understand the threat the disease purportedly poses. The fact that the news coverage frequently frames the disease in terms of worst-case scenarios and the public interpret the coverage in these terms only accentuates this gap between what the public perceives and what some health authorities claim.

Commenting on the problem of conflicting messages, the *Toronto Star* quotes the president of the Ontario Nurses Association, who says that “public health officials were at first giving contradictory advice,” leading to anxiety among the nurses and other healthcare workers (4/5). A headline from the *Toronto Sun* repeats the duality of opinions coming from authorities: “‘No reason to panic’; Pneumonia-like disease baffling doctors” (3/17). While these phrases are not contradictory, readers, predisposed to believe worst-case scenarios and unable to assess risks appropriately in this novel situation, are likely to react to the second phrase; the idea that the disease baffles doctors is frightening as the connotations of “baffling” are frightful. For one, “baffling” suggests that the microbe has been able to outwit scientists (see, for example, Ungar 1998). This presents the public a reason to panic, even if scientists instruct them otherwise.

As political philosopher Alexis de Tocqueville observed, the news is the most effective and perhaps the only feasible way to implant a shared idea into a large community (Paisley 2001, 134). Health authorities such as the CDC, recognizing this, seek to instruct the public at large via the news. Yet the news media stymie this effort by framing authorities as excessively eager to

ensure calm, which the public perceives as authorities' attempts at a cover-up or similar deception (Sandman 1993).⁴⁸ The *Toronto Star* does this repeatedly; while communicating frightening news, the *Star* also reports: "health officials urged calm" (3/17); "experts cautioned against panic" (3/19); and "[calls] for calm came [from officials]" (3/19). Depicted as commanding the public without offering accessible explanations as to why the public should believe them, the news suggests that skepticism towards authorities should be the public's approach. The *Star's* inclusion of the following quote from the WHO's director of communicable diseases emphasizes this: "The reason we are alarmed is because we don't know what is causing it" (3/19). His account contrasts the advice of other authorities: an eminent scientist being alarmed hardly suggests there is "no reason to panic" or that the public should be calm. Developing these contrasts and convincing the public to cast a concerned eye on these authorities, the news media also foster negative attitudes toward them, presenting coverage about the secrecy and dangers of science.⁴⁹

Disparate accounts about the scope of the epidemic also raise uncertainty and unsettle readers. For instance, the *Guardian* offers its perspective with some additional information:

The World Health Organization is not a body noted for its hyperbole. So when it issued a stark warning last week about a new disease which it described as "a worldwide health threat", a shiver of fear ran through public-health authorities around the globe. The new disease, which has been given a new name - severe acute respiratory syndrome (SARS) - was spreading from continent to continent unhindered. Antibiotics appeared to be useless in the battle to contain the

⁴⁸ Revelations, such as the following example from the *Toronto Star*, implicitly suggest the possibility of a cover-up as the news steadily gets worse, practicing a pattern that observers commonly associate with situations where the news is ultimately bad but the coverage only eventually reaches an actual description of its magnitude as the media attenuate the public's reaction by introducing facts in a piecemeal fashion (Sandman 1994). Here, the *Star* reports that "the deadly disease might be more easily spread than first imagined" (3/20). This, along with later reports of higher case-fatality rates than originally forecast by scientists, is the sort of news that can suggest a cover-up to a suspicious public. .

⁴⁹ The news media repeatedly express fears of science and research, especially after the epidemic. The *New York Times* remarks that laboratories are sources of diseases and outbreaks (9/30). The *Washington Post* comments that "SARS cases in Asian show labs' risks; as scientists battle diseases, accidents can infect public," citing fears of a laboratory smallpox outbreak and the instances of laboratory SARS outbreaks as examples (5/29/04).

sickness, which was merrily winging its way on board the hundreds of international airliners criss-crossing the planet every hour. (3/18)

The *Guardian*, after portraying the WHO as a measured, rational body whose judgment individuals can trust, indicates that the reaction of authorities worldwide to their decision on SARS is fear; implicitly, the *Guardian* suggests that readers should feel the same fears. To ensure this message gets through, the *Guardian* uses frightening, colloquial language to instigate a fear response, describing antibiotics as “useless in battle” and the virus as “merrily winging its way” around the world.

The *Guardian* account, among others, calls into question reports suggesting that authorities are not in a state of fear. As the public encounter these disparate accounts, the disingenuousness they might attribute to authorities because of their portrayals in the news media can convince them to seek alternate sources of understanding. Regardless, the fact that the authorities lack a complete understanding, a point which the news coverage makes repeatedly, compels the public to search for and accept other means to understand SARS; even flawed understandings are acceptable as the public desire to avoid uncertainty above all. Assessing this situation, the public and the media must refer to contexts and understandings they both already possess; this will allow them both to apply these understandings to SARS and define their conceptualizations of epidemic.

Science/Thriller Texts and Popular Culture

With the paucity of information that existed about SARS, popular culture references became a refuge for those grasping for any means to understand the threat and impending crisis (Van Riper 2003, 1104). Even later, as information became available, “Popular culture [did] more than formal science education to shape most people’s understand of science and scientists

[because] it [was] more pervasive, more eye-catching, and (with rare exceptions) more memorable,” (Van Riper 2003, 1104). Yet this condition is dangerous as it affects understandings of disease rooted in fear: “Just as atom bomb anxiety infused Cold War-era pop culture, virus anxiety – in the form of plagues, epidemics, parasites, and microbe-caused mutations – permeates recent popular culture” (Dinello 2001). Examining both bestselling science thrillers about emerging outbreaks and how the news media refer to these texts reveals one way in which popular culture and exaggerated accounts, if not outright fiction, influence understandings of disease.

As cultural critic Priscilla Wald remarks, “Popular culture registers our fears in a particular way and then produces, in turn, preconceptions in which we read the world. When a disease like SARS appears, we bring those preconceptions to the disease” (quoted in *Star* 5/2). Wald stipulates that these preconceptions guide experiences of “outbreak narratives” such as Crichton’s *The Andromeda Strain*, which subsequently enters popular culture, and the news coverage of the SARS epidemic. Additionally, Wald concludes that the understandings of disease that the media affect invariably alter reactions to disease, primarily by lowering the threshold for fear responses.

If the public has had *The Andromeda Strain* or similar works shape its preconceptions and its framework for understanding disease, it is hardly surprising that news of a real emerging infectious disease can produce panic. Novel diseases now “confront society with a risk that is hard to control or to describe” and as a result, “The medical thriller no longer just provides interesting stories but becomes the dominant form of risk communication” (Hahn 2005, 188). Literary historian Nicholas Pethes agrees that science fiction has considerable influence over how individuals understand disease; he claims these texts reveal the cultural meaning of science

(2005, 176). Moreover, Pethes observes that science fiction connects with and continues scientific discourse while presenting it in a popular form (2005, 177). Michael Crichton's novels are central to Pethes' insight; he claims that they exhibit cases of scientific discourse producing understanding in the popular realm (2005, 169).

Crichton's fiction is particularly interesting because, while it presents other questions, the predicament resulting from his works and the genre at large is that the public often rejects scientific explanations and instead opts for terrifying literary accounts to understand a disease (Zwart 2005, 91).⁵⁰ Thus, while some scholars acclaim Crichton and applaud that all audiences can access his fiction and read them as enlightening commentaries on the current state of science (Zwart 2005, 88), this is secondary. Instead, the public seemingly looks for the scare.

The Andromeda Strain (1969) is one such account; it is terrifying and also affects individuals' conceptions of science, as the work's reviews attest. For example, the *Greensboro News & Record* notes that "Crichton has become a master at making the incredible credible"; the *Chicago Sun-Times* comments that "He has a facile command for detail and for explaining complex technological matters in easy-to-grasp metaphors"; and *Life* magazine observes that "Science fiction, which once frightened because it seemed so far out, now frightens because it seems so near. *The Andromeda Strain* is as matter-of-fact as the skull-and-crossbones instructions on a bottle of poison."⁵¹ As these reviews suggest, Crichton's text offers understanding. His text seems credible and appears matter-of-fact, which he achieves at the outset with a preface and an acknowledgements section that take advantage of unsuspecting

⁵⁰ Addressing the other problems that Crichton's works present: first, Crichton's novels tend to take the most speculative theories and then extrapolate from them (*Time*, 1995); second, Crichton is the sole researcher for his projects (*Entertainment Weekly*, 2002); as Eid notes, the public's understanding is therefore subject to the whims and personal understandings of Crichton, which will introduce error to factual accounts. Additionally, it is worth noting that the scientific basis of his work is often emphasized; for instance, *Time* magazine highlights Crichton's use of footnotes in his fiction (9/25/95).

⁵¹ These reviews accompanied the paperback edition printed in 2003 by Avon Books.

readers' expectations by framing the text as a record of actual events; even before the first page, his fiction has already begun. This sets up *The Andromeda Strain* as a factual model for the public to understand emerging infectious diseases.⁵²

The plot of *The Andromeda Strain* is set in the 1960s. The United States government had initiated "Project Scoop," a program that launched satellites into the outer atmosphere to retrieve microorganisms that would then be analyzed for their potential as germ weapons. Returning to Earth, one of these satellites brought back the Andromeda Strain, a lethal microbe that causes instantaneous and fatal blood clotting. After the microbe ravages an Arizona town, a team of leading scientists prearranged for such a crisis convenes to analyze the Andromeda Strain. The team discovers that the microbe has certain stunning, novel features including the ability to sustain life without proteins or nucleic acids; they also learn that the Andromeda Strain undergoes significant mutations in each life cycle. The story climaxes as the Andromeda Strain mutates, gaining the ability to dissolve plastics, and escapes containment. Ironically, this proves fortuitous. The mutations render the microbe asymptomatic for humans; thus the microbe results in no effect despite being airborne and spreading. Crichton 'afflicts the comfortable' with the threat of extinction, yet after achieving a thrilling scare, he 'comforts the afflicted' by electing to have the Andromeda Strain mutate, shifting from a menace to a cautionary tale.

Crichton returns to the subject of emerging threats in the bestseller *Prey* (2002). The plot of this text, while similar to *The Andromeda Strain*, has a stark difference. In *Prey*, the United States Department of Defense has contracted a nanotechnology manufacturer to fabricate a product; in doing so, the company runs an experiment that goes terribly wrong, producing a rogue cloud of nanoparticles that is "alive," existing as mechanical organisms that are "a fucking

⁵² Perhaps more interestingly, the term "Andromeda Strain" has entered popular lexicon. As two medical historians note, frightening words associated with science and medicine readily enter the discourse of ordinary citizens (Moote and Moote 2004, 265).

man-made plague” (244). Crichton uses this reconceptualization of the infectious disease story to also convey a message: he concludes the novel by having the narrator warn, “As far as I know, this was the first time. Maybe it’s already happened, and we just didn’t hear about it. Anyway, I’m sure it’ll happen again. Probably soon....*They didn’t understand what they were doing*. I’m afraid that will be on the tombstone of the human race. I hope it’s not. We might get lucky” (501-2).

While *The Andromeda Strain* and *Prey* present government and military projects gone wrong, the public has become denuded to this, nearly expectant of it. Robin Cook’s bestseller *Outbreak* (1986), on the other hand, presents physicians as the progenitors of the threat.⁵³ *Outbreak* encourages suspicions of medical professionals and institutions, a common theme in Cook’s texts (Dinello 2001). Set in the United States in the 1980s, the antagonists are a group of malevolent doctors who conspire to cripple the burgeoning health maintenance organization (HMO) industry, inspired by economic self-interest; they unleash localized attacks of a modified strain of Ebola virus at HMO-affiliated hospitals. The protagonist, a young, inquisitive CDC scientist, eventually cracks the case and ends the reign of terror sweeping the country as outbreaks beset hospitals; this aspect of the plot presents a situation very similar to SARS, which affected healthcare workers and healthcare settings at significantly elevated rates.

Science fiction, however, is limited. The genre is fiction and while individuals can forget this distinction momentarily, they can still reject these texts as hypothetical. Dismissing narratives of actual events, however, is another matter. Richard Preston’s *The Hot Zone* capitalizes on this fact (1995). While Crichton tries to frame his texts in this way, neither case

⁵³ Cook is the “Master of the medical thriller” according to the *New York Times* and is a doctor who establishes his authority as an author in this genre by appearing in a white lab coat, adorned with a stethoscope, on the back cover of the paperback editions of his works. Pertinent to this study is his *Outbreak* (1986). This *New York Times* review accompanied the paperback edition printed in 1987 by Berkley Books.

exists as an entry in an encyclopedia; the Ebola Reston outbreak, the topic of Preston's text, does. The *USA Today* speaks to the difference, noting that "This work of nonfiction is more terrifying than any sci-fi nightmare" because, while Crichton had to make the incredible credible, Preston can tell the public that its wildest nightmares are a reality and, similar to the *Andromeda Strain*, only a stroke of luck and a freak genetic change saved the world from a gruesome end.⁵⁴ The *New Republic* says *The Hot Zone* is "in self-conscious imitations of a sci-fi thriller" (Gladwell 1995); as *Publisher's Weekly* put it, "Preston exposes a real-life nightmare potentially as lethal as the fictive runaway germs in Michael Crichton's *The Andromeda Strain*." It is worth noting the use of this analogy; seeing it here makes it also seem plausible that the public would do so.

Science thrillers influence both understandings of disease and also how the news media communicate information about disease. These *New York Times* bestsellers promote the idea that emerging infectious diseases should elicit a response from the public that includes feeling a crippling sense of uncertainty and the belief that the disease kills in the most horrifying ways; these texts also inform the public that each time one of these diseases brings human existence to the brink of annihilation, humans, by sheer dumb chance, survive. This is important because the public can perceive the threats in these texts to be ones they might face: at the very least, documented cases and outbreaks of Ebola virus exist and artificially intelligent nanotechnology seems on its way. As a result, it is difficult to escape the thought that lingers after reading these narratives and seeing them alluded to in the news about SARS: facing a similarly catastrophic situation, which is what scientists initially believed SARS was, humans should eventually run out of luck. This uncertainty and its implication provoke fears.

⁵⁴ The reviews offered here accompanied the paperback edition printed in 1995 by Anchor Books.

Science/Thriller Texts and the News

Opting for a form of understanding different from the one the health authorities offered, the news media readily framed the SARS epidemic as fiction realized. As the *Daily Mail* notes, London Heathrow airport during the early days of the SARS epidemic “could have been a scene from a horror film about a world gripped by plague. In fact, it was...[as] Every passenger wore a surgical mask throughout the 12- hour flight in case they spread or caught the killer flu-type virus that leads to SARS” (4/4). Recounting the story of a survivor, the *Mirror* calls her experience “[living] in the realms of science fiction horror” (4/12). The *Mirror* repeats this later, calling the “fatal SARS virus...a worldwide health nightmare” (4/19). Yet the simple stipulation that reality was emulating fiction does not provide evidence to support its claim. Scholars’ accounts and the corpus, however, do.

Crichton contends that, as a result of scientists’ failure in interacting with the media and communicating precisely how information should be conveyed, sensationalized accounts occur as the media render accounts of science that are popularized, often emulating science thrillers (1999). There are two potential processes taking place, with both resulting in the same conclusion. In one, the engineering process by which the media transform scientists’ factual findings into what the public comes to understand is complex. The media begin dependent on scientists to decipher the latest information in their fields (Nelkin 1995); this dependency meets an obstacle: a fundamental failure in communication exists between scientists and reporters, which results in the production of consistently sensationalized news (Winsten 1985). This sensationalism occurs because, in novel situations such as SARS, the members of the news media turn to their own points of access to understand (Eid 2004); popular culture icons become the paradigm of understanding for them as they have no sources of understanding other than their

communications with scientists, which are unfulfilling, and the associations they make to icons they already understand.

Alternatively, a process exists by which the media and scientists seemingly collude to ‘create news’. This begins with reporters contacting “a stable of faculty experts who reply rapidly to media requests for pithy quotes and sound bites on any given topic” (Freidman 2004, 4); the print media subsequently employ the richest, most disquieting quotes and other exaggerated information to misinform the public, impelled to do so by “newsroom pressures to dramatize stories by sounding alarms” (Shuchman and Wilkes 1997). Either way, it is the limitations of the public’s ability to understand science is what causes this sensationalism and the use of the science thrillers as a means of explaining real experiences: “popularizations of science – and the sensationalism that may result – is, then, not a punishment inflicted on science stories by disdainful or malicious journalists. It arises because of the rhetorical conventions of popularization” (Gregory and Miller 1998, 109). Thus, *The Andromeda Strain*, *Prey*, *Outbreak*, and *The Hot Zone* are all potential influences on the news about emerging infectious diseases and, at least in the case of SARS, empirical data proves this to be the case.

As a popular culture symbol, the Andromeda Strain becomes a frame for, if not an explicit means of, understanding SARS. The news media, repeating Crichton’s tactic of simplifying science with easily understood metaphors, use this reference. For instance, the *New York Times* compares SARS to the threatening Andromeda Strain to explain that the current situation could have been much worse (4/6). Alternatively, the *Boston Globe* uses SARS as an opportunity to offer a human interest article: after astronomers claimed SARS came from space, the *Globe* interviewed a NASA official whose job is to protect the public from extraterrestrial unknowns, such as the hypothetical Andromeda Strain (5/13). References to this also appear

casually, such as in the *Ottawa Citizen*; a columnist, discussing her experience in Beijing, comments, “Can I make it through the street market with no one coughing up chunks of Andromeda Strain on me? For most, the real concern was not SARS, it was fear of getting sick with some other routine illness that would look like SARS and force us into quarantine” (5/10).

Crichton’s *Prey* and Cook’s *Outbreak* are also means to understand SARS. Both stories have plots with events that are eerily similar to events of the SARS epidemic and their language uses are similarly interesting. In *Prey*, Crichton depicts the agent as controlling and as a killer, expressing the two prevailing tropes that Wallis and Nerlich noticed in their review of the coverage of SARS in the UK media (2005). This is important because, after having seen these labels attached to the disease agent in the science/thriller genre, readers are likely to, when encountering the same labels in the news, respond by understanding this news within the framework of their previous experiences with these labels (Moeller 1999, 48). If this is the case, then readers come to understand at least some aspect of SARS through the science/thriller genre. In *Outbreak*, Cook presents a critique of the news coverage of an outbreak scenario and does so by presenting what he believes to be flagrant news coverage. For instance, Cook describes the first headline in the *Los Angeles Times*, once it learns about the fictitious epidemic, as “A New AIDS Epidemic” (63); he proceeds to show scientists’ scorn for the media in response to what they allege is nothing more than fear-mongering. This can impact understandings of SARS: the trope exercised throughout Cook’s text, comparing a novel disease to another that the public fears, also appears in the coverage of SARS, which includes comparisons to Ebola and AIDS; the use of similar tropes can certainly prompt readers to associate the two accounts.

The *New York Times* attributes Preston’s *Hot Zone* as having scared the public at large into emblazoning Ebola in its memory (8/18/96). Preston introduced Ebola to the public, who

held on to the symbol; references to Ebola are prominent throughout the coverage of SARS for this reason, because people gained and retained ideas about Ebola. More importantly, Preston's text sets the standard for a writer or reporter conveying factual information in an entertaining fashion. As the *San Antonio Express-News* points out, "Preston's great skill is in turning interviews and scientific data into a compelling human story." In particular, three aspects of *The Hot Zone* gain traction with the news media who seek to emulate Preston's success: militaristic language; gruesome and terrifying accounts of disease symptoms; and avoiding scientific jargon.

Science narratives are not only a way to understand disease, but also set individuals' expectations for the media's coverage of novel infectious disease epidemics. For instance, while the two may be unrelated, militaristic language appears in both *The Hot Zone* and during the coverage of SARS; in this way, science narratives can familiarize individuals with metaphors which then become applicable and carry additional meanings when used to understand something else. In one of many such passages, Preston uses this language when he writes:

[Ebola proteins] are like HIV, which also destroys the immune system, but unlike the creeping onset of HIV, the attack by Ebola is explosive. As Ebola sweeps through you, your immune system fails, and you seem to lose your ability to respond to viral attack. Your body becomes a city under siege, with its gate thrown open and hostile armies pouring in, making camp in the public squares and setting everything on fire; and from the moment Ebola enters your bloodstream, the war is already lost, you are almost certainly doomed. You can't fight off Ebola the way you fight off a cold. Ebola does in then days what it takes AIDS ten years to accomplish (66)

This trope continues as Preston describes Ebola as an atomic bomb that hits hospitals, savaging victims and hitting the institution with such force as to incapacitate it. The vigor Preston gives to the Ebola virus reappears in the coverage of SARS, which references Ebola as a fellow emerging infectious disease and uses similarly physical language. Yet this physical language is not the end of the story. Preston also describes the disease stages of an individual infected by the Ebola virus

with vivid language and in layman's terms to ensure that anyone can appreciate the horror of the disease:

[Ebola] is a perfect parasite because it transforms virtually every part of the body into a digested slime of viral particles....The seven Ebola proteins somehow chew up the body's structural proteins....The skin bubbles up into a sea of tiny white blisters mixed with red spots known as a maculopapular rash. This rash has been likened to tapioca pudding. Spontaneous rips appear in the skin, and hemorrhagic blood pours from the rips...Your mouth bleeds, and you bleed around your teeth, and you may have hemorrhages from the salivary glands – literally every opening in the body bleeds, no matter how small....Your heart bleeds into itself...The brain becomes clogged with dead blood cells...the eyeballs may fill up with blood: you may go blind. Droplets of blood stand out on the eyelids: you may weep blood...The blood looks as if it has been buzzed in an electric blender... [In the final stages] tremors and convulsions of the patient may smear or splatter blood around. Possibly this epileptic splashing of blood is one of Ebola's strategies for success – it makes the victim go into a flurry of seizures as he dies, spreading blood all over the place, giving the virus a chance to jump to a new host. (105-8)

In this and other selections, Preston makes the frightening accessible and therefore all the more frightening. The news media imitate his tactics, recognizing how effectively his account can 'afflict the comfortable'. Vivid narratives of cases SARS appear in the news media to achieve this effect, terrifying the public with regards to the symptoms of SARS.⁵⁵

The News Media's Role

⁵⁵ As an interesting aside, Preston also devotes significant attention to the media as he exposes that the information individuals receive has been filtered at many levels by those who wish to regulate what the public comes to believe. In particular, Preston discusses a *Washington Post* article entitled, "Deadly Ebola Virus Found in Va. Laboratory Monkey" (286). Preston describes his conversation with Col. C. J. Peters, the authority consulted by the *Post* in writing the article. Peters notes that he consciously avoided using "scary military terms" so that the reporters would not use them because, "Half of this biocontainment operation was going to be news containment" during which the *Post* had to believe that the outbreak was a not a worthwhile story, that "the situation was under control, safe, and not all that interesting" (287). This attempt at containment is eerily similar to China's attempts to dispel fears of SARS. Over the course of this novel, Preston suggests that while authorities attempt to protect the public, they also conceal information from it. If not for *The Hot Zone*, it seems unlikely that the public would know of the Ebola Reston outbreak and just how close Americans were to an epidemic of what most virologists proclaim is the most lethal virus on Earth.

The *New York Times* proclaims that “Fear reigns as dangerous mystery illness spreads” (4/7). The *Sun* simplifies this: “SARS is a killer...It’s out safety at risk” (4/23). The *Toronto Star* explains this:

It’s one explanation of why assorted threats like SARS, West Nile virus, Ebola, HIV, typhoid, bioterrorism, anthrax, and even shark attacks can get hearts racing, palms sweating, and anxiety levels soaring. The “unknown and unfamiliar” often trigger such a response....“New risks, new events are more scary... Elements of SARS, as with West Nile virus last year, are unfamiliar to us. It's a new variant and it can kill us” (5/2).

Noticing this brand of news, the *USA Today* discusses its effects, which it ultimately deems unavoidable in these early days:

Certainly, the avalanche of SARS news helps feed fears that it could become a global epidemic.....But given the newness of the virus and the uncertainty about its virulence, separating sensible precaution from unnecessary panic isn't easy. The mysteries still surrounding SARS work against the public's ability to intelligently assess the risks or how best to adjust behaviors. And fear is likely to continue until more is known about what causes and cures the disease (4/28).

Significantly, this account demonstrates the news media defending its coverage of SARS: the *USA Today* actually shifts the blame for the epidemic of fear as it suggests that the news media cannot stop the epidemic of fear until scientists provide them with definitive information to report.

Addressing the media’s role explicitly, Ross highlights the public’s attraction to news that depicts their fears of death: “[fear’s] hypnotic pull explains the public’s drive for repetitive viewing and the media’s repetitive showing of violent and tragic events. Audiences [gravitate] to extreme programming” (2003, 94).⁵⁶ Crichton explains this phenomenon as the public’s desire to experience temporary scares; the same thrill is why the public crave frightful news (1999). Yet Siegel notes the complications of using fear in the news when he notes that, “fear is “hard for us

⁵⁶ Substantiating Durkheim’s claim regarding repetition forming knowledge, Ross notes that “[the fear] response becomes chronic...by recurring exposure. It creates the drive for a vicious cycle of reenacting traumatic events and further traumatization...generating a crescendo of internal chaos, panic, and fear” (2003, 12).

to overcome, or outreason,” and “Fear has become pervasive” as a means of communicating because of its unrivaled effectiveness in relaying messages and provoking responses (2005, 8). The conclusions from this are telling. The content and figurative language of the news can compel individuals to seek out information. The frame that best exacts these responses is the fear of mortality supported by the fear of uncertainty. This is precisely the frame the news media use to depict SARS.

Fears of microbes that cause disease, implicitly including fears of mortality and uncertainty, dominate the contemporary consciousness. As history of medicine scholar Nancy Tomes notes, commentators “even link apprehensions about germs to the end of the Cold War and the collapse of the Soviet Union, which left Americans needing a new public enemy number one” (Tomes 1998, 263-4). Fears of viruses filled this void and are now held in prominence as the root and sum of a mass of fears.⁵⁷ As one social critic notes, “Emerging from the shadow of the mushroom cloud, we’ve become enveloped in a new darkness. Uniquely fearsome, the virus goes beyond nuclear anxiety to the heart of paranoia – provoking ancient fears of disease, dehumanization, vampirism and biblical vengeance and inciting futuristic fears of human extinction. In many ways, the virus is the ultimate horror” (Dinello 2001). Ungar makes a similar statement less dramatically, noting that recent crises have “placed new diseases on the public agenda and may well have catapulted them ahead of nuclear war and climate change as the primordial source of apocalyptic anxieties” (1998, 41).

The Fourth Horseman of the Apocalypse

To evoke these fears of disease, biblical vengeance, and annihilation of humanity, the news media use of references to the Fourth Horseman of the Apocalypse, the cultural symbol

⁵⁷ For example, during a discussion of global warming, the *New York Times* assess the implications of climate change in terms of the infectious diseases it might release, aware that this will connect with the public (7/8/96).

most clearly associated with these fears. Continuing a discussion on the use of this reference in news about SARS from Chapter One, the *New York Times* explains that the “public [was primed] for biological apocalypse” and that they grappled with the news in “[their] own, unapologetically laymen’s, terms,” ascertaining understanding through cultural symbols and points of reference in the absence of conclusive scientific information (4/6). Discussing the dearth of factual information about SARS and its effects on the news, *MacLean’s* (Canada) comments that “the news could hardly be more satisfying” for those craving thrilling, fearsome coverage as “the Four Horsemen are now rampant” (4/21).

The Fourth Horseman appeared throughout the news coverage. Attributing impacts to SARS and identifying victims, the *Toronto Star* observes that, “We are only now learning the implications of [SARS] in a world where the Four Horsemen of the Apocalypse still ride,” based on that city’s experience (4/27). Addressing these implications, the *Globe and Mail* cites SARS as one of the Four Horsemen to hit Canada in 2003 (3/24/04). The *Herald Sun* blames SARS as a Horseman of the Apocalypse for crippling the international tourism industry (9/16). Even a whole year after the epidemic, the *Guardian* simply acknowledges SARS as one of the Four Horsemen of today (6/8/04). Even casual and comical accounts incorporate this icon. The *Ottawa Citizen* instructs in jest that, “if you see the Four Horsemen cantering up the 417 this summer, tell them they must have taken the wrong turn – Toronto’s that way” (4/17). Since SARS spread by air travelers with the virus, the *Toronto Sun* suggests that, “At least one of the Four Horsemen of the Apocalypse should collect frequent flyer points” (4/6).

News articles chastising the media for using this reference and the public for its fears also appeared. Critiquing the media, the *Spectator* (UK) says: “SARS is no more capable of keeping up with the Four Horsemen of the Apocalypse than a three-legged donkey is capable of winning

the Grand National [race]” (5/3).⁵⁸ Alternatively, the *Globe and Mail* orders its readers to “Stop your sniveling, you bunch of pathetic hypochondriacs” (5/23); it charges that, despite the excellent health of the public, “if you picked up the newspaper this week, you wouldn’t know it...horsemen of fear filled the headlines, injuring the economy and frightening many of us out of our wits.” It is worth noting that the *Globe and Mail* do not refrain from using this icon; even three years after the epidemic, the paper explains an initiative designed to protect against future outbreaks like SARS by reporting that it is “to prepare [Canadians] for the arrival of the Fourth Horsemen of the Apocalypse” (5/9/06).

An explanatory sequence reveals how this symbol conveys understanding: individuals’ fear of the Fourth Horseman, which comprises fears of biblical vengeance, catastrophe, uncertainty and mortality; the news media inform them that SARS is the Fourth Horseman; therefore, they attribute their fears of the Fourth Horseman to SARS. In this way, the news media can ‘afflict the comfortable’. Moreover, the Fourth Horseman of the Apocalypse is only one among many symbols and popular references proffered in the news that shapes understandings of SARS. Other tropes do the same work quite well.

Uncertainty

Contrasting the clarity by which the metaphor to the Fourth Horseman shared understanding, the use of uncertain language also significantly affected individuals. The news media frame their coverage in uncertainty and the public come to understand SARS in that context.⁵⁹ Additionally, in responding to the public’s need for the security of certainty, the news

⁵⁸ In select cases, the icon becomes a means of contrast; SARS is not the Fourth Horsemen according to these accounts. This conflicting opinion is a minor example of the inconsistent information the news offers during the SARS epidemic; an extended discussion of the implications of this double-talk appears later in this study.

⁵⁹ As the *Boston Globe* reports, “SARS-anoia” exists for a reason: “We are reacting with so much fear to what, so far statistically, is not a major killer” because, “We’re always more afraid of risks that are fraught with uncertainty,”

media can offer nearly any means of understanding to help the public define their situation, even if that definition is flawed; the maxim “the devil you know beats the devil you don’t” proves true for individuals seeking understanding at the outset of the SARS epidemic.⁶⁰

The news media made it blatantly clear from the beginning that this novel agent baffled health authorities and that the public faced a threat they did not know. As the *New York Times* notes on April 2nd:

New diseases are the source of great anxiety until scientists determine their causes and the way they are spread. The newest new disease, SARS, for severe acute respiratory syndrome, is a case in point.... as health officials work to try to understand the new disease, the public has been left with unanswered questions.... there is no documented effective treatment for SARS.... Health officials do not know what causes SARS.

These gaps in knowledge reveal the uncertainty of the situation. Moreover, the news headlines from the first days suggest as much, as the notion of this outbreak as a “mystery” led the news:

Mystery respiratory illness – *New York Times* (3/15)
 Mystery Bug – *New York Daily News* (3/16)
 Mystery malady - *New York Post* (3/16)
 Mystery Killer Bug – *Times* (London) (3/17)
 Mysterious pneumonia-like illness – *USA Today* (3/17)
 Unusual and lethal variety of pneumonia – *Guardian* (3/17)
 A mysterious disease that causes flulike symptoms and pneumonia – *Science* (3/21)

In addition to what these headlines imply, the news media recognized and told the public that the very nature of the experience was uncertain. For instance, the *New York Times*, quoting business leaders, reports that “We anticipated war, we didn’t anticipate [SARS]” (4/7). The problem resulting from this uncertainty is a need for information to help create certainty; the public desire

according to a Harvard risk specialist (4/30). The uncertainty of what SARS might become, particularly noticeable with the projected death tolls, is a certain stimulus for fears.

⁶⁰ Interestingly, it is worth noting that the novelty of the epidemic and the uncertainty it created left the news media short on facts to report, particularly in the beginning. As a result, the news media found substitutes: “The lack of information from official sources combined with paranoia and modern technology [built] the perfect rumor mill,” and so, “media [provided] the prime source for rumors on the disease” (*IHT* 5/5). The news media’s actions were not reckless either: authorities’ practices “[show] the high regard disease hunters hold for rumors,” even the crazy ones (*IHT* 5/5).

information to define their situation. The *Toronto Star* informs the public that this desire is normal and expected: “when people have information and know what they can do, that's the best way to allay any kind of anxiety....when people have information and know what they can do, that's the best way to allay any kind of anxiety...[but right now] They're weary and anxious” (4/19).

Moreover, the news media recognize and convey to the public the fact that people internalize their fears of SARS and assume they will be the ones to contract the virus; while this is irrational and demonstrates improper risk assessment, it is. As the *New York Times* puts it: “at Kennedy International Airport in New York yesterday, the medical center was swamped with people stepping off airliners from Asia who thought they might have the disease....‘A lot of them just have a cough or a dry throat, which is pretty typical after a long flight...I think it's become the main topic of conversation on the plane. It's a long flight, and I guess the movies get boring after a while’” (4/3). The *Washington Post* later presents a similar account, as one doctor explains that during the epidemic “Many patients called my internal medicine practice in New York convinced that the slightest cough was SARS. People were afraid to sit next to an Asian person or to eat in a Chinese restaurant. The mass media tend to magnify the latest health concern and broadcast it to millions of people at once. This has the effect of provoking panic way out of proportion to the risks” (8/30/05).

Personalized accounts of individuals' reactions to SARS because of the uncertainty the situation poses appear throughout the news coverage. Offering one man's narrative, the *Toronto Star* recounts:

I settled into my economy seat and was handed a copy of a Canadian newspaper to peruse. I gripped it as I read page after page of SARS coverage. As I finished reading every last bit of SARS, I became aware of the sneezing that was going on - RIGHT BESIDE ME. When I looked over and saw it was an Asian man who

seemed intent on sneezing us home for the 10-hour flight, I became pretty tense. Later, at home, I wondered about my reaction to the sneezer. Would I have been so tense if the person sitting next to me sneezing wasn't Asian? And why was I reacting that way? All I knew about SARS I had read in my newspaper. But surely newspapers are meant to be informative, not sensational? (4/5)

While this account is particularly interesting for its last lines, which show the newspaper offering questions regarding its eachothers' credibility, the account places readers in a situation they could easily find themselves in. Here the news media frame SARS as so pervasive that readers should maintain constant vigilance, particularly with regards to those around them, if they hope to avoid contracting SARS. The narrator's admission that "I became pretty tense" also opens up space for the public to feel the same way; the fact that the news media include this demonstrates their willingness to allow the public to have their fears expressed in print. In broadening their coverage of SARS to offer everything from scientific data to individual narratives, the newspapers actually comfort the public; as opposed to the health authorities, the news media appear to bear everything they have.

Returning to the question that closes this narrative, the *Toronto Star* frames itself as the primary conduit of information and actually ensures its status as informational rather than sensational by making this point: if the newspapers were sensational, then there would be no where for the public to access what they understand to be the factual information of the news. Therefore, the question of "surely newspapers are meant to be informative, not sensational?" is answered by the mere fact that no immediately identifiable alternative, especially for a novel situation like SARS when the news media is the only source of information. The public, averse to uncertainty, would avoid searching for another means of accessing information because, even if the news media is flawed, their guiding rule when assessing risks in uncertain situations remains "the devil you know beats the devil you don't."

The earlier issue of SARS baffling health authorities appears again in almost every discussion of uncertainty. As the *New York Daily News* reports in an article entitled “SARS – and fear – breaks out around globe” on April 6th, “SARS is a very big puzzle at this time – where this came from, how it started, what exactly it is.” The news media’s framing of scientists as uncertain appears in a variety of forms. For one, the *New York Post* simply mentions that “Scientists appear split on how contagious the disease - which begins with fluish symptoms and quickly progresses into potentially deadly pneumonia - can be” (3/18). The British tabloid the *Sun* speculates otherwise, noting: “some scientists [suggest] that SARS could be a biological warfare experiment that went wrong.⁶¹ Sex is another theory being investigated....SARS could also be a terrifying new mutation of coronavirus - which causes the common cold - or a deadly cocktail formed by a combination of viruses” (4/28). Repeating the framing of SARS as a biological weapon, the *Mirror* asks, “Has anyone questioned whether the deadly virus could be the result of a biological weapons experiment gone wrong? It could be we are seeing an international cover-up” (4/7).

Perhaps the only certainty the health authorities offered came in response to the confusion surrounding what to call the microbe; the WHO immediately gave it a name despite not knowing what it was. After a series of failed proposals, including Atypical Pneumonia Without Diagnosis, the WHO targeted a pronounceable acronym (*NYT* 5/4): the WHO

⁶¹ Giving legitimacy to this rumor, Nobel-prize winning microbiologist Joshua Lederberg later claims that, “SARS may end up being a biological weapon,” despite significant countervailing evidence that SARS arose naturally (*NYT* 11/11). Oppositely, the *Times* (London) downplays the bioweapon rumor. While recognizing that, “the risk of bioterrorism is being taken seriously on both sides of the Atlantic,” the newspaper reports that, “The [UK] Department of Health said: ‘The pattern of infection certainly looks like a naturally occurring illness but obviously we are keeping an open mind,’” emphasizing that scientists are not rejecting the rumor only because they are awaiting additional evidence to confirm their initial observations (3/17). Eventually, the *New York Times* also expresses this view. Quoting an esteemed researcher, the *Times* reports that, “As a scientist, you never say never...But every indicator I’m aware of points to a natural outbreak” (4/6).

introduced Severe Acute Respiratory Syndrome, or SARS, on March 16th.⁶² The uncertainty voiced by individuals attempting to interpret this name is telling: the most common complaints pertained to the perceived redundancy of “severe” and “acute” and the use of “syndrome,” which associates SARS with AIDS as the most common “syndromes” in public discourse.⁶³

Besides the name, all that is certain in the news media coverage regarding health authorities is that they, and therefore everyone else, have no idea what SARS is or what it might become. The *New York Post* begins its coverage by reporting on March 16th that “Docs fear spreading mystery bug...scientists [are] scrambling to determine what causes the syndrome, how to treat it and how to keep it from turning into a global epidemic.” Later, one expert offers the analogy that “[SARS] is like a football, and when a football hits the ground it can bounce in any possible direction” (*Star* 4/19). Another, looking back on the epidemic, portends danger as “‘We don't know whether SARS will return this year. It could. We don't have crystal balls’...Another possibility is that SARS will behave like Ebola, which erupts in periodic outbreaks and then disappears for long periods of time, only to strike again without warning” (10/17).

⁶² The use of the acronym SARS became a source of public uproar during the epidemic. For instance, the acronym was already in use by the Suffolk (UK) Accident Rescue Service, which had painted “SARS Doctor” on its cars; this use, while harmless before the epidemic, caused a stir according to the *Mirror* (5/24). Additionally, the acronym was given new meanings once it had sufficiently entered the public’s lexicon. For example, the *Mirror* devised a new meaning for SARS – “Sudden Anti-Revival Syndrome” – to refer to party elections and the timidity of the Tory party in England, comparing the party’s state to that of a sickened SARS victim (5/9). Perhaps it is worth noting here that the British tabloids demonstrate a far greater propensity to play with the language than their American counterparts, a tendency discussed by Conboy (2006).

⁶³ *New York Times* columnist William Safire explains the naming of SARS: “Here is how SARS the acronym came about. Three worried officials of the World Health Organization in Geneva, Switzerland, needed a name for a virus causing sudden deaths in China. The three were Denis Aitken, deputy director general; David Heymann, director of the Communicable Diseases Section; and Richard Thompson, its communications officer. (Presumably, he answers the phone with “Communicable communications here.”) ‘We wanted a name that would not stigmatize a location,’ Thompson says, “such as ‘the Hanoi Disease.’ We first thought of A.P.W.D., or Atypical Pneumonia Without Diagnosis, and I’m glad we dropped that. Then we simply described the disease in another way, and it was in front of us -- Severe Acute Respiratory Syndrome, SARS.” But what did they see as the difference between severe and acute? “I asked this question, too, when we came up with the name. In medicine, severe is ‘grave’ and acute means ‘suddenly.’ This respiratory syndrome caused great harm (severe) and had a rapid onset (acute). Later, when we had conclusive evidence that a new coronavirus is the cause of the disease, we named it the SARS virus.” Conclusion: the two words, used in this medical context, are not synonymous. Messrs Aitken, Heymann and Thompson are not guilty of redundancy” (5/4).

Headlines

Scanning the headlines and lead paragraphs of the initial news accounts about the epidemic reveals the variety of claims in the news attempting to identify SARS. Each new headline introduced a new combination of connotations. Moreover, the word choices here suggest the only conclusive news about the epidemic at this time was that it was unknown and deadly:

Mystery respiratory illness – *New York Times* (3/15)
 Flu-like illness that kills – *Washington Post* (3/16)
 Mystery Bug – *New York Daily News* (3/16)
 Killer ailment – *Toronto Star* (3/16)
 Mystery malady – *New York Post* (3/16)
 Mystery Killer Bug – *Times* (London) (3/17)
 Mysterious pneumonia-like illness – *USA Today* (3/17)
 Unusual and lethal variety of pneumonia – *Guardian* (3/17)
 Global killer – *Scotsman* (3/17)
 Killer Jet Bug – *Mirror* (3/17)
 Mutant pneumonia virus – *Daily Mail* (3/17)
 Drug-resistant strain of pneumonia – *Mirror* (3/17)
 Hong Kong Flu – *Mirror* (3/19)
 Death Flu – *New York Post* (3/20)
 A mysterious disease that causes flulike symptoms and pneumonia – *Science* (3/21)
 Killer Flu Bug – *Sun* (3/26)
 Mass Killer Bug – *Sun* (4/5)
 Asian respiratory disease – *New York Times* (4/6)
 SARS, a Chinese animal virus – *International Herald Tribune* (4/12)
 World's first jet-set plague – *Daily Mirror* (4/22)
 The plague called SARS – *Daily News* (5/4)

Individuals' propensity to remember headlines and openings to news articles gives these identifications tremendous importance; as the *Montreal Gazette* notes, "The need to sell news often conflicts with reality. Devoid of context, this so-called epidemic influences those too lazy to read or inquire any farther than the headlines... fearing for their personal safety, which is not even remotely compromised" (4/26). In this account and others, the news media inform the public of how and why they 'create news'. Nevertheless, these inflammatory headlines that

convey additional meaning still spark fears of disease and death as they exert disproportionate influence over the public's perceptions and understanding. As the *Toronto Star* comments, "The headlines are bold and scary: Thousands quarantined. Masks flying off store shelves. Panicked residents flooding a local clinic, fearing they've contracted a mysterious and deadly disease that's circling the globe" (3/29); these headlines, emphasized above and before the context, spark fears and irrational response long before anyone, even those who read the entire article, could realize that their personal safety "is not even remotely compromised."

In addition to the use of "mystery" to reflect the uncertainty of the situation, the framings of the microbe as "drug-resistant" and "unusual" also suggest that complications are arising in scientists' attempts to understand and threat the virus. Additionally, the designation of the microbe as a "killer," which is the dominant trope of the British news coverage, elevates fears associated with uncertainty: these accounts introduce the possibility to the reader that the "bug" could kill them; the clear association of SARS with mortality affects worry as people can attribute fears of death with SARS.⁶⁴ Classifying the microbe as a "global killer" and a "killer jet bug" further intensifies this fear: this conveys the damning certainty that nowhere is safe. Finally, the identification of the disease as "Asian" and as the "Hong Kong Flu" raises fears of the 'Other', heightening uncertainty by suggesting that a protective distance has suddenly been lost; these terms also make reference to the Hong Kong Flu pandemic of 1967 and the H5N1 Avian Influenza threat that emanates from Asia, associating this unknown microbe with diseased 'Others' that the antiseptic American public already fear (see Glassner 1999, 135).

⁶⁴ The *Ottawa Citizen* gives infectious diseases another identity. Calling them "The Comeback Kids," the newspaper remarks that the emergence of SARS and other infectious diseases is, "a classic David and Goliath scenario, except in this case there are a host of Davids bearing weapons far more versatile than slingshots" (5/23). The *Citizen* concludes by claiming, "This may sound like science fiction, but is it?" SARS appears to be, in this and other accounts, not only a culprit and a killer, but also a resurgent threat that reminds the public of the threats these diseases pose.

The news media also present additional frames of reference. For instance, the novelty of the situation, which is the cause for its mystery, is the focus of the *Boston Globe*, which notes, “All previously known human coronaviruses have caused nothing worse than a common cold.... “[SARS] is unique. It is basically a new virus and nobody seems to have immunity to it” (4/11). The toll also tends to become explicit in the first lines of accounts rather than headlines. Nevertheless, these framings still propagate fears. For example, the *Sun* claims early on that “Britain faces an epidemic of killer bug SARS which could hit millions....[and] the country should prepare for a mass outbreak” (4/5); the use of numbers, suggesting that millions could die, gives enhanced significance to the “killer” metaphor. Finally, another prominent technique in news headlines is to compare SARS to another disease; newspapers do this to frame the public’s understanding of SARS in terms they already understand. One example of this appears in the *Washington Post*, which claims in a headline that appears after the epidemic, “Health Experts Fear Reemergence of SARS Virus; Greatest Worries Are All the Unknowns, Including Whether Outbreak Could Mimic Spanish Flu That Killed Millions” (11/17).

Comparisons

The use of comparisons to understand SARS, while effective, is also dangerous. As demonstrated previously with the example of comparisons to the Andromeda Strain, these introduce additional meanings and cement prior understandings to a novel situation when they might not apply and can, as a result, affect inappropriate responses and irrational fears. The news media even suggest this problem; for example, the *International Herald Tribune* quotes an expert who says, “I really hate it when people do simple comparisons... So little is still known about SARS” (6/5). These comparisons, though, happen anyway. For instance, in attempting to provide thorough coverage, the *Daily Mail* offers an implicit comparison of SARS to a number of

terrifying diseases known historically as “killers”: “Last night President Bush gave health authorities in the U.S. the power to involuntarily quarantine people with SARS...It is the first disease in 20 years to be added to a quarantine list that includes cholera, diphtheria, plague, smallpox, yellow fever and Ebola” (4/5).

The news media include comparisons that are quite hair-raising: in framing SARS, some accounts use authorities’ quotes to elevate the status of SARS as a threat above these familiar “killers.” For example, the *Toronto Star* notes on April 5th that “It’s ironic because if this had been a patient with smallpox instead of SARS, the situation would have been a whole lot easier”; while this is because a vaccine exists for smallpox and there is abundant knowledge about the virus, the suggestion that a “killer” that plagued the world for centuries would have been favorable to SARS seems shocking on face and suggests to the public that this threat is severe.

In addition to those comparisons listed in the *Daily Mail* article, numerous others appear throughout the news coverage: the *Toronto Star* offers a comparison to the “fear and panic that gripped Toronto in the late 1940s [during] one of several polio epidemics to strike the city (4/26) and another account by which “SARS, and the diseases of the past like it, are like a raging forest fire” (4/26); a reporter for the *New Zealand Herald* notes that “The 1919 flu epidemic that killed my grandfather took five months to spread worldwide. Severe acute respiratory syndrome took less than five hours to fly [around the world]” (4/9); the *Daily Mail* wonders if “Mad cow disease, foot-and-mouth... is SARS about to join the list of calamities Britain has suffered because of Government complacency? The signs are not good” (4/24); the *Montreal Gazette* then repeats the claim that SARS is a biological weapon (4/26).

AIDS

The comparison above all others in both its frequency and the zeal with which it is made is the one to HIV/AIDS. For instance, the *Daily Star* reports in an article titled, “SARS: Is this new plague or what?” that “THE SARS virus has produced the world's most terrifying killer epidemic since Aids...[and] As with Aids, there is no known cure” (4/24). Yet this account is almost timid in its language. Other news media outlets offer far more sensational framings. For instance, presenting the comments of futurist Patrick Dixon, numerous media outlets including the *Scotsman*, the *Sun*, the *Times* (London), the *Daily Telegraph*, and the *Mirror*, reported in their articles that: “[SARS] is a far more serious epidemic potentially than AIDS;” and “If things continue as they are then a pandemic is surely only a matter of time;” and “This could totally change life as we know it.” Each article also mentions Dixon’s prediction; he forecasts that, “there could be a billion cases within sixty weeks” as the public is now “running a one in four chance of a global pandemic.”

In this way, the words of a single man can trigger a scare. As the *Ottawa Citizen* comments, “The facts, however, are not the issue. What’s a published government health guideline worth when it’s up against Dr. Patrick Dixon, futurologist, warning in every news story that SARS is ‘potentially a far more serious epidemic than AIDS’” (4/25).⁶⁵ Yet the *Citizen* is in the minority when it disparages Dixon. The vast majority frame Dixon as legitimate to ensure that individuals accept the possibility that his wild claims will come true. Returning to the *Scotsman*, the *Sun*, and the *Mirror* articles, each casts Dixon as an authority whose expertise lends credence to his predictions. Dixon is, by training, a medical doctor; he has no formal training in complex systems or mathematical modeling. In these articles, each newspaper frames him differently; he is an “AIDS expert,” a “Health expert,” and a “leading doctor who is

⁶⁵ In addition to mentioning the spread of Dixon’s speculation throughout the news, the *Citizen* goes on to point out that Dixon claims to “live in the year 2010 and see tomorrow as history.”

‘Europe’s top futurist.’” As opposed to the various health authorities that the news media discredited by portraying them as without knowledge and offering conflicting accounts and attempting to cover-up a mistake, the news media facilitate the public’s acceptance of Dixon’s account.

As such, Dixon, who was a fellow at the Center for Management Development at the London Business School at the time, is a problematic source. For one, HIV/AIDS is primarily a sexually transmitted infection; SARS is not. Thus, AIDS is a recognized reference that associates SARS with fears, yet it is impractical as a means of introducing denotative understandings of SARS. Similarly, the portents of a “futurist” can only offer fiction; the very notion of a “futurist” harkens to science fiction and the futuristic laboratories of *The Andromeda Strain*. Thus, neither of these symbols should actually suggest that Dixon has the relevant expertise or can even provide an accurate understanding about SARS. Yet this hardly matters. The use of AIDS as a frame relates SARS to something more familiar to the public; therefore, the public readily accept it despite the fact that using this symbol unavoidably produces a flawed understanding of the new disease.

As evident with Dixon’s account, comparisons often obfuscate denotative understandings of a disease. The dilemma has two basic dimensions: usually, severe flaws exist in attributing understandings of other diseases to a novel one such as SARS, especially when little information exists about the latter since the formation of a nuanced understanding is thus impossible; and second, most individuals are oblivious to these flaws and use these comparisons to locate their understandings of the novel disease since these offer at least a modicum of certainty that the individuals previously lacked. It is important to remember that individuals are overwhelmingly desperate for certainty and control; again, the maxims “the devil you know is better than the

devil you don't" and "some information is better than no information" apply: while these symbols may seem terrifying, individuals can assess their risks more accurately and perceive themselves as in control when using them, thereby reducing their levels of fear. This is why the news media offer comparisons to explain SARS: individuals want icons they recognize to help classify the unfamiliar and locate it in a familiar context.

Ebola

AIDS is only one association that can provoke fears of SARS. Throughout the news coverage, many others appear; one requires explicit recognition: Ebola. An emerging infectious disease that appeared sporadically during the 1980s and 1990s with devastating effects, Ebola became the other symbol to which SARS was most frequently compared. As with SARS, Ebola carries meanings that extend far beyond the facts of the virus. Individuals with any recollection of Preston's *The Hot Zone* or Cook's *Outbreak* or the film by the same name understand Ebola with the connotations that these works introduce. The mention of Ebola in the news about SARS reignites these memories and the association of SARS with Ebola then induces individuals to apply their fears of Ebola to their understandings of SARS (see Ungar 1998). The *New York Times* comments on this; the *Times* observes that while researchers report that SARS is "more contagious but less deadly than the Ebola virus" because individuals recognize Ebola as an icon and use it to shape their understandings of SARS, "officials are naturally wary of that comparison because fear of Ebola, thanks to movies like 'Hot Zone,' could cause panic" (4/2). This panic is the result of flawed understandings stemming from the application of individuals' misunderstandings of Ebola to their understanding of SARS.

Metaphors

Offering one interpretation, the *San Diego Union-Tribune* claims that “If ever there were a metaphor for global interconnectivity and the warp-like speed of potential 21st century change, the SARS virus is proof perfect” (5/1). Random accounts like this one appear frequently in the midst of more stable themes. In addition to its framings as a metaphor for Chinese secrecy, for human hubris, and a number of smaller claims, SARS appears as a metaphor in two dominant contexts: SARS as a “killer,” alternatively framed as the SARS epidemic being a “battle”; and SARS as a “bug” and a “culprit” with certain powers of agency to kill or otherwise effect destruction.

Killer / Battle

Depictions of SARS as a “killer” and the SARS epidemic as a “battle” or a “war” with an implicit cost in lives foregrounds fears of death and disease. This is perhaps the clearest means by which the news media spark the public’s fears, with the headlines repeatedly using and reusing these metaphors. Unambiguously, SARS is, among its many features, a “killer”:

Flu-like illness that kills – *Washington Post* (3/16)

Killer ailment – *Toronto Star* (3/16)

Mystery Killer Bug – *Times* (London) (3/17)

Global killer – *Scotsman* (3/17)

Killer Jet Bug – *Mirror* (3/17)

Death Flu – *New York Post* (3/20)

Killer Flu Bug – *Sun* (3/26)

Mass Killer Bug – *The Sun* 4/5

The *Daily Mail* emphasizes this in its review of the epidemic after one month had passed:

“SARS kills. The initial flu-like symptoms can quickly develop into fatal breathing difficulties in a significant number of cases. Many other infections, including the more virulent forms of flu, have lower death rates than SARS” (4/22). Once this context was established, the logical next step involved “battling” the “killer” to prevent further loss of life; the *New York Daily News*

frames the situation this way when it asserts that “With reckless impunity, SARS has taken the world by deadly storm. Across five continents, spread of the highly contagious virus is threatening to create a battleground with far-reaching consequences” (4/6). Even the *New York Times* uses this language; it reports that SARS is “a bit like a neutron bomb...It affects people, not equipment” (5/3). Similar depictions of SARS as a fantastic weapon only elevate fears as the toll of this battle becomes increasing human and personal.

Wondering what must be done, the *New York Daily News* offers the suggestion of a WHO regional director; this official claims that “The threat posed by SARS is unprecedented [and] We must use every weapon at our disposal” to respond (4/27). Other papers offer similarly random commentary using this metaphor: the *Sun* complains that “health chiefs were warned almost three years ago of the arrival of a killer virus like SARS,” suggesting that authorities knew of this “killer” and failed to protect the public from it (4/25); the *Mirror* reports that “plans for dealing with a bioterrorism attack could be implemented here if the SARS virus hits” (4/25); and the *Daily Star* suggests that Britons “need Mr. Blair to head a ‘war cabinet’” to combat SARS (4/25). The diversity of these accounts demonstrates the pervasiveness of this metaphor: while these are only single examples of various uses, the litany of accounts in the corpus of news coverage that offer similar language and content or even nuance it in a new way extend far beyond the small, fairly representative sample that appears here.

Bug / Agent / Culprit

As Wallis and Nerlich observe, labeling the microbe as a culprit is a dominant trope in the British news coverage of SARS (2005). Branding the microbe as a culprit presents a dual command: scientists must identify it and they must stop it. Throughout the epidemic, scientists focused on both these concerns, trying to stall the spread of disease while attempting to classify

and detail the microbe causing it. Yet this latter task proves exceedingly challenging: as the *New York Post* informs the public, “[the] virus is mutating into separate forms like a “murderer who is trying to change his fingerprints...or even his appearance, to escape detection” (5/4).⁶⁶ Even the scholarly journal *Science* frames its identification of the microbe with the idea of it as a culprit that obliged scientists to become disease detectives to hunt down a runaway menace.

Attempting to identify it, the culprit initially becomes a “bug.”⁶⁷ This appeared repeated in headlines, often in conjunction with the “killer” and “mystery” tags. Examples of this include:

Mystery Bug – *New York Daily News* (3/16)
 Mystery Killer Bug – *Times* (London) (3/17)
 Killer Jet Bug – *Mirror* (3/17)
 Killer Flu Bug – *Sun* (3/26)

The notion of the “killer bug” appeared outside of the headlines as well: the *New York Post* warns early on that “the killer bug travels around the world” (3/16); the *Mirror* comments that the “Killer jet bug...travels round the world on aircraft” (3/17); and the *Daily Mail* observes that the “Killer bug flies in on jet passengers” (3/17). In these accounts, the “bug” gains powers of agency: the “bug” can “travel.” While this might not seem important, the *International Herald Tribune* rephrases this to report later that “[SARS] is smart, versatile, and resilient” (2/24/05). With this account, along with those that depict the “bug” waging war against individuals and

⁶⁶ In addition to mutating, SARS escapes detection for the most obvious reason: it cannot be seen by the naked eye. The news media frequently mention this point; for instance, quoting Taiwan’s Premier, the *Boston Herald* reminds the public that “Fighting the epidemic is like fighting a war. We face an invisible enemy” (4/28).

⁶⁷ Simplifications are often used in situations involving medical language. At the outset of the epidemic, SARS was frequently identified as a “flu.” While this was incorrect, it was to be expected. Barnes explains this in a discussion of “flu” as a general name for illness: “Influenza, better known as the ‘flu,’ is familiar to most of us. We have grown up with it, and the familiar flu season comes around every year with a new variation of the flu bug. It does not matter whether you had the flu the year before, you can still catch the new flu bug since it differs slightly from the previous year’s version. And if you don’t catch this year’s version of flu, then you might get it years later. Some people try to hedge their best against catching the flu with a vaccination prepared ahead of time each year and tailored to combat the predicted seasonal variant. Despite annual vaccinations in the United States, between thirty and forty thousand people die from influenza each year.” (Barnes 2005, 337) Additionally, “Influenza picked up the nickname “flu” during the early twentieth century. Since then ‘flu’ has become a catchall term for many unidentified and unrelated short-term illnesses. The term has been applied to ‘stomach flu’ and other gastrointestinal disturbances, as well as to many other viral infections of the upper respiratory tract.” (Barnes 2005, 337)

communities, the status of SARS as an actor, despite the fact that it is an obligate parasite, seems secure; the news media, creating a fundamental misunderstanding, have given the SARS virus life in the public's understanding.

Comparisons and metaphors can function together to offer frames that present the public with an uncomfortable proximity to the disease. For instance, the *Daily Mail* reports:

SARS, unlike the great Third World killers such as cholera, typhoid and malaria, is not a disease linked to poverty or the environment. It has spread through Hong Kong and the cities of China despite good sanitation and healthcare facilities... Its mobility is startling and that is why we should fear it. It is, in fact, the first jet-set disease in history to have had global impact, and its victims have tended to be affluent, middleclass men and women with good access to health (4/22).

To the First World communities the *Daily Mail* commonly addresses, such an account brings SARS to their doorstep; this newspaper informs them that the flippant treatment they commonly give to Third World diseases, the supposed scourges of the poor that advanced societies solved centuries ago, must change with SARS. This is terrifying, as though the First World has suddenly fallen to a more threatened state. Moreover, the fact that the *Daily Mail* explicitly states that “we should fear it” because of “Its mobility is startling” is noteworthy: the virus cannot actually move; what the *Daily Mail* is actually saying that the public should fear the virus because people now transverse the globe at a remarkable pace and can spread the virus while doing so; however, with the frame the *Daily Mail* uses, it seems that the virus has an impressive mobility as an attribute; this begins a process by which the virus gains characteristics, gains abilities and meanings and becomes something more than its limited biological self.

Narratives

At the beginning of the epidemic, the news media used simplifying and condensing devices to reduce the coverage to fit within the spatial limitations of newspapers' print editions

(see Moeller 1999, 47). As the epidemic wore on and the frequency of new events decreased, space to expound upon particular events and present narratives became plenty. In response, the news media introduced narrative accounts to its coverage. These accounts, along with increasing the quantity of coverage, also incited fears among the public in a new way: the threat suddenly became personal as accounts designed to relate to readers took hold.⁶⁸

Uncertainty belies fears of disease and death: we wonder when our time will come. Yet we also normally take comfort in youth or good health as signs of a long life ahead, that these threats are legitimate but distant. SARS, as the *New York Times* reports, changes that perspective. Offering this narrative during the first week of coverage, the *Times* recounts:

On March 14, a worried father wheeled his adult son into the emergency room of Presbyterian Hospital here. The younger man was gasping for breath...."He was a remarkably healthy-looking guy," said Pete Herendeen, a registered nurse who first examined the patient. "But he was acutely ill. Right away we had the sense that this might be an extraordinary case." A check of the Web site of the Centers for Disease Control and Prevention told the nurses that officials were just becoming aware of a deadly disease, severe acute respiratory syndrome or SARS, found mostly in China and Hong Kong. The nursing staff had also heard about the disease on television news. (3/23)

The immediacy with which the disease can strike anyone becomes a focal point of the coverage. Individual stories, such as the one of this young man suffering despite outward signs of health, or the next one of another man's fears of contracting SARS on his flight home, depict for the public

⁶⁸ While it is not discussed at length here, a type of narrative that appears occasionally in the news praises the medical establishment, particularly those doctors and nurses who the media portray as heroes for fighting on the front lines of the epidemic. For instance, the *Financial Times* profiles Anthony Fauci, the Director of the National Institute of Allergy and Infectious Diseases of the National Institutes of Health; the *Times* speaks to his contributions and offers a quote from President Bush saying, "I love Tony's commitment to humans, to what's best for mankind" (5/24). A more somber set of narratives within this group are ones that memorialize those who have fallen to SARS. Carlo Urbani, the epidemiologist who first noticed the agent causing SARS, died from the disease and in response numerous newspapers produced articles commemorating his life and his dedication to securing the public's well being. The *Washington Post* is the first to print such an article (3/30) and over the course of the next month others followed suit, including the *Daily Telegraph* (Sydney) (4/1), the *Globe and Mail* (Toronto) (4/5), the *New York Times* (4/8), the *Rocky Mountain News* (4/15), and the *Guardian* (UK) (4/21).

how SARS can terrorize regular folks. Moreover, the news shows that SARS is never far away.

As a reporter observes in the *International Herald Tribune*, commenting on his own experience:

We're all within the reach of fear; fear of the unknown and the half known....Every day brings news of the spread of the killer virus. Is it mutating to a new more virulent form attacking young, healthier people?...Doctors warn that new patients are more seriously ill than in earlier cases and that, contrary to previous thinking, one may be able to catch it from people not yet showing symptoms of the disease....You could say that this is all alarmist nonsense. More people die from diarrhea or flu than SARS, and the risk to any particular individual is small. But one person bringing the disease into Hong Kong has practically crippled the health system there. One person brought SARS into Toronto and shut down two hospitals. (4/25)

Each of these accounts, though, describes a person removed from the disease; these narratives, while addressing experiences, do not cast readers in the shoes of ones who have suffered from the disease. The news media provide other narratives for that.

A category of narratives offer accounts from SARS survivors, relatives of survivors, and those who remain and remember loved ones who died of SARS. One example of these narratives appeared in the *Daily Mail*, in an article headlined "I caught SARS and lived: What is it really like to contract the world's most feared virus? Hear a British victim gives her graphic account of this terrifying disease" (4/29). In the article, the survivor details her "nightmare" and says, with her seemingly authoritative perspective, "I firmly believe the worst thing people are suffering from at the moment is fear." Her narrative, despite the article's salacious title, actually seeks to calm fears more than raise them. The *Mirror* offers a very different account, telling the story of a man who committed suicide "after mistakenly thinking his wife had SARS" (4/27). Ranging widely and coming from any number of sources, these narratives show the fear that SARS struck. Their stories emphasize for the public of how terrible this disease is. The *Toronto Star*, serving a community afflicted by the virus, present many such accounts. Two stand out in particular:

My name is Jenna Pollack, and as a 10-year-old I have experienced a really rough time. As most people know, there has been a disease called SARS that has been going around almost a dozen countries killing over 60 people. Well my grandparents just so happened to be two of the victims who had this terrible disease and died from it. I had to experience death itself. I never would have suspected that my family out of the millions of families scattered all over would get this disease. No one knows how hard it has been for my family to struggle through this heartbreaking tough time....I have no clue what is going on. I shiver when I think that death actually came and did its job by breaking up a family and taking those special people to heaven. Sometimes I wonder if there really is a God because if there is how could he/she let this happen to such a wonderful family?... SARS is a terrible disease and doctors have been trying to keep patients alive, but they just can't. The people who have survived this deadly disease are very, very lucky people. This is only the middle of living my life so if you think this is bad it gets worse. (4/19)

A late night phone call from her boss was how Yvonne Warner first found out....The patient was a young nurse who Warner had worked with for three years at Markham Stouffville hospital and one of her closest friends. "I couldn't sleep. I just I sat on the edge of the bed for hours and just cried," recalls Warner. "We were petrified, scared to death," Warner recalls. "I almost wanted to quit my job because I didn't want to risk my life or my family's life."... "All I wanted to do is hug her, but I couldn't. That was the hardest part - not being able to be with her physically and support her." (4/26)

These accounts instructed the public to fear contracting SARS: the disease itself had become a sort of death sentence as these accounts told of the young and the old suffering from the disease and their families and friends struggling to cope with the loss and the fear that came as a result. The news media, through these accounts, corroborate their use of dramatic headlines that proclaim the disease is a "killer" and is worse than AIDS. Providing further details, the news media report that families "can't find anyone in the Government who can tell them whether it's safe to go [to Asia]. The worried mum said: "We've been left completely in the dark. "There's absolutely no information or advice from officials here and we are fretting....We're at our wits' end" (*Sun*, 4/22). These narratives show readers that in their fears and in feeling lost, they are not alone.

Narratives of healthcare professionals also emerged, relaying authorities' fears. A recurrent one describes the struggles of nurses treating SARS patients; these narratives detail nurses' internal conflicts, their fears of contracting the virus and then sickening a loved one, and even their choices to quit out of fear. The news media's reason for including these narratives is simple: individuals, upon reading that healthcare workers are scared, believe they should be too, assuming that the experts' specialized knowledge gives them access to information and understandings that warrant these fears. The *New York Times* presents an example of these narratives, offering the story of Justin Wu, a Hong Kong doctor "on the front lines of treating SARS" (4/12). The article delves into how SARS has "transformed his life," describing the emotional toll it has taken on him; the narrative includes Dr. Wu's recent nightmares about SARS, his temporary separation from his wife to ensure she would not contract the virus from him, and his ominous prediction that, "There will be a pandemic following the epidemic... So there is nowhere to hide."⁶⁹ Reading about this doctor, nurses, and other healthcare professionals and the opinions of the public as they appear in the news, individuals see themselves amongst a society in fear of SARS.

'Communities of Fear'

As Sandman states quite simply, "We are alarmed by what we do not understand" (1993, 22). Individuals cannot understand SARS on their own, if for no other reason than its novelty. In

⁶⁹ Offering another such narrative, the *Toronto Star* shares the story and views of Dr. Neil Rau, an infectious disease specialist at a Toronto area hospital, who says, "In my career, I've never been as scared as I am of [SARS] getting out of control" (3/29). Exposing a central problem to these narrative accounts, individuals have no means of assessing the severity of Rau's claim because while the *Star* offers his perspective, the paper presents little background about Rau to qualify this statement and neglects to mention his reasons for having this fear; again individuals are left in a situation where they can only assume the worst.

response, the news media facilitates understanding.⁷⁰ This is important because, as Tocqueville notes:

“When men are no longer united amongst themselves by firm and lasting ties, it is impossible to obtain the concurrence of any great number of them...[concurrence] can only be habitually and conveniently effected by means of a newspaper; nothing but a newspaper can drop the same thought into a thousand minds at the same moment” (quoted in Paisley 2001, 134)

This still applies to newspapers today: the news remains the most effective means of introducing and establishing the same thought among the public at large (Wallace 2005, 1-2). These thoughts are what form communities’ understandings of SARS.

Serving as a lens instead of a mirror, international studies scholar Benedict Anderson describes the print media as progenitors of nationalism that conceive “imagined communities” by communicating in vernaculars that instill in readers the idea that they exist in a like-minded public consuming the same information and sharing in the same culture (1983).⁷¹ Other scholars elaborate on newspapers’ roles in the communities they serve, claiming that newspapers and these communities share a common cause and that newspapers construct and maintain communities and drive change within them (Barth 1980; Wallace 2005). Journalism studies scholar Martin Conboy connects these assertions to language use, focusing on the tabloid press.⁷²

⁷⁰ This dependency is one aspect of the news media’s unique relationship with the public that endures despite increasing popular distrust of authorities and public institutions (Jacobs and Shapiro 2000, 5). Additionally, Conboy elaborates on the tabloids status as public defenders who expose politicians and institutions “involved in an extended game of duping the public” (2006, 194).

⁷¹ Anderson contends in *Imagined Communities* that the print media – specifically books, newspapers, and novels – can, when communicating in vernacular, give individual readers the idea that engaging the text locates them in a public; individuals join a group of similar readers who, like them, consume these cultural products (1983). Anderson holds that these products can inculcate a national consciousness among readers. Anderson’s conclusion, stated simply, is that nationalism results from the combination of a decline of religion, recognition of human diversity, the development of print-capitalism, and the rise of print technologies. In particular, Anderson notes that, print-capitalism “created the possibility of a new form of imagined community, which in its basic morphology set the stage for the modern nation” (1983, 46). For the this study, part of Anderson’s argument – that individuals can imagine themselves engaging in a collective experience through the consumption of print media – helps explain the existence of “imagined communities” who experience a similarly powerful yet different emotion: fear.

⁷² From the *Oxford English Dictionary*, a tabloid is, “A popular newspaper which presents its news and features in a concentrated, easily assimilable, and often sensational form, esp. one with smaller pages than those of a regular

He writes that, “Tabloids provide an explicit sense of place, a textual locus for a popular national community,” and that their “language [is] the medium for the broadening of a popular sense of community” (2006, 2-9). Furthermore, the tabloid press is instrumental in determining communities’ vernaculars and understandings of themselves: as Conboy observes, tabloids perform significant roles as social educators and normalize social belonging (2006, 9).⁷³

Communities’ understandings and actions clearly demonstrated the sort of collective actions and standardized social behaviors indicative of a uniform community. As the *Toronto Star* reports, “There was widespread fear in the community. Hospital staff, and their families, were sometimes treated as outcasts,” ostracized for spending the day in the “hot zone” (4/26). Similarly, the people of Toronto begin hoarding, acting out of fear that they would be unprepared for the uncertain days ahead; sharing a narrative from a local businessman, the *Star* reports:

Worried customers continue to nab the boxes off store shelves. ‘I’ve never seen anything like it in my 22 years’... Garde said he has a list of about 150 people waiting to buy the masks and has had to ration supplies, limiting customers to two boxes of 20 masks each. The boxes now sell for \$34.95, up from \$19.95 just a few weeks ago. (3/29)

Moreover, newspapers explicitly described cities as being communities defined by their shared experience of fear. As the *Sun* notes on April 10th, “Hong Kong is dubbed the City of Life – but with SARS it is now the City of Fear.” The *International Herald Tribune* calls Hong Kong the same on May 27th. Describing the scene in her “city of fear,” a reporter for the *Mirror* in Hong Kong shares:

newspaper.” Regional differences complicate this definition. In the United Kingdom (UK), tabloids are the majority of daily newspapers; in the United States, the *National Enquirer* comes to mind. For this study, the UK’s conception of the tabloid holds: newspapers such as the *Boston Herald* and the *New York Daily News* are tabloids, along with UK’s *The Mirror*, *The Sun*, *The Daily Star*, and others.

⁷³ Conboy notes tabloids importance in defining the overall print media discourse. He writes, “Mainstream news media can be seen as becoming more involved in the stylistic and narrative language patterns of tabloids. Even their critics acknowledge the ability of the tabloids to determine agendas at a national-popular level” (2006, 10). Further explanation regarding the validity and importance of analyzing tabloids appears in the methodology discussion at the end of Chapter Three.

The fear is all around....Like the rest of the 6.8 million people who live here, you fear that someone may breathe on you. You ride escalators without touching the handrails and open doors with your elbows. Shaking hands is considered a health risk, air kissing is unthinkable and cough or sneeze in public and you'll clear a swath 200 meters wide around you. Every public place is deserted....To the outside world, we're little better than lepers. (4/17).

Clearly, fear compels these communities' actions. Moreover, as this *Mirror* reporter notes, no one knew when this would end, when these communities could return to living and controlling their own lives again. During the SARS epidemic, Toronto, Hong Kong, and other communities lost their identities as something other than a SARS community afflicted by the epidemic of fear. They became what I am calling 'communities of fear'. Fear governed the actions of these communities and their news media's discourse. Yet 'communities of fear' are something more as well.

Substituting fear for nationalism, a reasonable replacement given the emotive force of both sensations, 'communities of fear' are "imagined communities" constructed by individual readers engaging the news media. These individuals believe themselves to be members of a like-minded public who engage in the same activity, accessing the same news to shape their understanding of SARS. Moreover, these individuals believe the narrative accounts of members of their community to be indicative of the experiences of others among their like-minded public. These individuals also believe members of the news media to be part of that public, that the reporters who 'create news' are sharing in the same daily experiences they are.⁷⁴ The aggregation of these beliefs produces 'communities of fear' in the minds of individual readers. In this way, individuals found themselves experiencing the fears of the community and the fears of others without, by and large, having suffered from SARS themselves or having experienced anything to

⁷⁴ Supporting such a claim, Ross comments, "Indeed, the media mirrors society and society mirrors the media. Both the media and the public it informs are caught in the same trauma loop" (2003, xv-xvi).

warrant these fears. Fear became the individual experience because it was what the news media shared, introducing the seed and spreading the epidemic of fear through their special means; ‘communities of fear’ explain the process of how individuals became scared of something most had never, and would never, encounter: the accounts they read of those close to them suggested to them that not only was SARS deadly and terrifying, but as members of a community afflicted by the epidemic, they were next.

Communities Reimagined

Interestingly, another sort of narrative emerged counter to this idea, appearing first in Toronto and later extending to other news outlets. SARS became a source of satire, of humor, a way for the Toronto media and the people of Toronto to mock their fears, themselves, and everyone else still riveted by the pandemic possibilities of this coronavirus. As the *Toronto Star* says:

SARS has all the makings of a killer news story - which also means it's good for stupid jokes. Back when SARS was still new and risqué, dumb-funny SARS comments were being dropped by the dozen. As we became acclimatized to the initial terror, the term "SARS" seemed to precede punchlines in the making. Instead of avoiding crowded places (and all the fun), I've begun casually asking after my friends. "Oh, will you be there? Okay. Will SARS be there? Great. See you tonight." ...I went through all the phases of paranoia and "I have SARS" moments that we all went through in Toronto, but in a delayed fashion as I was out of the country for 10 crucial hype-building days just as the SARS story broke. Now that I'm at the blasé stage, every day is full of death-defying moments like getting a coffee at the corner and going to a loud bar and yelling with my friends in each others' faces. (4/15)

The *New York Times* later demonstrated an account to show other communities following in Toronto's footsteps. Along with noticing the zeal with which the public had taken up SARS as a part of their understanding of the world, the *Times* reports on how they now felt about the disease, with casual being an apt description:

As if to reinforce how much SARS has become part of the national lexicon, some boys were roughhousing at the back of the school, near where Mrs. Glazer waited for her granddaughter. As they shoved one another playfully, one of them yelled, "Watch out, he's got SARS!" (5/10)

Toronto, and other communities later on, no longer seemed like a 'community of fear'. The news media accounts suggest, as the *Star* does, that these communities "acclimatized to the initial terror" and now treated SARS as though it were just another thing, just another feature of culture that carries meanings for the purpose of a joke or a game. Other accounts from Toronto during the epidemic felt that this ability to laugh at the SARS experience, to have overcome fear, distinguished Toronto from the rest of the world; the city was, after all, the first to have its public escape the grip of the epidemic of fear. For instance, the *Toronto Star* calls for Toronto to unite, recognizing that,

[I]t's time for all of us to pull together. We all know that the World Health Organization (WHO) has just delivered a body blow - seemingly undeserved - to our fine city. We all dread the economic damage we're about to absorb....the world has just been told it's unsafe to come here. Yet, we also know how we're living, working, and coping....We continue to work together. And the paper comes out every day. (4/26)

While the gratuitous promotion of the newspaper as a community institution that stuck through the crisis with the city, this account suggests that all's well in Toronto, despite the WHO replacing SARS as the agent that sought to take the city down, the health authorities now recognized as the real enemy. The economic struggles are also noteworthy, as the newspaper finds ways to substantiate the scare they introduced. Yet, this coverage shows no fear. Similar accounts are the same, with a dearth of the accounts of disease and death that had become so commonplace in the weeks before:

The reputation of a great city is not built in a day. And it can't be ruined overnight. As we pull ourselves together from the SARS scare, let's rebuild our global reputation by reminding the world of the powerful social policies and effort that created this wonderful city....On our city's neighborhood streets are

the homes of...the world's survivors. We are accomplished builders - people with a magnificent record of achievement. These are the things that will pull this city back up on its feet. (*Star 5/3*)

The ideas themselves are bubbling across the city. And now, SARS may have stirred something dormant in Toronto, a latent desire for greatness. (*Star 5/3*)

Toronto had moved beyond being a 'community of fear.' The city, and soon the rest of the world, would transform themselves during their experience as the news media began to provide coverage that comforted the afflicted and sought to help these communities cope with the crisis the news had created.

Chapter Four:
Communities of Fate: Alleviating Fears with Friends and Foes

The transition in the news coverage in Toronto suggests a shift in manner from inducing panic to providing a palliative. As Sandman notes, “Alarming content about risk is more common than reassuring content – except, perhaps, in crisis situations, when the impulse to prevent panic seems to moderate coverage” (1994, 254). This moderate coverage alleviates fears, as demonstrated in Toronto’s attempts to unite, laugh at SARS, and band together against the WHO. This moderate coverage is the news media ‘comforting the afflicted’ after having effectively ‘afflicted the comfortable’ in Toronto with the sort of coverage presented in Chapter Four; the news media now provide individuals with information that is calming rather than chilling, protective rather than provocative, the sort of information Siegel and Ross might regard as cures to fears.

As the public recognize framings that alleviate their fears, this coverage facilitates the transformation of ‘communities of fear’ into, using a term that will soon be explained, ‘communities of fate’. After forming these communities, the news media present them with two competing narratives to understand themselves by: Major League Baseball (MLB) and the Chinese ‘Other’. The ‘communities of fate’ are provided ways to identify with the former and distance themselves from the latter; in doing so, they are encouraged to see themselves as recovered from the epidemic of fear and, by dissociating themselves from the diseased ‘Other’, feel safe from a potential relapse. This process of identification and separation achieves the effect of ‘comforting the afflicted’ for the ‘community of fate’, completing the news cycle.

‘Communities of Fate’

‘Community of fate’ is an arcane sociological term. For contemporary social scientists, it typically refers to poor communities with few resources to protect themselves from crime and other social injuries (Baehr 2005, 181). Sociologist Peter Baehr reconceptualizes this idea: for Baehr, ‘communities of fate’ is a term “that depicts the process of group formation under extreme duress” (181). This study adopts Baehr’s definition of ‘communities of fate’ and accepts the parameters he determines as foundational for their formation.⁷⁵

Dissecting this term, Baehr explains that ‘community’ here “refers to the sense that...agents recognize a common danger, face an uncertain and diffuse menace, and are able collectively to do something about it” (182). Additionally, ‘fate’ denotes “an unwanted, yet socially recognized, emergency which confronts people with a major challenge to their existence” (182). Baehr also comments that a powerful sense of group membership is vital for the formation of ‘communities of fate’, highlighting besieged cities and quarantined areas as ideal candidates (182). Additionally, Baehr contends that ‘communities of fate’ are socially productive and consequential; he claims they stimulate collective action during their brief existences and that they are acute, particular, and trans-temporal, similar to the infectious disease outbreaks they can form in response to (181).⁷⁶

⁷⁵ For further details on how the SARS experience satisfies the four primary parameters listed here, please refer to Baehr (2005). Nevertheless, it is worth noting the seven parameters he mentions for the formation of these ‘communities of fate’. Further detailing ‘communities of fate’, Baehr discusses seven parameters that are prerequisites for their formation. Four are primary: danger recognition, which is “people’s understanding that they are faced by a hazard so pressing, so immediate, *and so evident* as to demand their urgent attention” (184); moral density, which is the sense of community stimulated by common problem or interest (185); trial, which requires the crisis to extend beyond an isolated event (185); and exile or ostracism (186). The three additional parameters Baehr identifies are the presence of resources for resistance and an axis of convergence and the practice of a social ritual (188; 191). Baehr explains that the media and the use of a common language can satisfy the resource and convergence requirements, respectively. The final parameter, social ritual, is discussed in text. Please note that Baehr explains and offers examples to substantiate how the SARS experience satisfies each of these parameters. Also, while not offered as a dedicated discussion, Chapters Two and Four provide this information.

⁷⁶ Political scientists have identified ‘communities of fate’ as a means to amplify a community’s political voice and as a means to increase public awareness among citizens (see, for example, Hirschman 1970, 24). Applying this understanding of ‘communities of fate’ to this study, the ‘communities of fate’ that formed in Toronto during the SARS epidemic facilitates an increased awareness among the public about what SARS actually is and the threat it

‘Communities of fate’ are crucial to individuals’ experience of crises because, as Baehr explains, membership in ‘communities of fate’ can assuage fears of a contagion (2005, 182). Along with providing calming news during crises (Sandman 1994) and a means of distancing crises to reduce individuals’ perceived levels of risk (Unger 1998), the news ‘comforts the afflicted’ by depicting SARS as a crisis that satisfies all of the prerequisites for the formation of ‘communities of fate’. Thus, when interpreting the news, individuals can conceive of themselves as members of ‘communities of fate’, consequently alleviating their fears. Realizing relief from fear with membership in ‘communities of fate’ is actually quite fitting: the epidemic of fear relies on the existence of communities to come into being since epidemics are necessarily public diseases; in response, ‘communities of fate’ become the public’s cure.⁷⁷

News accounts, particularly in Toronto, presented coverage suggesting the existence of a ‘community of fate’. For instance, the *Toronto Star* claims that a special spirit exists within the city, a unique force that is rarely realized that bears the qualities of a ‘community of fate’; specifically, the *Star* mentions that:

This sense of "We are in this together - Us against the world," can't be manufactured. A campaign designed to whip this into form would have fallen flatter than this season's Blue Jays ads and as off the mark as the baseball team's pitchers this spring. Rather, this is organic, genuine, dynamic and priceless. (5/3)

The *Star* offers other accounts of collective action in Toronto that suggest defiance of SARS. In these accounts, the Toronto news media inform individuals that the community at large is over their fears and that they should be as well; the coverage suggests that the community is past the initial stage of shock as a ‘community of fear’ and is now a ‘community of fate’ with the accompanying, generally positive media coverage. The coverage also depicts Toronto as battling

poses; this results in fewer citizens saddled with irrational and excessive fear. In both political science scholarship and this study, the existence of ‘communities of fate’ results in a more well-informed public.

⁷⁷ According to the *Oxford English Dictionary*, an epidemic is: “Of a disease: ‘Prevalent among a people or a community at a special time, and produced by some special causes not generally present in the affected locality.’”

the virus, the WHO, and the misperceptions of the rest of the world. Regarding an example of this sort of coverage, the *Toronto Star* reports that May 1st was “Go out Toronto Night” and that it was a success as “a time for locals to shop, eat, dance, watch a play, and laugh in the face of SARS” (5/2). Additionally, the *Star* reports from the Fitness and Model Expo center, quoting one attendee to a clothing show who says, “We’re breathing all over each other and loving it” (5/4). These accounts suggest Toronto’s defiance and, considering how the community has clearly moved beyond a state of fear yet still satisfies Baehr’s parameters for a ‘community of fate’, substantiate Toronto’s status as a ‘community of fate’. When other communities that satisfy Baehr’s parameters achieve similar news coverage, they also become ‘communities of fate’.

Importantly, humor is a common tool among ‘communities of fate’ to alleviate fears. The *New York Times* nearly says as much during its SARS coverage. In one account, the *Times* reports:

But the outpouring of SARS representations may be one of the few times so many self-styled artists from across the world have collectively riffed with such immediacy on one theme [the public’s irrational reactions when in a state of fear]. Some images, like the one of Darth Vader wearing a surgical mask, are efforts to deflect fears about the illness with humor or to ridicule the sometimes outsized panic in the United States, where the disease is not known to have caused any deaths. (6/15)

The *Times* also addresses the countervailing point. While some humor becomes funny, other humor is insensitive, potentially harmful, and undergoes societal review. As the *Times* notes when recounting one individual’s narrative:

Even friendly conversation is under review. Aimee Gerry -- one side of her family is of Japanese descent -- says she often jokes with her white friends about SARS. She said that if someone coughed, “people will point to the person and say, ‘SARS!’” But that kind of kidding is not well received among her Asian-American friends. “I cracked a joke to my Korean friend, and he’s like, ‘That’s not funny,’” said Ms. Gerry, who lives near Los Angeles. “It’s a totally different discussion for Asian-Americans. It’s a topic of concern.” (4/17)

While baseball and its players use humor to generate a closeness with the public, these accounts reveal a distancing between the Chinese ‘Other’ who finds these jokes insensitive and the general public who happen to find them funny. These are the two opposites analyzed in this chapter, with the ‘community of fear’ gravitating toward the boys of summer while avoiding the ‘Other’.

Major League Baseball

Even before the season began, the *Globe and Mail* began reporting baseball players and executives’ responses to the SARS epidemic. These accounts suggested that the fears voiced in the news might not have reasonable cause. For example, Toronto Blue Jays star centerfielder Vernon Wells says in the *Globe and Mail* that he “was unaware of the nature of the health emergency,” indicating that he and the Blue Jays lacked concern to the point of nonchalance despite the appearance of SARS in Toronto (3/29). The *Globe and Mail* also reports the news from the New York Yankees General Manager Brian Cashman, who said that the Yankees were aware of the situation yet were not changing plans. The concern stemming from Wells’ comment is that readers could pigeonhole him as a stereotypical “dumb jock,” thereby rendering him as an invalid source of information; Cashman’s comment, however, validates Wells’ lack of concern. From this article and many others, the news shows that the MLB is critically aware of SARS yet is behaving rationally and therefore is not taking action until events warrant it.

Beyond the content, though, the use of the MLB as a means to convey news about SARS becomes patently obvious over the course of the epidemic as accounts from baseball players fill the sports pages of local and national newspapers and often extend onto the front pages and news sections as well. Baseball becomes, in these news depictions, a way for communities to recover

from SARS.⁷⁸ As the *Washington Post* notes, “Toronto can’t afford for life to shut down, and the Blue Jays are an important if small part of the city life. There are different kinds of viruses. Hysteria can act as a virus, too, and harm people in its own way, especially if it leads to economic ruin. From that perspective, perhaps baseball is doing the right thing by alleviating fears in Toronto” (4/26). While the *Post* flagrantly associates hysteria with a virus, giving this emotion biological form, the newspaper attributes significance to the team: the Blue Jays are a treatment for the fears of the people of Toronto.⁷⁹

Baseball also appeared in the news media as a valuable distraction and a means to attenuate individuals’ fears. The news media constructed this frame based on imagined historical accounts and matter of fact statements. For example, the *Washington Post* comments that traditionally “it was baseball’s role to provide an escape, to take our minds off all the creepy things outside the ballpark” (4/26); the *Boston Herald* similarly frames baseball as a means to escape from everyday fears (5/31). Additionally, noticing baseball’s role as such, MLB executives discuss the importance of the league “cheerleading for the city” (*Star* 4/26). Including this account, the newspapers find means to substantiate their otherwise unsupported claims. Moreover, baseball becomes a means of supporting and defending Toronto’s ‘community of fate’ as one executive remarks that “Toronto deserves better than the way people are reacting to

⁷⁸ Additionally, the *Washington Post* offers a cultural reference to explain the situation facing the MLB in responding to SARS. Oddly enough, the reference is identical to one in the *Toronto Star* that explains the public’s fear of SARS and identifies Toronto officials with a movie’s cast; both articles associate SARS with the film *Jaws*. The *Post* article remarks, “In dealing with the SARS outbreak, Major League Baseball is in the same predicament as that beach town in “Jaws.” Maybe there’s a shark, and maybe not. What should the league do? Placate fears, at the risk of seeming irresponsible? Or tell people it might not be safe to congregate at the ballpark, and risk a panic?” (4/26).

⁷⁹ Paul Godfrey, the President and CEO of the Blue Jays, sought to have the Blue Jays as a centerpiece of Toronto’s recovery strategy. To do so, “he asked people to rally around baseball” (*WP* 4/27) and tried to have the team and its fans “show [people] that there isn’t [fear] here” (*MG* 4/29). Additionally, baseball also emerged in the news as a means of economic recovery for Toronto. The *Boston Globe* discusses potential trips to Toronto, focusing on a Blue Jays’ game as a part of the package (5/9). The *Globe and Mail* speaks of “SARS-weary Torontonians” enjoying baseball games at a price of only CND\$1 and CND\$2 a ticket, offered by the team in an attempt to give a revitalizing kick to the city’s faltering economy (5/3).

[SARS]. There's no reason for the players not to be here. There's no reason for travelers not to be here" (*Toronto Star* 4/26). Through these accounts and others, it becomes clear that the news media is framing baseball as advocates for Toronto and as a community for the 'community of fate' to identify with.

Humor

Depicting baseball players laughing at SARS or offering coverage about baseball that pokes fun at the players using references to SARS is yet another means by which the news media alleviate fears. Laughing becomes a remedy to make SARS seem less frightening; in many ways, it becomes a cultural icon as a tool to deliver a joke and loses its significance as a disease that launched an epidemic of fear. The fact that people recognize the reference is important, as the following accounts will show, but it is more important that readers are able to understand the lighthearted spirit with which the mentions were made.

Offering one account early in the season to lampoon the "bullpen-by-committee" approach the Red Sox had taken into the 2003 season, the *Boston Herald* reports that "Less than two weeks have passed in this Red Sox season, but concern about the Red Sox' radical bullpen approach already has caused more hysteria than SARS" (4/13). While the article insinuates that these sorts of reactions about the Red Sox performance are standard fare, the reference to SARS reminds the public of how ridiculous their reaction was. Moreover, the fact that the *Herald* is even willing to associate a virus that actually did cause casualties with the comparatively trivial issues facing a Red Sox team that ended up in the American League Championship Series suggests that fears of SARS were fairly non-existent; the newspaper would likely have chosen a different reference otherwise. The *New York Daily News* offers a similar account when criticizing the New York Mets. On April 28th, the *Daily News* says: "They've made 28 errors in

25 games, but yesterday was ridiculous. Never mind the SARS scare, Mets players needed surgical masks to protect against the spread of bad defense.” Again, the use of a direct reference, in this case one that explicitly claims that the SARS scare is less of a public issue for New Yorkers than the Mets inability to field the baseball. In both cases, the news media’s use of baseball and humor to suggest that SARS hardly calls for the hullabaloo raised about it seeks to alleviate fears.

The news media even portray accounts that express slight reservations as amusing, bringing SARS into view without tinted lenses expecting catastrophe. Sharing a narrative from Minnesota Twins pitcher Rich Reed, the *Seattle Times* reports:

[He] had figured out how he would keep from getting sick in Canada. “I’m getting some sannies and wrap them around my face,” he said soberly, referring to the white sanitary socks ballplayers wear. “I’ll keep it on ‘til we get to the hotel.” Seriously? “Yeah, I’m serious,” he said. And then he cracked a smile. “No,” he said, “I better not say that. (4/12)

The *Seattle Times* goes on to frame baseball players as brave, being willing to go to Toronto as one of the few travelers who even consider going to the city; moreover, they emphasize the duration of their stay, sharing that “baseball players [have] to spend three days at a time [in Toronto] to do their jobs” (4/12). Returning to Reed’s account, the fact that the news media portray him as having “cracked a smile” and lay out their coverage in this way is crucial to the public’s understanding of this and similar accounts that express irony that readers can easily miss out on. Moreover, it is worth considering how the media could have otherwise crafted Reed’s account to depict an account of fear to the public: imagine that, instead of telling readers that Reed was smiling and joking around when making this statement, the quote ended after “I’m serious he said” or if the account had framed his facial reaction otherwise; this simple change would convey a very different meaning to readers. Yet, during accounts about baseball and its

players, the news media seemingly always go the extra step in their coverage to ensure that they appear in a positive light and in coverage that alleviates worries about SARS.

Players

The news media accounts of baseball players, in some instances, portray them expressing confusion as to the appropriate course of action for responding to SARS; in these instances, they appear to be in the same state as the folks who root them on. Yet this uncertainty led baseball's medical advisor, Elliot Pellman, into a situation where he had to "[urge] appropriate precautions while trying to allay irrational fears" when reporting to teams (*WP* 4/25); he spoke of a need to "separate fact from fiction' about the SARS threat" (*Star* 4/24). As the *Washington Post* comments, "Several Toronto players said they weren't certain whether to be panicked or dismissive" (4/26). As one Toronto Blue Jay remarks in the *Post*, "It's like getting two different stories....I was watching the news last night, and the World Health Organization was saying it's almost dire straights in Toronto. The health board in Toronto was saying it has accounted for every single person that has SARS and that it's not a clear and present threat....We're just trying to get the best information we can get" (4/26). Sharing this content, the news media show that baseball players are just like the rest of the community: frustrated that the health authorities engaged in endless double-talk and bewildered with regard to what they should do next.

Offering these accounts as a part of the news coverage, the media seek to ensure that readers realize their similarities with baseball players. Their heroes on the diamond, as these interactions show, are nothing more than "just folks," a point that quickly becomes clear as they share their confusion and become, in the face of a "killer virus," just another person with fears of death and disease. Additionally, the plain spoken language used by most players helps readers associate with them and makes them easier to quote, potentially increasing the prevalence of

their accounts in the press. Tangentially, it is also important to note the unique relationship between baseball players, teams and beat writers; the reporters who provide many of these accounts are family to baseball players during the season, traveling with the team. This camaraderie likely lead to more positive framing for baseball players in the press, particularly when compared to the health authorities that reporters have recognized difficulty dealing with.

Returning to particular news accounts, local newspapers carried coverage about those select few players who expressed fears over SARS. For instance, the *Boston Herald* reports that, while Red Sox pitcher John Burkett felt Toronto was “a great place to go” and still a place he has always liked, he had significant fears:

Sure, the doctors are telling us there’s a very slim chance of getting it, but why take chances? When it comes to something that has a chance of killing you, you’d like to be on the conservative side. Why put yourself at risk? And not only myself, my kids, my family? Over what?...I don’t care to even be at risk, so even though it’s a very slim risk, why take that chance? (5/29)

Burkett, soon vilified in the Toronto press for his comments (*BH* 5/29) and pointed out as misguided in various national media, is a fitting example of how individuals misjudge risks, particularly those they do not understand. Even he recognizes his inability here; as the *Herald* reports: “People make a bigger deal out of [SARS] than it probably is’ Burkett said with a sigh” as he included himself in the group who did (5/29). The newspapers’ inclusion of his physical display of emotion also demonstrates Burkett’s resign over this situation: with his words, he expresses fears and with his actions, at least according to the *Herald*, it seems as though he knows his fear is only an illusion he cannot overcome.⁸⁰

⁸⁰ Considering Burkett’s statements in light of his profession, one in which a ball could strike him in a vulnerable position at over a hundred miles an hour and could conceivably kill him, the idea that being unfamiliarity with a situation can cause improper risk assessments seems absolutely valid.

Responses in the news media to Burkett's account demonstrate the degree to which the news media tend towards depictions of baseball players as defenders of the 'communities of fate'. The *Toronto Star*, for one, mocks Burkett's performance the day after he loses a game in Toronto (5/30). Moreover, the words of Johnny Damon also mitigate the influence Burkett's sentiments might have. Damon asserts, "I don't have any concerns" and, as a star centerfielder and fan favorite, Damon's assurance can drown out Burkett's comments since Damon is a popular media voice while Burkett is forgettable (*BH* 5/29). The media's framing of these competing accounts, using Damon and a hierarchy of stardom to discredit Burkett, is also telling.

In contrast to Burkett, one dominant framing in the news reinvents a popular conceptualization: the news media depict baseball players as heroes during the SARS epidemic. For instance, the *Toronto Star* lauds Mike Sweeney, the Kansas City Royals' star first baseman for overcoming the hysteria of SARS and signing autographs for fans in Toronto despite recommendations from health authorities not to do so (5/3); the *Star* groups Sweeney with doctors and nurses as praiseworthy for helping Toronto cope with SARS. The *Star* cites Sweeney as a model for other baseball players and the public to emulate.

The sentiments that players share in the news exhibit their assessments of the situation. The following examples demonstrate a range of players who all reach a common conclusion about SARS:

"I don't think about [SARS]," said third baseman Eric Hinske. "Nobody walks around scared. You just go about your normal life. It's been more blown out of proportion here." – Eric Hinske, Third Baseman, Toronto Blue Jays, *New York Post* 4/15

Inside, one of the early afternoon arrivals in a business-as-usual Royals' clubhouse was veteran reliever Jason Grimsley, who feigned mock dismay when the doors opened up at 3: 30 p.m. and an unwashed print media came stumbling in, looking for palpable signs of player panic. "Sensationalism sells," a relaxed Grimsley said. "We talked with our own and baseball's physicians. We just have to take

precautions.” – Jason Grimsley, Relief Pitcher, Kansas City Royals, *Toronto Star* 4/26

Catcher Brent Mayne said he and his teammates found little to be worried about. “It was fine,” he said Sunday. “I like the city and it was a good time.” – Brent Mayne, Catcher, Kansas City Royals, *Montreal Gazette* 4/29

“We’re going to play baseball and not let it distract.” – Carlos Beltran, Centerfielder, Kansas City Royals, *USA Today* 4/24

“You look out the window and walk outside and everything is normal...It’s not worth worrying about” – Mike MacDougal, Relief Pitcher, Kansas City Royals, *New York Times* 4/27

“People are going about their normal business” – Joe Randa, Third Baseman, Kansas City Royals, *New York Times* 4/27

“I guess Major League Baseball says it’s safe enough for us to be [in Toronto], so that’s good enough for me.” – Rocco Baldelli, Outfielder, Tampa Bay Devil Rays, *St. Petersburg Times* 5/13

"I went out," Carlos Lee said. "I can't be worrying about everything like that. I have to worry about the game. I think we'll be all right. I heard they have some cases, but they're isolated at the hospitals." – Carlos Lee, Outfielder, Chicago White Sox, *Chicago Sun-Times* 5/27

Paul Konerko, who reacted matter-of-factly to the original SARS scare in Toronto a month ago, still was not concerned even after arriving in the city Sunday night. "I really don't know anything about it still, other than I think they wouldn't be sending us here if there was that much of a threat," Konerko said. "Our organization wouldn't let that happen, nor would Major League Baseball, so I just think that I go along with them on that. If we're here, that must mean it's OK." – Paul Konerko, First Baseman, Chicago White Sox, *Chicago Sun-Times* 5/27

If these accounts were not convincing enough, the news media also offer ones of transcendent stars who have status and hold the public’s trust. Derek Jeter, the New York Yankees’ elite shortstop, is one such star. In Toronto for a series in early April, Jeter suffered an injury that required an MRI. Despite the news media’s portrayals of Toronto’s hospitals as a “hot zone,” a reference to Preston’s thriller that has entered the lexicon and appears throughout the news, “Jeter and [Yankees Manager] Joe Torre said the Yankees were not concerned about sending

Jeter to a Toronto hospital Monday night because of fears about severe acute respiratory syndrome, which has caused some hospitals to be closed and others to be put on high alert. ‘I wasn’t even thinking about that,’ Jeter said. ‘I was thinking about my shoulder’” (*NYT* 4/2).⁸¹ The news depicting Jeter’s lack of concern and the Yankees’ willingness to send their most prized asset into what the *Times* labels a “hot zone” meaningfully indicates to readers that perhaps they overestimated the threat; again, it is important to consider how different the account would be if Torre and Jeter’s comments were not included. Certainly their lack of fear would not be assumed.

Alex Rodriguez, the Texas Rangers’ star shortstop, is another transcendent star who dispels fears of SARS. Admittedly, this occurred after he changed his mind. At first, Rodriguez asserted that he would avoid leaving his hotel room during visits to Toronto while SARS remained a threat. He, as Burkett had, faced significant press backlash. Once there, however, Rodriguez reneged on his claim. Reporters quote Rodriguez as saying, “I was just joking around a bit...The city’s the same as it always was; safe, fine, good to go...[The Rangers medical staff] said [SARS] was blown way out of proportion” (*TS* 4/30). The *Toronto Star* even mentioned that “[Rodriguez] said he would even partake in Toronto’s nightlife” (4/30). In addition to his iconic status, the *Star* makes explicit one reason why readers can take Rodriguez’s revised perspective seriously: “Alex Rodriguez is the major league’s highest paid player at US\$25 million a season” (4/30). The *Star* recognizes that many readers will trust Rodriguez’s account because of what he

⁸¹ The content of this story differs between newspapers. The *New York Times* (4/2), the *Toronto Sun* (4/24), and the majority of other newspapers that elected to report this say that Jeter went to a hospital in Toronto for an MRI on his shoulder. The *Boston Herald*, however, contradicts this account; the *Herald* reports that, “the Yankees refused to send him to a Toronto hospital, opting to fly him home to be treated by American doctors instead” (5/29). While one of these accounts is incorrect, it seems safe to assume the *Herald* got the story wrong as it is both a local tabloid, which are typically more error-prone, and is clearly in the minority.

risks; the *Star* implicitly suggests that if Rodriguez and his paycheck are willing to mingle with the crowds in Toronto, then any regular Torontonians or tourist should feel similarly safe.

Baseball Authorities

Addressing the crisis from the league's perspective, baseball commissioner Bud Selig makes this stance explicit, commenting that "we don't want to overreact" (WP 4/25) and that the most sensible course is to "proceed with caution... [and] monitor the situation very closely," (WP 4/27). It is important to realize Selig's unique position, particularly in contrast to the health authorities. While sports may seem an odd place for coverage of SARS, these depictions of SARS can be as influential as front page news because, for better or for worse, the public reads newspapers' sports pages; the news that those associated with baseball create can shape understandings of SARS. This leads to the second point: Selig absolutely does not want the MLB to become a fear mongering organization that helps fuel fears of SARS. Selfishly, elevated levels of fear harm the MLB as a business since individuals are likely to avoid the crowds at ballparks due to fears of SARS, cutting into sales in Toronto and elsewhere; opposite to the news media that drum up a scare to satisfy a profit motive, baseball needs to reassure to get people out to the ballparks.

Among others, MLB executives help solve this dilemma. The *Toronto Sun* offers one such account, beginning with the assertion that "We can call Bill Stoneman worldly because he knows a thing or two about it" (4/29); this sets the tone for what follows. As the article continues, "And as general manager of the [2002] World Series champion Anaheim Angels, he, like the rest of baseball, is ignoring the World Health Organization travel advisory against coming to Toronto because of the SARS outbreak." According to this news account, Stoneman is intelligent, validated by the fact that he oversaw a champion, and his opinion about SARS is

indicative of “the rest of baseball,” intimating that everyone associated with the MLB shares the opinion that the WHO overreacted and that SARS is nothing to fear. These framings construct Stoneman as an authority, both about baseball and, being worldly, about life; this becomes meaningful in light of another quote from Stoneman: “[teams] had information coming from the medical advisor the commissioner’s office supplied...they are monitoring this thing by the hour, they’re not putting their heads in the sand” (*TS* 4/29).

First, in suggesting that the MLB reached its recommendation to play ball in Toronto despite SARS and the WHO’s travel advisory, Stoneman and the newspapers who cite him and other MLB officials as authorities implicitly question the validity of the WHO’s alert. The *Toronto Star* elevates this questioning to an outright attack on the WHO’s decision: “[despite] the scare tactics of the WHO...the SARS scare as far as baseball is concerned might prove a tempest in an Asian teapot” (4/26). The suggestion that the WHO is plotting against Toronto appears frequently.⁸² The *Toronto Sun* quotes the Blue Jays’ CEO as saying, “the World Health Organization has thrown a dagger at [Toronto]” (4/24). Additionally, the Blue Jays’ CEO later says in the *USA Today*, “We’re taking a common-approach...We’re trying to bring a sense of calmness to a situation that’s overinflamed” because of the WHO’s “major overreaction” in branding Toronto with a travel advisory (4/24).

Stoneman’s quote also indicates that MLB has accurate information and that they can inform the public as need be. In presenting his account this way, the newspapers substantiate the quantity of coverage they have devoted to the perspectives of the MLB on the SARS epidemic and also reemphasize their framing of the health authorities as less than helpful characters.

⁸² The *Washington Post* commends the MLB for playing on while “the WHO and Centers for Disease Control and Prevention disagree on the extent of the SARS threat” (4/26). The *Toronto Sun* also reports that “Fighting the World Health Organization and their ruling on the SARS outbreak with a CND\$1-seat sale” was a highlight of the early portion of the Toronto Blue Jays’ season (5/4). Also, it is worth noting that this coverage about baseball appears in multiple sections of newspapers, from the business and the front page news to, obviously, the sports pages.

Moreover, acknowledging that information can cure fears, the MLB can now assume the role of healthcare workers and alleviate the symptoms of the epidemic of fear that grips the public.⁸³

Even for the members of the MLB, spreading information is vital. As the Blue Jays' CEO notes in the *Montreal Gazette*:

[Fears of SARS] is the problem of misinformation, false information, and partial information... Once [the Texas Rangers] get here, they will see the city is not quarantined, there is not a wall around the city, this isn't a leper colony and realize Toronto is open for business. (4/29)

Presenting this and similar accounts, the news media repeat Toronto's status as a 'community of fate' in publications outside the greater Toronto area, helping spread the word that the town has overcome the disease.

Managers

Managers are the most prolific among the MLB representatives in terms of 'creating news' because they are obliged to hold post-game press conferences during which they know they will be quoted. Responding to a question, legendary Yankees second baseman and Tampa Bay Devil Rays manager Lou Piniella offers his perspective to the *St. Petersburg Times*:

"Piniella said walking around and going to restaurants are a part of his routine when he travels to Toronto... That isn't going to change, he said. 'I'm going to Toronto and enjoy the city like I always do,' Piniella said. 'It's a wonderful city'" (5/13). Dusty Baker, manager of the Chicago Cubs, offers a similar sentiment in the *Ottawa Citizen*:

I love Toronto and I love Canada. I talked to people in the hotel today and to the driver in the cab today, the city's hurting in tourism, in cancelled conventions,

⁸³ In trying to find a story, the news media went as far as speaking with Kansas City Royals trainer Nick Swartz. Reporting the fruits of this conversation as news, journalists found that he packed an extra item in his medical kit. It happened to be an extra supply of hand wipes. The *Toronto Star* continues, "But the simple hygiene aid, he insisted, was as much the result of a common flu virus that struck down 18 members of the team on a recent road trip, rather than the fear of SARS" (4/26).

you're told not to go eat, you're told not to do this and that (because of SARS). It appears to me a lot of this overblown. (6/14)

As iconic figures who the media frame interchangeably as leaders of men and as grandfather figures steeped with knowledge of the world, the news these men 'create' corroborate the other MLB accounts and inform readers that there is nothing to fear.

One manager's account demonstrates the image control and framing of the iconic MLB figures as he backtracks from potentially incendiary remarks. Before a series in Toronto, Minnesota Twins manager Rod Gardenhire says in the *Minneapolis Star Tribune*, "If that stuff's in Toronto, I hope we don't go...I don't want our team having to mess with that" (4/4). While Gardenhire's words do not explicitly express fear, they certainly suggest it; not mentioning SARS in his statements and instead referring to the virus as "that stuff" and "that" indicates his fear as he seems to try to avoid SARS by avoiding its name. This is the lone account of a manager even expressing reservations in the news media. It is also worth noting that the team's hometown newspaper carried the story while no other outlets decided to carry the story or report it the following day.

Of course, there is perhaps a reason why: Gardenhire immediately weakens his original words. In the *Toronto Sun* the next day, Gardenhire "softened his stance somewhat" as he says, "You always have to have people looking into things. But we'll go and play where they tell us to play. Hopefully everything will be okay" (4/5). Interestingly, the venue for his comments has changed: as opposed to carrying his comments in the *Star-Tribune*, Gardenhire appears in the Toronto newspapers; this is almost certainly an attempt to ensure that baseball maintains its image as Toronto's defender. Why this coverage does not appear in Minnesota remains a puzzle.

Later on, the newspapers emphasize Gardenhire's new stance when reporting on his team; the *Toronto Star* quotes him as saying, "We'll leave it up to smarter people than us if we

should be playing baseball [in Toronto],” (4/24). With the news media casting him and his team in the same lot as the public, the media suggest that Gardenhire and his players trusts the league officials, who, as shown earlier, have the information and believe that the situation is under control. Presenting this account, the newspapers invite readers to share in Gardenhire’s beliefs which, as compared to earlier, seem to have relieved him of fear.

To avoid being mired in ‘creating news’ as Gardenhire was, Tony Pena, the Kansas City Royals manager, expresses annoyance at SARS. The *Washington Post* reports that “SARS was the last thing players wanted to talk about” as Pena says, “Everybody [has] put [SARS] aside...No one is afraid. Not anymore. We are here now” (4/27). His terse quote indicates how tired he is of answering reporters’ questions about SARS; he no longer wants to address an epidemic of fear that he considers dead.

Alternatively, Chicago White Sox manager Jerry Manuel has perhaps the most entertaining retort to a SARS question. As the *Chicago Sun-Times* reports:

After just answering a series of questions about the struggling offense, manager Jerry Manuel scoffed at one inquiring about any SARS precautions he might be taking. “I might need SARS. Where’s SARS at? I’ll stare it down,” said Manuel...“SARS has not place in this [head] at this time. I’ve got a lot of other things going on in there. I don’t go anywhere anyway. If I got somewhere, it might be to play golf. If it gets me there, that’s a great place to get me.” (5/27)

Manuel’s obviously joking manner when responding to the question and his willingness to engage a virus he cannot see in an old Western-style showdown conveys yet again the message that SARS is the least of the players or managers’ concern and therefore it should not worry individuals either. Again, humor shines through in the quotes the news media present.

Baseball fans also ‘created news’. For instance, the *Seattle Times* quotes a letter to the editor from a Canadian who wrote:

Many of us (about 5 million, actually) are comfortably living and working in the greater Toronto area, mask- and virus-free. The ‘situation’ is well under control...I note, however, that there were 321 murders in the L.A. area in 2002. This means that someone could interpret the odds of being shot in the streets of L.A. as higher than the chances of catching SARS in Toronto. No one, including me, is suggesting that MLB cancel all games in the L.A. area until you get your crime under control.” (5/4)

The letter is in response to comments from Anaheim Angels pitcher Kevin Appier, who suggested that the Angels’ series against the Blue Jays be moved to avoid any possible SARS threat and it ends with instructions: “Appier and his teammates should stick to what they know and act in Toronto, as we all are, with an appropriate level of care but without irrational fear” (5/4). The trope the letter analyzes, the understanding of SARS as a killer, now appears recast in a new context: rather than presenting SARS alone as a killer, the letter contrasts SARS to the mundane threat of homicide. Similar to the media’s lack of attention to malaria, tuberculosis, and other diseases the attention to SARS in contrast to homicide, the more likely threat, seems rooted in the difference between what is new and what individuals are denuded to. Recognizing this, the letter contrasts “catching SARS” with “being shot,” the latter being a far more gruesome, violent act. As such, this language frames SARS as a lesser concern, avoiding any of the sensational rhetoric ascribed to SARS during the early coverage of the epidemic. Importantly, the very presence of this letter suggests that the news media are engaging the ‘community of fate’ and are allowing them access to the baseball community.

Offering additional fan commentary, the *Toronto Star* incorporates narratives to show tourists enjoying Toronto and Blue Jays baseball (see, for example, 5/4). Yet this news is significantly less exciting than the news of more creative, boisterous fans. One such article appears in the *Washington Post* and begins, “‘SARS!’ yelled Liam Eagle, 24, sitting in the seats behind the plate. Angel Berroa hit a foul ball. ‘I’m telling you, SARS is working,’ Eagle said

jokingly. ‘We’re five for six right now. Five outs on six SARS’” (4/27). Eagle and a friend came to make the point that “the controversy over Toronto being unsafe to visit was overblown. The pair wanted to manipulate players’ latent fears of SARS, to intimidate them; as the friend notes, “‘If we can get the whole stadium yelling SARS, we could go on a winning streak’ Abrams said. ‘There is no way they could ignore us or not be uncomfortable’” (WP 4/27).

These fans point out differences in community as the three perspectives shared here are from residents of the greater Toronto area and address the Anaheim Angels, the Kansas City Royals, and readers outside Toronto. As MLB executive vice-president Sandy Alderson shares in the *Toronto Star*, “The level of concern increases dramatically from a distance” (4/26). Based on fans’ accounts, this seems true: as members of a ‘community of fear’ who are now coping with their fears, these men are communicating with those who have not experienced what they have. As a Toronto resident mentions later on in the article, “Look what’s going on in Toronto. There’s nobody going around with masks on. It’s controlled. It’s in a couple of hospitals. It’s contained” (*Star* 4/26). However, this is not what those at a distance see. The level of concern increases at a distance because communities outside Toronto seemingly chose to internalize the early coverage, the propagation of fear, as their understanding of SARS. In contrast, the people of Toronto lived through the entire ordeal and gained an actual understanding of the experience that is no longer mired by the additional meanings the news media initially introduced.

Reviewing fans’ accounts and those of the MLB, these individuals do not seem to be in fear. As mentioned before, ‘comforting the afflicted’ is precisely the goal of the MLB during this crisis, seeking to calm the public and provide a reasonable, stabilizing force in the community. As the people of Toronto and elsewhere rally around the Blue Jays and baseball in general as a means to overcome fears of SARS and they witness the news from MLB officials and iconic

players and managers, the term ‘communities of fear’ no longer applies to their state. The news as this crisis situation wears on does not even warrant such a label since reassuring coverage designed to prevent increasing panic tends to dominate the news at these times (Sandman 1994, 254). Instead, the news and fans’ responses suggest the emergence of ‘communities of fate’ from the ‘communities of fear’ as individuals have recognized a means to use the news to alleviate their fears.⁸⁴

The Chinese ‘Other’

Baseball stories are not the only collection of narratives offered to ‘communities of fate’ when they attempt to define themselves. During the SARS crisis, one consequential action that helped individuals dispel their fears is the process of ‘Othering’. Specifically, the news depicts a Chinese ‘Other’ that allows individuals, in this case an ‘Us’ community that includes most Americans and Europeans, to distinguish and distance themselves from the ‘Other’.⁸⁵ By doing so, these individuals can distance their fears through a socially constructed coping mechanism. The importance of ‘Othering’ to individuals’ psychology is well-recognized. As Siegel notes, “Multiple studies in the psychiatric literature over the past fifteen years have corroborated the link between fear of death and thinking negatively about others” (2003, 53). Elaborating on this

⁸⁴ Baseball is not the only sport and baseball players are not the only athletes who appear in the news conveying messages that can help alleviate fears. In Europe, similar coverage extended to soccer and its professionals. For instance, the *Mirror* presents an article poking fun at Paul Gascoigne, a midfielder and former England international soccer player. The *Mirror* informs the public that, “Ex-Rangers star Paul Gascoigne is living in fear of the killer Hong Kong flu” (4/8). On the surface, this hardly seems comforting. Yet the public fears are soon set aside as Ally McCoist, a striker and former Scotland international who is now a well-received broadcaster, tells the *Mirror* and the public that, “Gazza is walking about with a mask so he doesn’t catch the SARS virus. I couldn’t stop laughing for days” (4/8). Following McCoist’s lead, the public can laugh at Gascoigne’s behavior, acknowledging that it is irrational. The use of “Gazza,” Gascoigne’s popular nickname, also indicates a degree of familiarity; the British public knows these two icons from their exploits on the pitch. The gas mask is now just another of silly Gazza’s quirks while McCoist, who tells the public how to understand a football game, now tells the public how to interpret Gazza’s actions and, by association, its own.

⁸⁵ The Chinese similarly recognize Americans as ‘Other’. As one scholar notes, “barbarians” is the term the Chinese have used for foreigners for hundreds of years (Barber 1995, 186). Furthermore, to quantify the prevalence of this reference, scholars performed a textual analysis of the news about SARS in New Zealand. Their research found that 65% of articles published placed a particular emphasis on China (Wilson, Thomson, and Mansoor 2004).

point, Ross observes that “The intense feelings that trauma generates...creates disconnection, making it easier to externalize the “other” and blame him for one’s unresolved distress” (2003, 53).

The news can create and shape individuals’ understanding of a situation by introducing the dichotomy of ‘Us’ and the ‘Other’ to explain it. This is central to how the news facilitates individuals’ imagination of membership in a ‘communities of fate’ as the news presents a Chinese ‘Other’ for individuals to contrast themselves with. Generally, as linguist Teun A. van Dijk comments, “Discourse plays an important role in the production and reproduction of prejudice and racism” and “Popular resentment against the Other – particularly with regards to the Other entering “Our” country – is filtered through the constructions or interpretations of popular reactions by journalists or other professionals. This means that both the media and the politicians are able to construct popular resentment as meaning what they please” (1997, 31; 34). This proves true during the SARS epidemic.

As van Dijk later notes, “[the] rhetorically populist point in all these discourses always is the persuasive construction of a *threat* – that is, a threat to our norms, values, principles, or religion; a threat to the economy and social structure; and, of course, a threat to our standard of living and our wallets. Cultural differences between ‘Us’ and “them” are thus exaggerated, and differences within our group and their group are ignored” (1997, 61-62).⁸⁶ SARS, which the Chinese ‘Other’ has brought upon ‘Us’, is the threat to “our” lives that the news media focus on when emphasizing the dichotomy between ‘Us’ and the ‘Other’; this is also central to the framing of the Chinese as the ones to blame for the crisis. Multiple accounts directly place blame

⁸⁶ Pointing out the actual lack of biological difference between whom contracts SARS and who is safe, the *Toronto Star* notes: “Anyone can get this. It has nothing to do with race or the language spoken. Every person can be at risk.” (3/29). This information goes to suggest that, on occasion, examples contrary to the tendency to ‘Other’ appear.

on China for SARS: the *New York Post* titles an article, “China’s fatal secret: Hid deadly outbreak until it spread around the world,” and goes on to discuss how preventative measures early on could have saved lives and would have headed off any epidemic of fear (3/17); the *International Herald Tribune* reports simply that the “Deadly illness [is] tied to a secretive China” (3/24).

The news media also exhibit a distancing technique that scholars identify as using ‘We’ and similar forms in their discourse to exclude the ‘Other’ whose identity, in this case Chinese, is referred to specifically and therefore is not implicit within the ‘We’ group (Carbó 1997, 93). This is a particularly common tactic in the tabloids and the *USA Today*, which are newspapers whose discourses focus on depicting local communities and who facilitate individuals’ imaginations of communities (Wallace 2005, 181). An example of this appears in the *Boston Herald* as the newspaper quotes its city’s mayor, who says, “Fewer people are coming down to Chinatown... What we’re trying to do is educate folks in Chinatown and also the public that this is not imminent” (4/7). The mayor’s phrasing precisely separates the people of Chinatown, the Chinese, from the remainder of Boston. Moreover, this account also shows that people are avoiding Chinatown, suggesting that distancing from the ‘Other’ is happening; it is even possible that the act of distancing and avoiding Chinatowns is one of the collective behaviors that ‘communities of fate’ take on to alleviate fears of contagion.

While the division between ‘Us’ and the ‘Other’ is a social construct, individuals’ perceptions construe these differences as innate realities; as Riggins notes: “The public that so fervently distinguishes between Self and Other rarely realizes the illusionary nature of the opposition” (1997, 5).⁸⁷ As a result, the Chinese ‘Other’ is a potent coping mechanism that

⁸⁷ Riggins also comments that “The ‘inferiority’ and ‘evil’ of the Other, which is so obvious that it does not need to be proved, cannot be proved conclusively through discourse, which, after all, is nothing but talk” (1997, 10). While

enables ‘Us’ to alleviate concerns about the SARS threat by first associating SARS with the ‘Other’ and then distancing the ‘Other’, both physically and behaviorally, by depicting them as distinctly different from ‘Us’. Accounts of this distancing become quite extreme. For instance, the *Sun* wonders whether, “Isn’t it about time travel to Hong Kong from the UK is banned to prevent the spread of SARS? We should at least quarantine people arriving from the Far East to protect the rest of us” (4/11).

These depictions and the alienation of the ‘Other’ from ‘Us’ aids in individuals’ transitions to joining ‘communities of fate’. This occurs because becoming members of ‘communities of fate’ is actually another distancing mechanism: the Chinese ‘Other’ cannot join these communities because they are perceived by ‘Us’ as the source of the threat. As the *Tampa Tribune* reports, even a joke can reveal how the public perceives a threat: “the new joke in California is that getting a parking spot there is easy if you look Chinese: Sneeze once and you have the whole parking lot to yourself” (6/2). The existence of this ‘Other’ is what satisfies the “danger recognition” component necessary to form ‘communities of fate’ as they are the “hazard so pressing, so immediate, *and so evident* as to demand their urgent attention” (Baehr 2005, 184); thus, joining the ‘communities of fate’ places ‘Us’ in an exclusionary community, now removed from the ‘Other’ and therefore safer than before.

It is worth noting that this entry into ‘communities of fate’ is an attempt to achieve distance; this is the opposite of individuals’ relationship with the MLB, whom they interpreted as members of ‘communities of fate’ inviting them to join as well. This dichotomy validates journalist Malcolm Browne’s claim about what individuals’ desire from the news. He contends that “Especially in America, we like to think of things in terms of good guys and bad guys... We

this may be true, the need for “the ‘inferiority; and ‘evil’ of the Other” to be proved is a legitimate question to which the answer seems to be no. The entrenchment of this social construct by repetition and Riggins observation that it “is so obvious that it does not need to be proved” support this claim.

love to see everything in terms of black and white, right and wrong, truth versus lies” (quoted in Moeller 1999, 14). Individuals in the ‘Us’ community now identify themselves as the good guys, the right ones, the side of truth and align themselves with the MLB representatives and the members of the ‘communities of fate’; the Chinese ‘Other’ who withheld secrets and already serves as an icon for disease validates these associations as the ‘Other’ is the negative counterpoint to all the virtues of the ‘Us’ community.

Even historically, the Chinese ‘Other’ has been a target of popular resent and blame for both physical and social contagions (see, for example, Glassner 1999, 135 and Gordon 1994, 25).⁸⁸ This is again the case during the SARS epidemic. For instance, the *Spectator* (UK) later describes SARS as another iteration of “yellow peril” (10/1/05). In response, accounts expressing concern about the backlash that the Chinese-American population will suffer as a result of being branded as the ‘Other’ appear. The *New York Times* offers a historical perspective and discusses empirical examples of how “fear of SARS can degenerate into a generalized antipathy toward Asians,” saying:

In the late 19th century, anti-Chinese sentiment arose, fueled by a bad economy and workers threatened by an influx of cheap Chinese labor. Anti-Chinese propaganda tended to focus on issues of health and disease....Elements of the American press helped fan the flames, portraying the Chinese as an unsanitary and dangerous race. An editorial in The Santa Cruz Sentinel in 1879, for example, described the Chinese as "half-human, half-devil, rat-eating, rag-wearing, law-ignoring, Christian-civilization-hating, opium-smoking, labor-degrading, entrail-sucking Celestials...It is no wonder, then, that given this not-so-distant history Chinese-Americans are uneasy about the way in which people have responded to the threat of SARS. (*NYT* 5/21)

⁸⁸ Presenting a historical account of the Americans’ disgust with the Chinese ‘Other’ in periods of social stress, Glassner observes: “With an economic depression under way and 20,000 Chinese immigrants out of work, politicians, newspaper reporters, and union leaders all pointed to opium dens as evidence of the debauchery of Chinese men, whom they proposed to exclude from jobs and further immigration....as popularly portrayed, opium dens were squalid places in which wasted men fought with one another and defiled white women and children. “What other crimes were committed in those dark fetid places when these little innocent victims of the Chinamen’s wives were under the influence of the drug, are almost too horrible to imagine,” Samuel Gompers, president of American Federated Labor (the AFL), wrote in a pamphlet titled *Some Reasons for Chinese Exclusion*” (Glassner 1999, 135).

Whether this account achieves its goal is a valid question. In referencing historical accounts and rekindling latent fears of the Chinese ‘Other’ as diseased, this article might actually motivate the ‘Us’ community to separate from the Chinese ‘Other’. Moreover, readers might perceive these descriptors to be valid: as the cause of SARS, the Chinese ‘Other’ could be “half-devil” and, in keeping the virus a secret, is “law-ignoring” and potentially “Christian-civilization hating” as the disease, perhaps understood by some as the Fourth Horseman of the Apocalypse, threatens to plague ‘Us’.

Not all of the news regarding the Chinese ‘Other’ is negative or distancing. Occasionally, newspapers attempt to suggest the irrationality of avoiding Chinatown or the dangers of discriminating against people of Oriental decent because of SARS paranoia (see, for example, *USA* 5/1; *NYT* 5/21). Yet these accounts were only a fragment of the accounts about this ‘Other’. Validating prior scholarship with empirical data, SARS was yet another case when, “Although there [were] some genuine attempts by certain journalists to cut through stereotypical portrayals [of the Other], they usually [were] overwhelmed by the ubiquity of dominant discourses that provide the frame within which public discussions take place” (Karim 1997, 156). The reality is that, being preserved by repetition and in popular culture, the use of the ‘Other’ as a means of understanding and coping with crisis has become unavoidable, particularly since communities’ understanding of their own identities is inextricably tied to their understanding of the ‘Other’ (Connerton 1989, 153; Riggins 1997, 6). The security of perceived distance from a threat that ‘Othering’ provides causes it to be one of the news media’s most frequent methods of ‘comforting the afflicted’.

To facilitate separation of the ‘Us’ community from the ‘Other’, the news media offer depictions of the ‘Other’ as irrational. Recognizing this general protocol, Riggins notes that

“Characterizing Others as odd or irrational is a powerful strategy of exclusion used by a dominant majority that sees itself as normal and rational” (1997, 17). The news media’s reports on Hong Kong’s mask culture, a dramatic overreaction by the ‘Other’, is one example of this. Additionally, the *USA Today* exhibits the overreaction of the ‘Other’ by reporting that the famously crowded Beijing has become “a veritable ghost town” and that “you could have fired a cannon down the pedestrian walkway without hitting anything other than air” (4/29). Accounts of the draconian measures installed by Singapore’s government also depict the irrationality of the ‘Other’. Moreover, the irrationality of the other comes to light in news media accounts attempting to distinguish ‘Us’.⁸⁹ For instance, the *Toronto Star* offers an account of an event in China, saying:

The school attack is the first reported instance of civic violence directly associated with SARS. More conflict appears possible as China's government -- used to treating the public, especially in rural areas, in a highhanded fashion -- applies stringent measures to contain the disease and runs up against social tensions and the fast-spreading fear of SARS. (4/29).

Depicting these people as unruly and out of control suggests to the ‘Us’ community that while the ‘Other’ remains diseased and confused, they have means to cope with the experience and can continue to function in civil society, refraining from raising the sort of upheaval that would introduce further chaos into a frightening situation.

Reading these accounts, members of the ‘Us’ community are likely to respond to the crisis in a fashion dissimilar to the ‘Other’ to distinguish themselves; in doing so, these individuals will recognize themselves as normal and rational. Additionally, these individuals may alleviate their fears this way: realizing that the ‘Other’ is in a state of fear, they may reject their fears as irrational or abnormal because of their identification with the ‘Us’ community,

⁸⁹ The Chinese are not always the other. In fact, Ireland bans Canadians from the 2003 Special Olympics out of fears of SARS (*Star* 6/7).

which they can understand as necessitating this means of distinction from the ‘Other’. Numerous descriptive accounts appear in the news coverage to express the fears of the ‘Other’. For instance, the *New York Times* reports:

In the village of Yuzhuang, about 11 miles north of Beijing, one entrance was blocked today by several vigilant residents, some carrying spray bottles of disinfectant. Another entrance was barricaded with a large pile of branches, freshly cut for the emergency, while a third small lane, blocked by a pipe, was patrolled by a lone man who wore a protective mask... [another guard villager said] “we don’t want any outsiders to bring the infection in. (4/28)

The villagers’ paranoia also appears in the *Washington Post*; the presence of these articles frames the Chinese as somehow backward, erecting feeble barricades and operating in quaint ways:

The corn farmers were dressed in camouflage and sitting in the dark on the side of the road, their unshaven faces barely visible in the dim light cast from the doorway of a small shack. When a jeep tried to turn off the highway, they jumped up and ran into the road to block it. “You can't go this way,” shouted Qiao Pingjia, 52, a burly fellow waving a stick with a piece of red cloth tied to one end. This was the way to Xinbaimiao village, he said, and visitors were no longer welcome. Spurred to action by village officials, residents had set up 24-hour checkpoints to keep out people who might be carrying the SARS virus. “We won't even let our relatives in... We're afraid... We're afraid of dying.” (6/8)

Similarly, the *Boston Globe* offers accounts of individuals, including one Chinese man who claims, “So if I get SARS, I can only wait for death,” speaking with a sort of fatalism that might have been warranted in the earliest coverage but was out of place by June 1st, when it appeared in the *Globe*. The *Mirror* also reports madness in China by claiming that “Thousands fled Beijing [as] China allegedly imposed martial law over the SARS epidemic” (6/18). In this case, it is not only the ‘Other’ but the ‘Other’ community that seems irrational and odd.

The *Boston Herald* confirms for the ‘Us’ community that a measured reaction is all that the threat warrants from ‘Us’, reporting that “SARS continues to scare the living daylights out of us, even though catching it remains an exceedingly remote possibility for most of us here”

(5/13).⁹⁰ Furthermore, the *Herald* presents a crucial distinction when it notes that “catching [SARS] remains an exceedingly remote possibility for most of us here”; the *Herald*, a tabloid, identifies geographic communities, noting that ‘Us’ in Boston are safe while implicitly suggesting that the ‘Other’, the source of the disease, are still under threat. This dichotomy also repeats the recommendation of maintaining physical distance from the ‘Other’ since the ‘Us’ group is safe here yet would be under threat if in the proximity of the ‘Other’.

Another dominant component of this ‘interpretive package’ details how the ‘Other’ comports itself in contrast to ‘Us’. Discussing the media portrayals of the Chinese in the news about SARS, one scholar notes that “The disease furthered the perception of the Chinese as filthy, dirty, unhygienic, as the ‘backward yellow race’ because of their filth and habits, like spitting in the street and poor oral hygiene and not washing their hands” (Sharma 2004, 336).

The *USA Today* confirms this when discussing the conditions in China:

The casual attitude toward health isn't unusual in China. This remains a country where men and women enthusiastically spit in public, even in affluent cities such as Beijing or Shanghai. People eat from common plates and male drivers urinate in plain view by the side of almost any road. (10/29)

These behaviors characterize the Chinese as the ‘Other’ as they contrast appropriate, Western behavior; as Tomes notes, “The ability to conform to “antiseptic” standards of cleanliness [differentiates] rich from poor, educated from unschooled, American-born from foreign-born,” (1998, 11).⁹¹ Spitting, in particular, became a focus of the news. As the *Ottawa Citizen* reports, “virtually every person we encountered [in Beijing] was wearing a mask... Public horking –

⁹⁰ Placing the SARS statistics in the context of other potential hazards offers perspective. This aids the public’s ability to assess risks appropriately. Coincidentally, Kahneman and Tversky, who discussed the public’s inability to assess risks properly when facing novel, uncertain situations, wrote an article in 1982 that asks readers to “imagine that the US is preparing for an outbreak of a rare Asian disease, which is expected to kill 600 people” (1982). The article focuses on the psychology of preferences and discusses irrational choices in such a situation.

⁹¹ To demonstrate the American standard of hygiene and individuals’ focus on cleanliness and sanitation in the ‘Us’ community, multiple news articles appear discussing appropriate hygiene habits. The articles highlight a contrast in standards between ‘Us’ and the ‘Other’ and in doing so emphasize the separation between the two groups. For examples, see *USA Today* 9/25; *Washington Post* 12/18.

once a socially-acceptable maneuver in China, even for women – all but disappeared” (5/10). Interpreting this against other accounts of the crude behavior of the ‘Other’ and even the *Citizen’s* suggestion of their past mannerisms, individuals would likely recognize the Chinese ‘Other’ trying now to emulate the American standard.⁹² The *International Herald Tribune* makes the failure of the Chinese in reaching these standards explicit when it discussed the existence of a “deliberately lowered ‘Chinese standards’” (5/2).

Presenting the Chinese ‘Other’ as slowly developing toward the standards America reached long ago further distances the ‘Other’ from us. For instance, Tomes notes that “most nineteenth-century Americans showed little concern about those forms of casual contact with other people... They coughed, sneezed, and spit with blithe disregard for the health consequences of those around them” (1998, 3). Comparing this description to those of the Chinese at the time of the SARS epidemic, nineteenth century Americans appear here to be equivalent, at least in terms of expected Western standards of manners and decency, to the Chinese ‘Other’. This construction, drawing comparisons and finding similarities between ‘Others’ and distant predecessors of the ‘Us’ community, is a common form of denigration (Fabian 1983; Riggins 1997).⁹³ This form of identifying the ‘Other’ as less developed than ‘Us’ also appears in other contexts, including discussions of political systems not modeled after the American representative democracy. For instance, the *New York Times* claims that SARS will be to China what the Chernobyl disaster was to Russia, an incident that rattles the foundations of an

⁹² Rumors of the strange behaviors of the Chinese also became a means for ‘Othering’. As the *New York Times* reports, “An Internet site devoted to collecting urban legends and rumors, Snopes.com, has been fielding a barrage of e-mail messages about the illness, many of them anti-Chinese (that the disease originated with people in Hong Kong eating dogs that had it, that workers at Chinese restaurants have the disease, and so on)” (4/6).

⁹³ Within the coverage, the Chinese population does this to themselves, forming communities within themselves. For instance, the *New York Times* reports that “The villagers are unscientific, and trusted rumors” according to local officials attempting to distinguish themselves as more Western than their compatriots (4/29).

oppressive, communist political institution that shrouds itself in secrecy and that will result in sweeping reforms (5/19).

Yet another important part of this ‘interpretive package’ is the framing of the Chinese ‘Other’ as a source of disease. Similar to the other aspects of the news, this relies on historical references: Western societies still perceive the East as the source of epidemic scourges, including plague and cholera (Bourdelaïs 2003, 77). As a result of this embedded association, the ‘Othering’ that appears in the news separates ‘Us’ from the ‘Other’ by identifying for ‘Us’ locations to avoid, specifically Chinese restaurants and Chinatowns, and by mentioning the exotic culinary tastes of the Chinese ‘Other’, which the ‘Us’ community is likely to find repulsive. Both these techniques have historical basis: during the Foot-and-Mouth epidemic in England in 2001, the *New York Daily News* blamed “meat probably smuggled from the Far East and served in a Chinese takeout in northern England as the most likely source of the foot-and-mouth epidemic devastating Europe” (3/27/01). While this article offers no supporting evidence and uses mitigating language, the very presence of this claim demonstrates an animosity towards the Chinese ‘Other’ and how ready the news media is to blame them. Such references become iconic and understood as true due to their repetition and the public’s acceptance of their veracity due to their consistent recurrence.

Based on this framing, members of ‘communities of fate’ acted collectively and avoided Chinese restaurants and Chinatowns. This physical distancing was one way these individuals alleviated their fears: whereas the ‘Other’ was the source of the disease, avoiding the ‘Other’ seemed to be a valid means of avoiding infection. The toll of this collective action, functionally a boycott of these Chinese businesses, was almost immediately evident and severe. The epidemic had been known widely for only two weeks before the *Toronto Star* reports that the

epidemic could ruin Toronto's Chinese businesses and their owners (3/29). The *Cleveland Plain-Dealer* recounts the narrative of a Chinese restaurant owner who simply says, "Nobody comes here...I don't know what I should do...We're all healthy" (4/9). The *New York Daily News* later presents pleas from Mayor Michael Bloomberg and Senator Chuck Schumer calling on New Yorkers to aid the city's struggling Chinese businesses (4/28); the desperation in this and other accounts demonstrates the power of 'Othering' as a coping tool that is also a damaging social construct.

Noting that the most severe effects of SARS seemed to be its devastation of Chinatowns' economies, the *New York Daily News* took to calling the disease the "Chinatown Syndrome" (5/1). The *USA Today* address the effects of 'Other' in a similar manner:

Here, in tiny Chagrin Falls, SARS had struck. Well, not really SARS, but the fear of SARS. Actually, there were no recorded cases of severe acute respiratory syndrome anywhere near here, but as the owner of the restaurant noted, the headlines had taken their own toll. Never mind that we were in the Midwest; this Chinese restaurant was seen as uncomfortably close to China and the epicenter of the latest pandemic. Twenty miles west, in Cleveland proper, people were avoiding an exhibition of Chinese art and culture like, well, the plague. Even in a place as removed as this, the contagion of fear is rampant, a collective and irrational apprehension that is every bit as unsettling as SARS itself....Philosopher Michel de Montaigne was right: Fear should be placed at the top of the list of things to be feared...Fear is a kind of dirty bomb we unleash on ourselves rendering our own lives uninhabitable. (5/1)

While the *USA Today* attempts to suggest that the response to SARS has been overdone, members of the 'communities of fate' would reject this charge; they seem to have found 'Othering' to be a satisfactory method to alleviate their fears and are not likely to give much credence to these criticisms. Moreover, the very fact that the process of 'Othering' has taken hold in Chagrin Falls, Ohio to the extent that is seemingly has goes to suggest the importance and prevalence of 'Othering' as a means of alleviating fears for members of the 'communities of fate'.

The news about the culinary tastes of the Chinese furthers the separation of ‘Us’ from the ‘Other’.⁹⁴ As the *USA Today* describes:

Exotic creatures headed for the dining tables of southern China are slaughtered [in markets] within splatter distance of workers' dinner trays. This wild animal market, which stocks pigeons, dogs, cats, snakes and species too numerous to list, isn't just a Noah's ark for those who see a rat and think "entree." Markets like Xinyuan are where scientists believe the deadly SARS virus may first have jumped from animals to humans. The markets cater to the unusual culinary tastes of Guangdong province residents, famed for a willingness to eat anything. (10/29)

This account is hardly alone in describing this sort of scene in China. Furthermore, the *New York Times* reports that the Chinese are continuing the same practices that scientists believe caused SARS to arise in the first place (8/14). The *USA Today* reports the same, also indicating that the Chinese are not worried about a reemergence of SARS or the appearance of another disease epidemic (12/29). This lack of concern points to a perceived difference between ‘Us’ and the ‘Other’: the ‘Us’ community believes in response that SARS does not worry about the ‘Other’ because they cannot understand its implications, because they are disgusting, and because they lack vigilance in controlling disease, continuing to pose a serious disease threat to ‘Us’.

Thus, individual members of ‘communities of fate’ have found two ways of alleviating their fears. First, these individuals can imagine themselves joining a community that does not fear SARS; the MLB is an example of such a community. Second, these individuals can imagine themselves joining a community that distances themselves from fears of SARS by identifying an ‘Other’ and distancing themselves from that ‘Other’; the treatment of the Chinese in the news exemplifies this. In both these cases, the ‘interpretive packages’ enabled individuals to interpret the news in such a way as to facilitate membership in ‘communities of fate’, resulting in the

⁹⁴ While many of these accounts appear after the epidemic as retrospective examinations of how SARS came to be, their presence entrenches the ‘Us’ and ‘Other’ dichotomy, particularly in reference to the Chinese ‘Other’ and disease. If nothing else, this will shape the understanding of future novel infectious diseases epidemics.

news 'comforting the afflicted' and completing the cycle that began when the news of SARS and the epidemic of fear first broke.

Chapter Five:
Hitting Where It Actually Hurts: SARS as an Economic Contagion

While the cycle of ‘afflicting the comfortable’ and ‘comforting the afflicted’ has completed, the news coverage does not end here. The news media cannot simply end it here: to do so would implicate them as ‘the boy who cried wolf’; the public would brand the media as fear mongers, a label that would carry wide ranging implications for the industry. To prevent such claims, the news media devote significant coverage, particularly towards the end of the epidemic, to the economic implications of SARS and its concurrent epidemic of fear. This becomes the lasting memory of SARS, as the news media frame the disease as an economic crisis caused by irrational fear which, as the previous chapters suggest, resulted from the public’s response to what they encountered in the news.

The news media’s recognition that the public had returned to a level of comfort and now had a hankering for another scare was immediate. As *New York Times* columnist William Safire writes: “Worried about having nothing new to worry about? Upset that Baghdad turned out to be a cakewalk and SARS didn’t lay everybody low? Relax; I’ve got three piping-hot economic worries to satisfy our lust for fresh anxiety” (*NYT* 5/19).

Categorizing the news articles of the Toronto newspapers about the SARS epidemic, a report from the Robarts Centre at York University states that the Toronto news media devotes nearly a quarter of its coverage throughout the course of the epidemic to “economic” issues (Drache, Feldman, and Clifton 2003). At certain times, this coverage peaks and as many as half of the articles discuss “economic” issues. These peaks occur later on; at the beginning, the plurality of the articles discussed “health” and few if any addressed “economic” issues. This report also observes that the coverage in the American media is similar: examining the *New York*

Times and *USA Today*, nearly a quarter of their articles pertaining to SARS are on “economic” issues, with their appearance increasing as the viral epidemic nears its conclusion.

Even before Safire’s article, the reality of the SARS epidemic was becoming abundantly clear as uneventful days rolled by: SARS was actually a minor health concern that produced, along with an epidemic of fear, a severe economic malaise. The *New York Times* said this outright in an article entitled “The Cost of SARS,” reporting that, “SARS is not just a health problem. As fear and shutdowns curtail travel, it is devastating the Asian economy” (5/1). Here the *Times* even wonders whether “an economic argument will carry more weight” in convincing the public to move beyond its fears. The article also announces the need for the world to invest in public health to prevent a future situation similar to SARS and to reduce the burden infectious diseases currently place on the economy.

Importantly, the economic slump during the SARS epidemic is not due to lost productivity caused by illness. As the same *Times* article notes, the economic downturn occurred because the SARS kept people at home and discouraged commerce, as business owners in Chinatowns across North America can attest. The *Times* itself explains the economic slump by referring to SARS-related uncertainties: the economic slump was destined to continue as long as the disease persisted and as long as the public’s fears lingered, two variables that were impossible to predict (4/28).

Discussing diseases in economic terms is nothing new (see Tomes 1999; 2002). Recent epidemics of Foot-and-Mouth disease and Creutzfeldt-Jakob disease (Mad Cow) among cattle in Europe, as well as coverage of the economic impacts of tuberculosis, malaria, and other infectious diseases that public health efforts still have not eradicated, all prepared the news media to present this coverage. In particular, these earlier instances of disease reporting allowed

the news media to hone their abilities to produce disease narratives, explaining the economic impact of disease by using an individual or community whom they present in a manner that will provoke a response. Reactions to the Foot-and-Mouth epidemic involved heart-wrenching narratives of Dutch farmers falling into destitution, forced to sell farms that their families had owned since the 13th century in order to survive after the government seized and slaughtered their livestock (*NYT* 4/6/01). Articles regarding upheaval in specific industries also appeared with regularity. During the Foot-and-Mouth epidemic, Great Britain found itself without tourists; the *USA Today* presented a narrative about a struggling travel agent who noted that “It’s like the prettiest girl at the school suddenly finding out she needs date to the prom” (5/18/01).

Similarly, Toronto found itself as “a brand in crisis” due to fears of SARS and an associated stigma (*Star* 4/26): “thanks to SARS,” Toronto businesses had “gone into meltdown,” a startling reference linking Toronto to Chernobyl (*Star* 4/26). Narratives from the perspectives of the citizens, press, and politicians of Toronto express their frustrations at their city’s state throughout the SARS epidemic, speaking of themselves as the culture capital of Canada yet finding themselves deserted by both stars – Billy Joel, Elton John, Jennifer Lopez and others all skipped town – and tourists (*Star* 4/19). As the spokesman for City of Toronto remarks, “the real battlefield [against SARS] is on the PR side of things” (*Star* 4/26). The *Toronto Star* printed accounts of individuals and communities who proffered pleas to their fellow Torontonians to invite guests, to bring outsiders into town and to show them the city is safe and is still a great place to do business (5/3; 5/10). Eventually, recognizing that the tourism industry remained in a rut and showed no signs of recovery, the *Toronto Star* took a radical approach, suggesting that tourists come now since all the desirable amenities had returned while other tourists stayed away;

the *Star* offered narratives from a few vacationers who had taken this approach, framing them as brave and admirable people for having faith in Toronto after the crisis (6/14).

Columnists for the *Star* became increasingly defensive about their city during this time as well. Addressing its economic struggles and the lack of American tourists, formerly the lifeblood of the industry in Toronto, one writer suggests that the people of Toronto boycott American products and cancel their trips to America in retaliation (*Star* 5/3). Yet the reason Americans were avoiding Toronto was simple and seemingly logical: having seen a glut of articles on the SARS crisis in Toronto, Americans, generally averse to putting themselves in harm's way, decided to steer clear of the one place in the western hemisphere where deaths from SARS had occurred. The militaristic language and other figurative language in the news media coverage that stimulated American's fears certainly did not help either: while many individuals may have returned to a state of 'comfort' after joining the 'community of fate', the American public understood its safety in terms of the distance it kept from the SARS-riddled 'Other'. As the *Star* notes, quoting a Toronto tour guide, "They [Americans] think we're all dropping dead" (6/14); this is because the language the news media use to present the situation in Toronto, particularly the headlines that scream danger, convince Americans to stay away (*Star* 4/26). The *Star* sums up the situation by saying, "the tourists aren't here to listen to reason" (4/26). The reporting of the news media precludes that possibility.

Numbers became one way for the news media to make SARS matter and warrant the attention they gave the disease. Moreover, the reported numbers and the frames used to communicate them are startling enough to achieve their desired effect. For one, the CNN anchor Lou Dobbs reports in the *New York Daily News* that emerging diseases pose a greater risk to America than global terrorism, nuclear threats, the rising trade deficit or any commonly

recognized danger; he supports this assertion with the fact that, “The World Health Organization has estimated the global cost of SARS alone to be more than US\$30 billion” while, “JP Morgan Securities Canada estimates that Toronto is losing US\$30 million a day as a result of its SARS outbreak” (6/22). The *New York Times* corroborates Dobbs’ sentiment, noting that “Serious people know that germs pose a far greater threat to mankind than terrorism” and suggesting that, “macroeconomic recovery may fall victim to microbe economics” as SARS and, “fear of the disease has paralyzed much business,” crippling the travel industry and having a noticeable effect on the economy at large (4/4). Contrasting a mere 774 fatalities and 8,096 cases throughout the course of the epidemic, the economic figures validate fears of SARS: while the death toll does not seem to warrant getting all hot and bothered, particularly when the news media report that the number of deaths due to malaria alone on any given day dwarfs this, the economic impact statistics seem substantial, especially when considering that they stand alone and that the public is not given any other disaster costs to contrast the SARS experience with.⁹⁵

Statistics are the quantitative measure of SARS impact. While these figures provide one means of understanding the economic impact of SARS, they seem impersonal; while individuals realize this impact is severe, it is hard for them to fathom how these gaudy numbers actually impact them. Perhaps Stalin’s maxim about witnessing death, that “one death is a tragedy, one million is a statistic” applies to this context as well: this logic about numbers suggests that stories of individuals’ financial struggles, similar to the accounts of individuals’ fears of death due to

⁹⁵ To place these cost figures in context, comparisons to other crisis situations reveals that, while a significant expense, SARS is still a lesser evil. Early estimates reported that damage from Hurricane Katrina in 2005 could exceed US\$25 billion in costs to insurers paying out claims resulting from the incident (*BBC News* 9/14/05). Topping this figure, the *Christian Science Monitor* reported that, “In one short week, [the 9/11 attacks] have taken an astonishing financial toll: perhaps \$60 billion already in direct costs to the US economy – plus well over \$600 billion in stock-market losses (Scherer 9/20/01).

SARS, might more effectively communicate with readers, appealing in terms more in line with their sensibilities.

This proves to be the case as the news media share narratives from two perspectives to provide a qualitative component to the economic news about SARS. One of these perspectives views the economy as a single unit that represents the diverse enterprises and industries it encompasses, an admitted generalization that conveniently creates a shared experience for the public: as participants in this economy, the impact of SARS on the economy is impossible for any individual to escape. Overwhelmingly, these narratives tell a bleak tale. Repeating figurative language uses prevalent throughout the coverage of SARS, the news media convey the sense that the economy suffers a physical beating from SARS. The *USA Today* observes that, “The tiny microbe that has captured the world’s attention has the power to belt the Chinese economy...Financial markets in Hong Kong and China have already been hurt” (4/21). The *New York Daily News*, canvassing Asian business leaders while surveying the damage, reports that, “Chinatown is seriously wounded” (4/29). “Flu hits ailing travel firms” is the word from the *Daily Star*, which goes on to cite an expert from Morgan Stanley who says that, “SARS may well be the tipping point for a global economy that has been hit by war and geopolitical uncertainty” (4/5). The *New York Post* pulls no punches either, reporting under the headline, “Outbreak could infect reeling US economy” that, “SARS could deliver a devastating blow to the already sputtering US economy” (4/25).⁹⁶

⁹⁶ A minority report does exist in regards to the economic impact of SARS. The *Toronto Star* reports that Asian economies are “proving remarkably resistant to the virus” as “Asia’s growth juggernaut is too robust to be sidelined by SARS fever. Neither the disease itself or the psychological fallout will sap the economy’s health for long” (5/10). The *Star* goes on to blame the news media for portraying a false picture, claiming that “the picture of panic is deceptive. SARS may be spreading sickness, but Asia’s economy is emphatically not the sick man of the globe” and, citing Deutsche Bank’s chief economist for Asia, that “SARS is emerging as the excuse on which we’re going to hang any bad news for the next few months.” This view, however, is decidedly in the minority and the article itself admits that “it has hardly been painless, and SARS is still leaving scars.”

The news media go as far as to describe SARS as contributing to the economy's death. The *Boston Herald* comments that "the epidemic's uncertainty 'kills' markets" as "SARS scare grips the region and the world" (4/25), and the *New York Daily News* shares the views of Morgan Stanley's chief United States economist, who forecasts a global recession and says that "SARS is 'just another nail in the coffin for the world economy'" (4/6). The quantitative data and these qualitative reports from the news media and experts confirm that the economy suffers from SARS in the way scientists and health officials initially predicted that people would. The news media perform this transition seamlessly, still using the same trope, the language of physicality, to convey the same message even though the economy as a physical body is an abstraction. Surprisingly, the trope proves more effective addressing the economic impacts than the health effects of SARS. When reporting on SARS as physically imposing itself on the public, individuals can respond by taking individual actions to protect themselves or at least comfort their fears; wearing a mask or stockpiling canned goods exemplifies this behavior. The key to these actions is that individuals perceive themselves as in control and with the option of taking steps to protect themselves. When the economy at large is struck and might suffer similarly – when the economy might die – individuals are without a means of rectifying the situation or alleviating fears. Individuals rely on the economy for survival and now might realize their dependence on forces outside their control; this awakens them to uncertainty, resulting in fear.

While this is speculation, it seems possible that, in response to this newfound uncertainty, individuals in this situation take the same steps they did when first facing uncertainty about the viral agent of SARS. If nothing else, parallelism in the public's experience of coverage that seeks to 'afflict the comfortable' suggests this possibility. If this is the case, individuals may turn to the news media and believe experts and business leaders to understand the situation; when these

authorities comment on the economy's beaten and impoverished state, individuals panic: they realize that a struggling economy equates to lower pay, fewer jobs, and threatens their financial well-being. Thus, this language of physicality can leave the public with a greater sense of helplessness and, after having calmed its fears of SARS as a health threat, it appears that the news media return with the same language under a different guise and bestow on the public a new understanding of how it should fear, and remember, SARS.

The second economic perspective that the news media use for qualitative assessments of SARS is that of the individual, offering personal narratives to substitute for accounts of the economy at large. The *New York Times* practices this form of news communication frequently during the SARS epidemic, showing both the economic blight SARS leaves individuals in and the chance for profiteering thanks to the epidemic. Offering a lengthy discussion of SARS and its effect on society in the May 18th Sunday edition, the *Times* presents a series of narratives on individuals affected by the epidemic. These include the stories of Tony Retkowski, a flight attendant who was laid off in a downsizing effort by the airline industry struggling to stay aloft while SARS grounded travelers, and Harjab Uppal, a Toronto cabbie who was failing to make ends meet as he waited in his car each passing day for clients to finally show and request his services. Later in the week, the *Times* addresses the economic troubles in New York's Chinatown, as stores slash prices and lay off workers yet still find no relief; a store owner tells the *Times* that, "Even vegetables dropped," expressing his exacerbation with both his cut-rate prices and decreased sales (5/23). These narratives, depicting a few among the many who suffer from SARS yet do not appear in the case or mortality counts, communicate to the public the real damage of SARS.⁹⁷

⁹⁷ Stories of hope also emerge: the *Times* describes a Hong Kong orchid shop manager who says that, eventually, "everyone will not be afraid – everything will be good" and people will return to shop at his store (*NYT* 5/25).

Tangentially, an individual making a quick buck off the calamity and peoples' fears appears as an economic narrative that also demonstrates the reality of peoples' fear of SARS. For instance, the *New York Times* casts a light on the 'Other' and divulges an economic success story when offering an account from Mongolia. Bulgan Tsogoo, a vendor, is selling masks in a flea market; for him, "Business is going well" as he is doubling his daily earnings selling a hot item instead of footstools, his normal ware (4/20). This is despite there being no confirmed cases of SARS appearing in Mongolia as authorities were locking down the county to prevent importation of SARS. The reason for his sales success is the news media: the news media scare, even in Mongolia, had been effective and people became afraid enough to generate tremendous demand, willingly purchasing masks at marked up rates and producing an economic success story as a result. The inclusion of this account in the *Times*, and similar accounts in other papers, can legitimately be identified as signs of the news media gloating: their scare, initially designed to sell papers and produce profits for themselves, apparently achieved substantial trickle down effects seen the world over. Alternatively, these accounts might merely demonstrate the news media offering narratives that 'comfort the afflicted' in this cycle of economic coverage: stories of individuals realizing economic benefits from the SARS experience attenuate the coverage of SARS as an economic contagion by serving as a counterpoint to the accounts of those who face struggles.

Occasionally, articles also describe the economic crazes spurred by SARS, particularly those launched by rumors regarding simple SARS cures. Noticing claims coming from China that "Turnips 'Cure SARS'," the *Sun* reports that "Sales of turnips are rocketing in China because the veg is said to cure SARS. They are used in herbal remedies sold to treat severe acute respiratory syndrome. Wholesale prices of turnips in China's capital Beijing have shot up thirty

percent in a week amid fears over the deadly virus. Carrots, garlic and ginger are also included in the potions and street markets have been selling out” (4/16). In Hong Kong, yogurt sold out (*Sun* 4/3) and vinegar flew off the shelves as reports suggested that it could kill SARS and should be used as a disinfectant (*NYT* 5/2); this was deemed particularly important after scientists reported that common detergent failed to destroy the virus. Perhaps the most significant craze during the epidemic, especially in Asia, was the purchase and use of respiratory masks. Accessorizing with gas masks became fashionable, with multiple news sources commenting on the fashion trends and designer labels and knock-off brands and a burgeoning market for this protective gear; the same articles often noted as well that individuals were misusing the masks and were likely placing themselves at greater risks to contract SARS because of this misuse and the false sense of comfort they might get from using the mask, oblivious to their misuse. Commenting on the state of affairs, the *Mirror* reports that “Sales of gas masks have soared in Hong Kong after reports the killer SARS bug is spreading. Bleach and detergents, which doctors say can kill the bug (although this is later disproved), are the next hottest selling items after masks” (3/31).⁹⁸ These articles appeared primarily to entertain the American public, further distance ‘Us’ from the irrational ‘Other’, and to continue to establish SARS in the context of economic reporting rather than as a health concern.

The substantial economic struggle resulting from SARS gave the news media something to report. This became the means for the news media to save face: having generated a public panic, the news media needed some way to legitimize the impact of SARS to the public so as to avoid the brand of being ‘the boy who cried wolf’. The economic story that the news media

⁹⁸ Tomes (1999; 2002) details how medical professionals, even when providing incorrect information, can drive consumers’ economic decisions. Consumers are especially apt to respond to a doctor’s recommendations due to fears of mortality that drive them to action and the belief that, while the doctor’s information might be imperfect – evidence-based research claims that doctors provide patients with necessary and effective care only half the time – their own is even worse.

introduce and the figures they present to verify the economic significance of SARS achieve this effect and become the lasting memory of the SARS epidemic. This is actually quite appropriate: with a globalizing world economy that will surely face similar incidents in the future, the economic impact of emerging infectious diseases and their associated epidemics of fear presents an issue that will require everyone's acknowledgement and attention.

Epilogue:
Looking Back for Lessons while Awaiting Pandemic Flu

Everything is simply too much for any of us to understand. Mindful of our limitations, we turn to the news media to tell us what we need to know within a universe of information; as the *New York Times* puts it, we turn to newspapers for “All the News That’s Fit to Print.” Yet there is an inherent danger to this, one that often goes unrecognized. As Susan Moeller remarks, “What we know about the world is circumscribed by what the media are able to tell us – and choose to tell us – about the world” (1999, 17). Unless we relentlessly question what we read and unless we remember that the news media is not an impartial eye, that the news media is always filtering and framing events, another epidemic of fear is certain to erupt when the next infectious disease emerges.

There are two final notes of importance. First, the news media cannot create fear. The news media convey only those fears we already feel. As sociologist Frank Furedi notes,

[I]t is important to remember that the media amplify or attenuate but do not cause society’s sense of risk. There exists a disposition towards the expectation of adverse outcomes, which is then engaged by the mass media. The result of this engagement is media which are continually warning of some danger. But the media’s preoccupation with risk is a symptom of the problem and not its cause (1997, 52).

Peter Sandman concurs:

[While] dwelling on things that anger or frighten the public – that is, dwelling on outrage – helps the media attract an audience...The outrage industries do not manufacture outrage. They amplify it...When they try to arouse outrage about an issue that doesn’t actually bother people, they fail (3/21/06).

During the coverage of SARS, the news media did nothing more than rile our latent fears. Rather than blaming the news media for the epidemic of fear, perhaps we should try to understand our fears and understand the risks we face so that the news media cannot amplify them to levels disproportionate with reality.

Second, fear is not necessarily bad. Government officials and scholars recognize the importance and utility of fear as a tool for social control; both groups unequivocally acknowledge that, in a pandemic flu scenario, the most effective means to ensure public safety is social distancing, the politically correct term for quarantine. Most experts also agree that the best way, if not the only way, to achieve maximum isolation is a fear campaign that dwarfs anything the public has previously experienced. Obviously, such a campaign poses its own grave dangers and one hopes it is not a case of ‘the boy-who-cried-wolf’. At the outset of an emerging infectious disease outbreak, however, there is no way of knowing this.

When considering communication of risk and fear, what the public and the news media must guard against is allowing an epidemic of fear to take a life of its own and run amok long after the real threat is gone. This is a daunting task as the goal for the news must now be to produce responsible coverage that provides precise information and reports to the public an accurate assessment of the risk and potential severity of a situation.

Informing readers of the existence of an epidemic of fear and detailing how and why the news media direct the course of this epidemic through a cycle of coverage that afflicts the comfortable and then comforts the afflicted was the purpose of this thesis. In reaching its end, this study should serve as an efficacious vaccine for readers.

During the imminent occasion of the next outbreak, when a new viral agent spawns another epidemic of fear, the media will offer similar coverage and the public will experience the same fears and will engage in the same fear responses. Even those with the knowledge this thesis imparts, inoculated, will experience these fears and engage in these responses. Their response, however, will be measured as their symptoms are attenuated; they possess understandings of the workings of this epidemic that enable them to contain it.

And contain it and then cure it is what they must do.

Works Referenced

- Altheide, David L. *Creating Fear: News and the Construction of Crisis*. New York: Aldine de Gruyter, 2002.
- Atkin, Charles K. "Theory and Principles of Media Health Campaigns." In *Public Communication Campaigns*, edited by Ronald E. Rice and Charles K. Atkin. Thousand Oaks, CA: Sage Publications, 2001. p. 49-68.
- Baehr, Peter. "Social Extremity, Communities of Fate, and the Sociology of SARS." *European Journal of Sociology* 46 (2005): 179-211.
- Barber, Benjamin R. *Jihad vs. McWorld: How Globalism and Tribalism are Reshaping the World*. New York: Ballantine Books, 1995.
- Barnes, Ethne. *Diseases and Human Evolution*. Albuquerque, NM: University of New Mexico Press, 2005.
- Barth, Gunther. *City People: The Rise of Modern City Culture in Nineteenth Century America*. London: Oxford University Press, 1980.
- Bennett, W. L. *News: The Politics of Illusion*. New York: Longman Publishers, 1996.
- Bergeron, S. L. and A. L. Sanchez. "Media Effects on Students during SARS Outbreak." *Emerging Infectious Diseases* 11 no.5 (2005): 732-5.
- Blakely, Debra E. *Mass Mediated Disease: A Case Study Analysis of Three Flu Pandemics and Public Health Policy*. Lanham, MD: Lexington, 2006.
- Bourdelais, Patrice. *Epidemics Laid Low: A History of What Happened in Rich Countries*. Translated by Bart K. Holland. Baltimore, MD: Johns Hopkins University Press, 2003.
- Brug, J., A. R. Aro, A. Oenema, O. de Zwart, J. H. Richardus, and G. D. Bishop. "SARS Risk

Perception, Knowledge, Precautions, and Information Sources, the Netherlands.”

Emerging Infectious Diseases 10 no. 8 (2004): 1486-9.

Burkhart, Ford. *Media, Emergency Warnings, and Citizen Response*. Boulder, CO: Westview Press, 1991.

Burnet, Macfarlane. *Natural History of Infectious Disease*. Cambridge, UK: Cambridge University Press, 1962.

Carbó, Teresa. “Who Are They? The Rhetoric of Institutional Policies Toward the Indigenous Populations of Postrevolutionary Mexico.” In *The Language and Politics of Exclusion: Others in Discourse*, edited by Stephen Harold Riggins. Thousand Oaks, CA: Sage Publications, 1997. p. 88-108.

Centers for Disease Control and Prevention. “Severe Acute Respiratory Syndrome.” Centers for Disease Control and Prevention. Last updated October 6, 2004. Accessed March 17, 2007. <http://www.cdc.gov/ncidod/sars/>.

Chan, L. C. Y, B. Jin, R. Rousseau, L. Vaughan, and Y. Yu. “Newspaper Coverage of SARS: A Comparison among Canada, Hong Kong, Mainland China, and Western Europe.” *Cybermetrics* 6/7 (2002/3): 1-12.

Chiasson Jr., Lloyd. “The Japanese-American Enigma.” In *The Press in Times of Crisis*, edited by Lloyd Chiasson Jr. Westport, CT: Greenwood Press, 1995. p. 137-152.

Chiu, W., J. Huang, and Y. Ho. “Bibliometric Analysis of Severe Acute Respiratory Syndrome-related Research in the Beginning Stage.” *Scientometrics* 61 no.1 (2004): 69-77.

Cliff, Andrew, Peter Haggett, and Matthew Smallman-Raynor. *Deciphering Global Epidemics*. Cambridge, UK: Cambridge University Press, 1998.

- Conboy, Martin. *Tabloid Britain: Constructing a Community through Language*. New York: Routledge, 2006.
- Connerton, Paul. *How Societies Remember*. Cambridge, UK: Cambridge University Press, 1989.
- Cook, Robin. *Outbreak*. New York: Berkley Books, 1987.
- Crichton, Michael. *The Andromeda Strain*. New York: Avon Books, 1969.
- Crichton, Michael. *Prey*. New York: Avon Books, 2002.
- Crichton, Michael. "Why Science is Media-dumb." Presented to American Association for the Advancement of Science, January 25, 1999.
<http://www.abc.net.au/science/slab/crichton/story.htm>.
- Curran, James and David Morley, eds. *Media and Cultural Theory*. New York: Routledge, 2006.
- Davis, Cynthia J. *Bodily and Narrative Forms: The Influence of Medicine on American Literature, 1845-1915*. Palo Alto, CA: Stanford University Press, 2000.
- Diamond, Jared. *Guns, Germs, and Steel: The Fates of Human Societies*. New York: W. W. Norton & Company, 1997.
- Drache, Daniel, Seth Feldman, and David Clifton. "Media Coverage of the 2003 Toronto SARS Outbreak: A Report on the Role of the Press in a Public Crisis." *Robarts Centre Research Papers*. Toronto, CA: Roberts Centre for Canadian Studies, York University. Published October 29, 2003. Accessed March 17, 2007.
http://www.yorku.ca/robarts/projects/global/papers/gcf_mediacoverageSARSto_ppt.pdf.
- Durkheim, Emile. *The Elementary Forms of Religious Life*. Translated by Karen E. Fields. New York: Free Press, 1995.

- Edgar, Timothy, Mary Anne Fitzpatrick, and Vicki S. Freimuth, eds. *AIDS: A Communication Perspective*. Hillsdale, NJ: Lawrence Erlbaum Associates, 1992.
- Eid, Mahmoud. "Lost in Transit: Narratives & Myths of the Crash of Egypt Air Flight 990 in Egyptian and American Newspapers." In *Crisis/Media*. Delhi, IND: The Sarai Programme – Centre for the Study of Developing Societies, 2004. p. 130-137.
- Enemark, Christian. "Securitizing Infectious Diseases." In *Ethics and Infectious Disease*, edited by Michael J. Selgelid, Margaret P. Battin, and Charles B. Smith. Malden, MA: Blackwell Publishing, 2006. p. 1-10.
- Fabian, Johannes. *Time and the Other: How Anthropology Make its Object*. New York: Columbia University Press, 1983.
- Fairclough, Norman. *Discourse and Social Change*. Cambridge, MA: Polity Press, 1992.
- Fairclough, Norman. *Media Discourse*. New York: St. Martin's Press, 1995.
- Fauci, Anthony S., Nancy A. Touchette, and Gregory K. Folkers. "Emerging Infectious Diseases: a 10-Year Perspective from the National Institute of Allergy and Infectious Diseases." *Emerging Infectious Diseases* 11 no. 4 (April 2005).
- Freidman, Lester D., ed. *Cultural Sutures: Medicine and Media*. Durham, NC: Duke University Press, 2004.
- Furedi, Frank. *Culture of Fear: Risk-Taking and the Morality of Low Expectation*. London: Cassell, 1997.
- Gamson, William and Andre Modigliani. "Media Discourse and Public Opinion on Nuclear Power: A Constructionist Approach." *American Journal of Sociology* 95 (1989): 1-37.
- Garcia, Mario R. *Contemporary Newspaper Design: A Structural Approach*. 2nd ed. Englewood Cliffs, NJ: Prentice Hall, 1987.

- Garrett, Laurie. *The Coming Plague: Newly Emerging Diseases in a World out of Balance*. New York: Farrar, Straus, and Giroux, 1994.
- Glassner, Barry. *The Culture of Fear: Why Americans Are Afraid of the Wrong Things*. New York: Basic Books, 1999.
- Graybill, Lyn S. ““CNN Made Me Do (Not Do) It: Assessing Media Influence on U.S. Interventions in Somalia and Rwanda.”” In *Crisis/Media*. Delhi, IND: The Sarai Programme – Centre for the Study of Developing Societies, 2004. p. 170-183.
- Gregory, Jane and Steve Miller. *Science in Public: Communication, Culture, and Credibility*. New York: Plenum Press, 1998.
- Hahn, Torsten. “Risk Communication and Paranoid Hermeneutics: Towards a Distinction between ‘Medical Thrillers’ and ‘Mind-Control Thrillers in Narrations on Biocontrol.’” *New Literary History* 36 (2005): 187-204.
- Hargreaves, Ian. *Journalism: Truth or Dare?* Oxford, UK: Oxford University Press, 2003.
- Hirschman, Albert O. *Exit, Voice, and Loyalty. Responses to Decline in Firms, Organizations, and States*. Cambridge, MA: Harvard University Press, 1970.
- Holy Bible*, King James Version. New York: American Bible Society: 1999.
- “Institute of Medicine – About SARS.” Institute of Medicine of the National Academies. 2006. <http://www.iom.edu/CMS/3239.aspx>.
- Institute of Medicine. “Emerging Infections: Microbial Threats to Health in the United States.” Washington: National Academy Press, 1992.
- Jones, Kelvyn and Graham Moon. *Health, Disease and Society: A Critical Medical Geography*. London, UK: Routledge & Kegan Paul, 1987.

- Kahneman, Daniel and Amos Tversky. "The Psychology of Preferences." *Scientific American* 246 (1982): 160-173.
- Kamps, Bernd Sebastian and Christian Hoffman, eds. *SARS Reference*. 3rd ed. Paris: Flyer Publishing, 2003. Access at <http://www.sarsreference.com/>.
- Karim, Karim H. "The Historical Resilience of Primary Stereotypes: Core Images of the Muslim Other." In *The Language and Politics of Exclusion: Others in Discourse*, edited by Stephen Harold Riggins. Thousand Oaks, CA: Sage Publications, 1997. p. 153-182.
- Lippmann, Walter. *Public Opinion*. New York: The Free Press, 1992.
- Maher, Mike and Lloyd Chiasson Jr. "The Press and Crisis: What Have We Learned?" In *The Press in Times of Crisis*, edited by Lloyd Chiasson Jr. Westport, CT: Greenwood Press: 1995. p. 219-223.
- May, Thomas. "Public Communication, Risk Perception, and the Viability of Preventative Vaccination against Communicable Diseases." In *Ethics and Infectious Disease*, edited by Michael J. Selgelid, Margaret P. Battin, and Charles B. Smith. Malden, MA: Blackwell Publishing, 2006. p. 232-245.
- McCloskey, Donald N. *The Writing of Economics*. New York: Macmillan, 1987.
- McCombs, Maxwell and Donald Shaw. "The Evolution of Agenda-Setting Research: Twenty-Five Years in the Marketplace of Ideas." *Journal of Communication* 43 (1993): 58-68.
- Michelson, Evan S. "Individual Freedom or Collective Welfare? An Analysis of Quarantine as a Response to Global Infectious Disease." In *Ethics and Infectious Disease*, edited by Michael J. Selgelid, Margaret P. Battin, and Charles B. Smith. Malden, MA: Blackwell Publishing, 2006. p. 53-69.

- Miller, Judith, Stephen Engelberg, and William Broad. *Germs: Biological Weapons and America's Secret War*. New York: Simon & Schuster, 2001.
- Miller, Toby. "Financialization, Emotionalization, and Other Ugly Concepts." In *Crisis/Media*. Delhi, IND: The Sarai Programme – Centre for the Study of Developing Societies, 2004. p. 20-28.
- Moeller, Susan D. *Compassion Fatigue: How the Media Sell Disease, Famine, War and Death*. New York: Routledge, 1999.
- Moote, A. Lloyd and Dorothy C. Moote. *The Great Plague: The Story of London's Most Deadly Year*. Baltimore, MD: The Johns Hopkins University Press, 2004.
- National Institute of Allergy and Infectious Diseases. "List of NIAID Emerging and Re-emerging Diseases (2006)." National Institutes of Health.
<http://www3.niaid.nih.gov/research/topics/emerging/list.htm>
- Nelkin, Dorothy. *Selling Science: How the Press Covers Science and Technology*. New York: W.H. Freeman, 1995.
- Nikiforuk, Andrew. *The Fourth Horseman: A Short History of Epidemics, Plagues, and Other Scourges*. London: Phoenix, 1993.
- Oxford English Dictionary*, 2nd ed., s.v. "Connotation."
- Paisley, William. "Public Communication Campaigns: The American Experience." In *Public Communication Campaigns*, edited by Ronald E. Rice and Charles K. Atkin. Thousand Oaks, CA: Sage Publications, 2001.
- Parenti, Michael. *Inventing Reality: The Politics of the Mass Media*. New York: St. Martin's Press, 1986.

- Pethes, Nicolas. "Terminal Man: Biotechnological Experimentation and the Reshaping of 'the Human' in Medical Thrillers." *New Literary History* 36 (2005): 161-185.
- Pew Research Center. "Fewer Favor Media Scrutiny of Political Leaders." Pew Research Center Survey Reports. March 21, 1997.
<http://people-press.org/reports/print.php3?ReportID=112>.
- Pew Research Center. "Online Papers Modestly Boost Readership: Maturing Internet News Audience Broader Than Deep." Pew Research Center Survey Reports. July 30, 2006.
<http://people-press.org/reports/display.php3?ReportID=282>.
- Pew Research Center. "Public More Critical of Press, But Goodwill Persists: Online Newspaper Readership Countering Print Losses." Pew Research Center Survey Reports. June 26, 2005. <http://people-press.org/reports/print.php3?PageID=969>.
- Pew Research Center. "Striking the Balance, Audience Interest, Business Pressures and Journalists' Values." Pew Research Center Survey Reports. March 30, 1999.
<http://people-press.org/reports/display.php3?ReportID=282>.
- Preston, Richard. *The Cobra Event*. New York: Ballantine Books, 1998.
- Preston, Richard. *The Hot Zone*. New York: Anchor Books, 1995.
- Reid, Lynette. "Diminishing Returns? Risk and the Duty to Care in the SARS Epidemic." In *Ethics and Infectious Disease*, edited by Michael J. Selgelid, Margaret P. Battin, and Charles B. Smith. Malden, MA: Blackwell Publishing, 2006. p. 171-183.
- Rezza, G., R. Marino, F. Farchi, and M. Taranto. "SARS Epidemic in the Press." *Emerging Infectious Diseases* 10 no.2 (2004): 381-2.
- Riggins, Stephen Harold, ed. *The Language and Politics of Exclusion: Others in Discourse*. Thousand Oaks, CA: Sage Publications, 1997.

- Riggins, Stephen Harold. "The Rhetoric of Othering." In *The Language and Politics of Exclusion: Others in Discourse*, edited by Stephen Harold Riggins. Thousand Oaks, CA: Sage Publications, 1997. p. 1-30.
- Rogers, E., J. Dearing, and D. Bregman. "The Anatomy of Agenda-setting Research." *Journal of Communication* 43 (1993): 68-85.
- Roggenkamp, Karen. *Narrating the News: New Journalism and Literary Genre in Late Nineteenth-Century American Newspapers and Fiction*. Kent, OH: Kent State University Press, 2005.
- Rollyson, Carl. *Reading Susan Sontag: A Critical Introduction to Her Work*. Chicago, IL: Ivan R. Dee, 2001.
- Ross, Gina. *Beyond the Trauma Vortex: The Media's Role in Healing Fear, Terror, and Violence*. Berkeley, CA: North Atlantic Books, 2003.
- Rothman, A. J., W. M. Klein, and N. D. Weinstein. "Absolute and relative biases in estimations of personal risk." *Journal of Applied Social Psychology* 26 (1996): 1213-1236.
- Sandman, Peter. "Mass media and environmental risk: seven principles." *Risk: Health, Safety and Environment* (Summer 1994): 251-260.
- Sandman, Peter M. "The Outrage Industries: The Role of Journalists and Activists in Risk Controversies." Peter M. Sandman. Posted March 21, 2006.
<http://www.psandman.com/col/outrage.htm>.
- Sandman, Peter. *Peter Sandman Risk Communication Website*. Peter Sandman.
Accessed March 17, 2007. <http://www.psandman.com>.
- Includes all works referenced in text with specified date.

- Sandman, Peter M. *Responding to Community Outrage: Strategies for Effective Risk Communication*. Fairfax, VA: American Industrial Hygiene Association, 1993.
- Selgelid, Michael J., Margaret P. Battin, and Charles B. Smith. "Introduction." In *Ethics and Infectious Disease*, edited by Michael J. Selgelid, Margaret P. Battin, and Charles B. Smith. Malden, MA: Blackwell Publishing, 2006. p. xi-1.
- "Severe Acute Respiratory Syndrome (SARS)." Resolution to the World Health Organization World Health Assembly. 29 May 2003. World Health Organization. 10 Oct. 2006. <<http://www.who.int/csr/sars/en/ea56r29.pdf>>.
- Sharma, Sanjay. "Remembering SARS in Beijing: The Nationalist Approach of an Epidemic." In *Crisis/Media*. Delhi, IND: The Sarai Programme – Centre for the Study of Developing Societies, 2004. p. 332-338.
- Shuchman, M. and M. Wilkes. "Medical Scientists and Health News Reporting: A Case of Miscommunication." *Annals of Internal Medicine* 126 (1997): 976.
- Siegel, Marc. *False Alarm: The Truth about the Epidemic of Fear*. Hoboken, NJ: John Wiley and Sons, Inc., 2005.
- Singer, Eleanor, and Phyllis M. Endreny. *Reporting on Risk: How the Mass Media Portrays Accidents, Diseases, Disasters, and Other Hazards*. New York: Russell Sage Foundation, 1993.
- Sloan, Bill. *"I Watched a Wild Hog Eat My Baby!" A Colorful History of Tabloids and Their Cultural Impact*. Amherst, NY: Prometheus Books, 2001.
- Smith, Richard. "After war, plague." *British Medical Journal* 326 (April 17, 2003): 10.
- Sontag, Susan. *AIDS and Its Metaphors*. New York: Farrar, Straus, and Giroux, 1989.
- Sontag, Susan. *Illness as Metaphor and AIDS and Its Metaphors*. New York: Picador, 2001.

- Sparks, Colin and John Tulloch, eds. *Tabloid Tales: Global Debates over Media Standards*. Lanham, MD: Rowman & Littlefield Publishers, 2000.
- Stephenson, Michael T. and Kim Witte. "Creating Fear in a Risky World." In *Public Communication Campaigns*, edited by Ronald E. Rice and Charles K. Atkin. Thousand Oaks, CA: Sage Publications, 2001. p. 88-102.
- Thomas, William L. and Dorothy Thomas. *The Child in America*. 2nd ed. New York: Alfred Knopf, 1929.
- Tomes, Nancy. "Epidemic Entertainments: Disease and Popular Culture in Early-Twentieth-Century America." *American Literary History* 14, no. 4 (2002): 625-52.
- Tomes, Nancy. *The Gospel of Germs: Men, Women, and the Microbe in American Life*. Cambridge, MA: Harvard University Press, 1998.
- Ungar, Sheldon. "Hot Crises and Media Reassurance: A Comparison of Emerging Diseases and Ebola Zaire." *British Journal of Sociology* 49 no.1 (March 1998): 36-56.
- Urquhart, John and Klaus Heilmann. *Risk Watch: The Odds of Life*. Bicester, UK: Facts on File Publications, 1984.
- Van Dijk, Teun A., ed. *Discourse and Communication: New Approaches to the Analysis of Mass Media Discourse and Communication*. Berlin: Walter de Gruyter, 1985.
- Van Dijk, Teun A. "Discourse and the Denial of Racism." *Discourse & Society* 3 (1992): 87-118.
- Van Dijk, Teun A. *Elite Discourse and Racism*. Newbury Park, CA: Sage Publications, 1993.
- Van Dijk, Teun A. "How 'They' Hit the Headlines: Ethnic Minorities in the Press." In *Discourse and Discrimination*, edited by Geneva Smitherman-Donaldson and Teun A. van Dijk. Detroit, MI: Wayne State University Press, 1988. p. 221-262.

- Van Dijk, Teun A. *Ideology: a multidisciplinary approach*. Thousand Oaks, CA: Sage Publications, 1998.
- Van Dijk, Teun A. *News Analysis: Case Studies of International and National News in the Press*. Hillsdale, NJ: Lawrence Erlbaum, 1988.
- Van Dijk, Teun A. *News as Discourse*. Hillsdale, NJ: Lawrence Erlbaum, 1998.
- Van Dijk, Teun A. "Political Discourse and Racism: Describing Others in Western Parliaments." In *The Language and Politics of Exclusion: Others in Discourse*, edited by Stephen Harold Riggins. Thousand Oaks, CA: Sage Publications, 1997. p. 31-64.
- Van Dijk, Teun A. *Racism and the Press*. New York: Routledge, 1991.
- Van Riper, A. Bowdoin. "What the public thinks it knows about science." *European Molecular Biology Organization* 4 no. 12 (2003): 1104-1108.
- Wahl, Otto F. "Stop the Presses." In *Cultural Sutures: Medicine and Media*, edited by Lester D. Freidman. Durham, NC: Duke University Press, 2004.
- Wallace, Aurora. *Newspapers and the Making of Modern America: A History*. Westport, CT: Greenwood Press, 2005.
- Wallis, Patrick and Brigitte Nerlich. "Disease Metaphors in New Epidemics: the UK Media Framing of the 2003 SARS Epidemic." *Social Science and Medicine* 60 (2005): 2629-2639.
- Washer, Peter. "Representations of SARS in the British Newspapers." *Social Science and Medicine* 59 (2004): 2561-2571.
- Weinstein, N. D. "Unrealistic optimism about future life events." *Journal of Personality and Social Psychology* 39 (1980): 806-820.

Weinstein, N. D. "Why it won't happen to me: Perceptions of risk factors and susceptibility."

Health Psychology 3 (1984): 431-457.

Wiggins, Gene. "Journey to Cuba: The Yellow Crisis." In *The Press in Times of Crisis*, edited by

Lloyd Chiasson Jr. Westport, CT: Greenwood Press, 1995. p. 103-121.

Wilson, N., G. Thomson, and O. Mansoor. "Print Media Response to SARS in New Zealand."

Emerging Infectious Diseases 10 no. 8 (2004): 1461-4.

Winsten, J. "Science and the Media: The Boundaries of Truth." *Health Affairs* 4 (1985): 5-23.

Witte, K. and M. Allen. "When Do Scare Tactics Work? A Meta-analysis of Fear Appeals."

Health Education and Behavior 27 (2000): 608-632.

World Health Organization. "Severe Acute Respiratory Syndrome." World Health Organization.

Last updated October 2004. Accessed March 17, 2007. <http://www.who.int/csr/sars/en/>.

World Health Organization. *The World Health Report 2004 – Changing History*. Geneva,

Switzerland: The World Health Organization, 2004.

Zwart, Hub. "Comparative Epistemology: Contours of a Research Program." *Acta Biotheoretica*

53 (2005): 77-92.

News and Magazine Articles from outside timeframe and Other News Sources

Andrews, Edmund L. "Dutch Farmers Facing Mass Foot-and-Mouth Slaughter." *New York*

Times, April 6, 2001, p. a4.

BBC News. "Katrina damage 'could top \$25 bn'." Sept. 14, 2005. Accessed Feb. 17, 2005.

<<http://news.bbc.co.uk/2/hi/business/4195018.stm>>.

Cowell, Alan. "Foot-and-Mouth Damages English Tourism, too." *New York Times*, March 16,

2001, p. a4.

Cushman, John. "Report Says Global Warming Poses Threat to Public Health." *New York Times*.
July 8, 1996.

Dinello, Dan. "Virus Horror!" *Salon.com*. August 9, 2001. Accessed March 17, 2007.
<http://archive.salon.com/ent/movies/feature/2001/08/09/virus/print.html>.

Gladwell, Malcolm. "The Plague Year." *New Republic*, July 17, 1995. p. 40.

Greer, Germaine, "An African Feast for Flies and Other Parasites," *Guardian*, July 25, 1994,
Features, p. 18.

Henig, Robin Marantz. "Viral Nightmares." *New York Times*, August 18, 1996, sec. 7 p. 13.

Jaynes, Gregory. "Meet Mister Wizard." *Time* (Sept. 25, 1995).

Lemonick, Michael D. "How good is his science?" *Time* 146 (1995): 65.

Lyall, Sarah. "Foot-and-Mouth Outbreak Halts British Animal Exports." *New York Times*, Feb.
22, 2001, p. a3.

Markel, Howard. "Germ Warfare." *New York Times*, September 6, 2003, p.11.

Merrick, Amy. "Leather could be the Next Victim of Cattle Plagues." *Wall Street Journal*, April
9, 2001, p. b3.

Morganthau, Tom, Mary Hagar, Bob Cohn, George Raine, Michael Reese, Monroe Anderson,
and Richard Ernsberger Jr. "Future Shock." *Newsweek*, November 24, 1986, special
report, The AIDS epidemic, p.30.

"No quick end to SARS – WHO." *CNN*. April 9, 2003.

<http://www.cnn.com/2003/HEALTH/04/09/sars/index.html>.

Scherer, Ron. "Costliest disaster in US history." *Christian Science Monitor*, Sept. 20, 2001.

Sloan, Gene. "Great Britain, open for business, offers great bargains: Disease has waned, but
tourists are still few and far between." *USA Today*, May 18, 2001, p.1D.

Svetkey, Benjamin. "Michael Crichton gets small." *Entertainment Weekly* 684 (2002): 34.

"WHO confirms SARS more deadly." *CNN*. May 8, 2003.

<http://www.cnn.com/2003/HEALTH/05/08/sars/index.html>.