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Agenda-Setting and the Media Amplification of Fear: The Case of Pandemic Influenza Coverage

by

Paulette Richard

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Agenda-Setting and the Media Amplification of Fear: The Case of Pandemic Influenza Coverage

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Paulette Richard

A Thesis/Practicum submitted to the Faculty of Graduate Studies of The University of Manitoba in partial fulfillment of the requirement of the degree

Of

Master of Public Administration

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Joint Program

FACULTY OF GRADUATE STUDIES

The undersigned certify that they have read, and recommended to the Faculty of Graduate Studies for acceptance, a thesis entitled "Agenda-Setting and the Media Amplification of Fear: The Case of Pandemic Influenza Coverage" submitted by Paulette Richard in partial fulfillment of the requirements for the degree of Master of Public Administration.

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ABSTRACT

This thesis aims to contribute to the understanding of the interplay between the media and political actors in agenda-setting and framing of health policy issues. The primary objectives of the study are to (1) review norms used by the media and public policy actors in agenda-setting on the issue of infectious disease, and more specifically on pandemic preparedness, (2) determine if the media report on the pandemic question using a panic frame and narrowly define the pandemic preparedness issue, and (3) whether the Canadian federal government reform of public health, and new investments for stockpiling of antiviral drugs, have been addressed by the two Canadian English national newspapers using balanced reporting of an impending pandemic crisis.

The content analysis results were drawn from a census of newsprint media coverage from October 1, 2005 to May 31, 2006 on the topic of avian influenza and pandemic preparedness. The findings suggest that news coverage was hegemonic and that a significant number of stories were framed in a reassuring or neutral tone. However, it was noted that stories written immediately following a trigger event such as heightened alert to potential spread of the H5N1 strain after reported cases in Asia, reports were found to use a panic frame and the tone was more likely to be alarmist. The study concludes that although the story held some news value for both newspapers over the entire review period, the stories lacked sufficient information for readers to fully understand this complex topic. More generally, articles were found to lack depth in technical details around the issue. The majority of articles provided too few details on the ethical dilemma surrounding pandemic planning, the threat posed by the H5N1 flu strain, or the risks and benefits to antiviral drugs use.

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Several journalists, editors and public health officials agreed to be interviewed for this project which contributed to improving my understanding of their work and the interplay between media and public health professionals. Their contribution was invaluable to provide me with practical information on the delicate relationship between the media and public health officials. Participants provided open and honest opinions and anecdotes on how they must balance the responsibility of reporting the news with the duty to report timely, relevant and informative stories.

I would like to acknowledge the financial support from the Western Regional Training Centre (WRTC) in Winnipeg. The affiliate studentship funding allowed me to travel to present my preliminary findings at a conference in Montreal.

Finally, I would like to express my gratitude to my husband Rod, my children Diane, Mike and Monique. During the few years that I worked on this project they have become very knowledgeable in the field of infectious disease such as avian influenza and pandemics. I particularly appreciate the discussions around the dinner table. Their

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The result of this work is an example of a great team effort because without support from these individuals the journey to finalizing such a large project would have been much more daunting.

Table of Contents

Approval Page.....ii
Abstract.....iii
Acknowledgements.....iv
Table of Contents.....vi
List of Tables.....viii

CHAPTER ONE: INTRODUCTION AND LITERATURE REVIEW

Text Analysis.....4
Importance of the Research.....8
Method of Inquiry.....9
Lay Out of the Thesis.....14

CHAPTER TWO: PROVIDING CONTEXT

Health Crises in Canada.....17
Background on SARS.....20
Catalyst for Public Health Policy Reform.....23
Facts about Avian Influenza.....28
Facts about Pandemics.....30
Policy and the Media.....31
Political Economy of Media.....36
English-Canadian National Newspapers.....44
Conclusion.....47

CHAPTER THREE: AGENDA-SETTING

Agenda Setting.....49
Measuring the Agenda for Public Health.....52
Type of Story.....55
Article Placement.....61
Conclusion.....68

CHAPTER FOUR: MEDIA FRAMING

Introduction.....70
Intensity Scale.....73
The Panic Frame.....74
Comparative Analysis of Headlines vs Text.....82
Sources Quoted.....86
Story in Context.....98
Conclusion.....104

CHAPTER FIVE: CONCLUSION
Policy Implications..... 113
Opportunity for future research..... 114

REFERENCES..... 117

APPENDIX A: Coding Sheet..... 135

LIST OF TABLES

Table 3.1: Number of news stories on influenza pandemic by newspaper.....52

Table 3.2: Type of Story by National Newspaper.....57

Table 3.3: Source of Stories by National Newspaper..... 60

Table 3.4: Story Location by Newspaper.....63

Table 4.1: Tone of Headline by Newspaper..... 75

Table 4.2: Overall Tone of Story by Newspaper..... 78

Table 4.3: Story Location and Frame Use by Newspaper..... 83

Table 4.4: First Person Quoted by National Newspaper 94

Table 4.5: Second Person Quoted by National Newspaper..... 97

Table 4.6: Extent of Information Provided by National Newspapers..... 100

CHAPTER 1

Introduction and Literature Review

Medical experts and researchers predict that an influenza pandemic is looming. In the last century, the world experienced a devastating pandemic in 1918 and less severe occurrences in 1957 and 1968. Experts suggest that there is a strong probability that the world may soon be faced with an outbreak.[1] As stated by author and historian Esyllt Jones, concern over the fear of pandemic is not new. It has been steadily building for at least twenty years because "super bugs resistant to antibiotics, the emergence of AIDS in the 1980s as a global pandemic of proportions not seen in the modern era, and the spread of diseases such as SARS have led to a popular rediscovery of epidemics."[2] Interest in impending epidemics - an epidemic being a local or national outbreak, a pandemic a worldwide one – is intensified whenever disease outbreaks occur.[3] During the 2002/03 flu season reports of a mystery illness surfaced in Guangdong Province, China. This serious respiratory illness became known as Severe Acute Respiratory Syndrome (SARS) and "is considered to be the first severe and readily transmissible new disease to emerge in the twenty-first century."[4] At the beginning of the outbreak, little was known about the origin of the disease or how it was transmitted. Outside of China and Hong Kong, Toronto was the region hardest hit by SARS.[5] Reports of the illness appeared in the Canadian media during the outbreak, and were sustained for several years following the crisis. Since SARS, journalists have written extensively about public health threats,

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[1] United States Government, Department of Health and Human Services (USDHHS), 2005.
[2] Jones, 2007, p. 5.
[3] Ibid, p. 101 to 102.
[4] World Health Organization, 2003, No. 56.
[5] Health Canada, *Learning from SARS,* 2003, p. 20.

people's vulnerabilities to disease and the need for public health reform to deal with outbreaks.

While I followed events in the media relating to SARS, and other emerging infectious diseases such as West Nile virus, my first impressions were that the stories were written using a panic frame - promoting sudden uncontrollable fear or anxiety about the topic.[6] Many newspapers reported on the spread of West Nile virus predicting certain doom and describing the worst case scenario of this imminent threat. For example, the first confirmed human case of West Nile Virus to be reported in North America (1999) highlighted the risk of what had previously been a hypothetical scenario of transcontinental spread of disease to one of reality. West Nile virus is a mosquito-borne virus that can cause flu-like symptoms in infected individuals. In rare cases, it can lead to meningitis (inflammation of the lining of the brain and spinal cord) or encephalitis (inflammation of the brain) and can cause death.[7] The arrival of such a serious illness to North America garnered a great deal of media attention. I became curious to know if this initial impression was reflective of the newspapers' general depiction of health topics or whether this was unique to the West Nile virus. The view that a panic frame was used by the media, and more specifically newspapers, became the impetus for the inquiry. I began wondering if articles are written more for their commercial viability or if journalists generally write informative, fact-based and well-balanced reports. To explore these questions, this thesis evaluates a census of newsprint media coverage during the 2005/06 flu season. After SARS was contained, numerous newspaper reports were published of governments around the world dedicating resources to pandemic planning. Newspaper

[6] Oxford Dictionary, 2001, p. 647.
[7] Public Health Agency of Canada (PHAC), *Disease Information,* 2007.

coverage of an emerging avian influenza strain typed as H5N1 influenza which, in rare cases had infected and killed several people in several Asian countries, began to appear. Outbreaks of avian flu H5N1 in birds, and isolated human cases in Asia were the trigger events which seemed to place the topic onto the media agenda. These reports became the source of my initial observations that stories were written using a panic frame. Government attention on the issue, particularly following the experience with SARS likely elevated the story in the minds of the journalists. *Globe and Mail* reporter André Picard and *National Post* reporter Tom Blackwell agreed that SARS was one of the factors that raised the profile of the pandemic story.[8] Using the flu season as a timeframe to analyze the issue of influenza pandemic allowed me to gain insight into how the issue was depicted in the national newspapers.

The theoretical perspective addressed in this thesis is focused on mass communication analysis of agenda setting which "results from the frequency with which a subject is discussed in the news media with no attention paid to how the subject is treated,"[9] and framing "or making salient certain features of a news event and depressing others"[10] on health related issues such as pandemic. The two English-Canadian national newspapers were chosen as they are direct competitors who both report on regional, national and international stories. Research on the impact of mass media on public perceptions of health issues has shown that headlines on health scares have a measurable effect on behaviour.[11] Dorfman states that the media's influence over public health issues "are not considered by the public and policymakers unless they are visible, and they are

[8] Picard and Blackwell, Online Interviews, 2007.
[9] Cappella and Jamieson, 1997, p. 30.
[10] Ibid.
[11] Ramsay, White and Bozoky, 1998; Freemantle, Minozzi, Domenighetti and Finer, 1999; Henderson and Kitzinger, 1999.

not visible unless the news has brought them to light."[12] Dorfman acknowledges that the media plays a role in drawing attention to various topics. Therefore studying how stories are presented provides an opportunity to gain insight on the policy making process while learning something about the actors who are responsible for developing public policy.

Text Analysis

In this thesis I hypothesize that the two English-Canadian national newspapers have focussed on the pandemic issue using a panic frame. They report on the probability of a pandemic as something on our doorstep exaggerating the risk of people in Canada dying from contracting the H5N1 strain of avian influenza which to date has been an issue of importance only outside of the country's borders. I further contend that the national newspapers' coverage of health topics provide insufficient details for readers to have a thorough understanding of the issues around to the threat of pandemic influenza. The newspapers not only provide limited details, but they often do not provide simple precautionary advice to help readers to better prepare in the event of a pandemic.

This study explores how the media have reported on the threat of disease outbreak in Canada analyzing coverage from the two national English-Canadian newspapers, the *Globe and Mail*, and the *National Post*. This research expands the existing literature on agenda setting and framing on a health topic and more generally research on health topics from a Canadian perspective.

To conduct the research, I completed a content analysis and a discourse analysis on the two papers during a discrete period of time. A total of 349 articles were analyzed

[12] Dorfman, 2003, p. S217 to S226.

in this study. The study period was October 1, 2005 to May 31, 2006, selected to fall within the Public Health Agency of Canada (PHAC) reporting of seasonal avian influenza cases.[13]

The study was conducted using a census - data are collected from all units rather than from a sample of units in a population.[14] This method was preferred over a survey which is based on a cross-sectional design using quantifiable data collected from respondents using two or more variables. These variables are then examined to detect patterns in their relationship.[15] The census was deemed more appropriate since it allows for an enumeration of all the possible data within the population.[16]

The decision to study newspapers was made based on existing media research which shows that the media can influence the public's perception and that they have an impact on public policy.[17] Newspapers are an important source of information for opinion leaders and policymakers and may influence the course of policy.[18] Communications research suggests that public pressure can influence media attention on a topic, which can then have an impact on policymakers and have an impact on policy development or change.[19] On this question, Soroka asserts that media effects on the public and on policymakers are closely connected.[20] Since policymakers play a large role as media sources there is a possibility that they can affect the media content.[21]

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[13] PHAC, *Flu watch reports*, 2006.
[14] Bryman and Teevan, 2005, p. 216.
[15] Ibid, p. 386.
[16] Ibid, p. 216.
[17] Schooler, Sundar and Flora, 1996, p. 346 to 364.
[18] Myhre, et al., 2002, p. 173.
[19] Wallack, et al. 1993.
[20] Soroka, 2002, p. 266.
[21] Soroka, 2002, p. 10.

Newspapers are also important to policymakers. The *Globe* has been credited as having influenced the questions asked in Parliament's Question Period and that other media used the *Globe* as reference point for their own news line-ups.[22] The same can be said of the *Post* which Taras suggests has become "both a catalyst and a cheerleader for emergence of the Canadian Alliance Party, an intervention into national life that is almost unprecedented for a newspaper in the post-war era."[23] As observed by Sampert "the *Post* can be seen as playing a large role in setting the political agenda and potentially influencing policy in its coverage of news events."[24]

Analyzing newspaper coverage is important because it provides insight into agenda setting.[25] Newspaper reading may raise awareness of a greater number of public health topics than other information channels such as television.[26] Much of the literature discusses limitations of various news formats recognizing that while print is constrained by space, the broadcast media are constrained by time. The flexibility of format in print media is less problematic than time constraint of broadcast media because more detailed information can be provided in newspaper format.[27] Newspapers are relatively inexpensive to produce compared to other forms of media, they have many public uses, and they can be read and reread.[28] Comparatively "periodicals often cost more, websites have narrower access, and broadcast news evaporates."[29] Even with new communicating technology, "newspapers remain vital to social, political and economic affairs, from local

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[22] Taras, 1990, p. 88.
[23] Taras, 2001, p. 232.
[24] Sampert, 2006, p. 86.
[25] Wanta, 1997, p. 137 to 151.
[26] Peter and de Vreese, 2003; Faulkner, Finlay and Roy, 2007.
[27] Wanta, 1997, p. 137 to 139.
[28] Adelman and Verbrugge, 2000, p. 347.
[29] Ibid.

to the national."[30] The demographics profile of newspaper readers also contributed to the choice of newsprint media rather than broadcast media for study. In discussing the characteristics of a typical Canadian audience, Taras noted "that the higher one's education and socio-economic status the less television one is likely to watch and the more likely one is to read books and newspapers."[31] These characteristics of newspaper readers represent a population with unique potential to influence policymakers making them worthy of study.[32]

The two national newspapers share a similar audience demographic base. The *Post* and the *Globe* readers are generally "older, wealthier and more educated than the general population."[33] Since national newspapers have different news agendas and need to appeal to a larger and more diverse audience than local newspapers the choice of focussing on the two national newspapers was deemed to be a sound choice to complete a comparative analysis.[34] Given that I was interested in studying the question of how influenza pandemic is reported from a Canadian perspective and since the story is of national and international interest the selection of these two newspapers was justifiable.

In addition, the choice to focus on the national newspapers was made based on titles with a large weekly national circulation and which are considered agenda-setters.[35] Despite recent research showing that newspaper sales have experienced a steady decline in recent years there is reason for optimism for this industry. In 1997, Canadian newspapers still attracted approximately 43 percent of advertising dollars while television

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[30] Dornan, 2003, p. 101.
[31] Taras, 2001, p. 10.
[32] Myhre, et al., 2002, p. 173.
[33] Anonymous health reporter, e-mail interview, 2007.
[34] Sampert, 2006, p. 74.
[35] Wanta, 1997, p. 137 to 151.

accounted for approximately 33 percent.[36] Some believe that "newspapers can be a vital information 'clearinghouse' telling readers what's important, what to pay attention to and what to ignore."[37] Newspaper stories are likely to be more numerous on a topic than what would be covered in the broadcast media. Newspaper coverage will cover the issue in much greater detail and depth, and the overall content is similar to television coverage.[38]

Importance of the Research

This thesis provides evidence of how the two national English-Canadian newspapers view and report on health related topics. The health of a country's population is an important social policy issue. Disease outbreaks have the potential to affect each and every citizen and can have a significant social and economic impact. The media serves as an important conduit of information about public policy issues and the media can influence the importance placed on this issue on the public agenda.[39] In fact the media plays a role in shaping the public agenda.[40] This research provides a better understanding of the role of newspapers, academics, governments and health practitioners in the public policy making process.

There has been limited research on the agenda setting and framing of public health issues in Canada.[41] Of the Canadian studies analyzing health topics, most have compared media coverage using various combinations of national and local newspapers. A few studies have focused on newspaper and broadcast media; however, none of the

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[36] Taras, 2001, p. 17.
[37] Katz, 1997, p. 159.
[38] Wanta, 1997; Altheide, 2002; Driedger, 2007, p. 777.
[39] Sampert, 2006, p.12.
[40] Taras, 1990, p. 33.
[41] Faulkner, Finlay and Roy, 2007; Berry, Wharf-Higgins and Naylor, 2007; Matas et al., 1986; Driedger, 2007.

studies located completed a comparative analysis of health related content from the two national newspapers. In their research for example, Berry, Wharf-Higgins and Naylor used newspaper, radio, television and internet news sources to complete a content analysis on the construction of news reports on health topics. The analysis was limited to one unidentified western Canadian City.[42] Matas et al. completed a content analysis of the *Winnipeg Free Press* and the *Globe* over a 20-year period assessing whether press coverage contributed to negative attitude towards psychiatry.[43] Driedger studied how the public may perceive a health risk issue based on how it is depicted in the media. Her study focused on the Walkerton Ontario E. coli contamination of the public water supply comparing reports from the *Globe* and the *Post*, as well as television and radio coverage.[44] Faulkner, Finlay and Roy studied how much physical activity research gets reported in the media. This research analyzed coverage from the two national newspapers and eleven daily newspapers across Canada.[45]

Method of Inquiry

As stated earlier, I relied on content and critical discourse analysis to determine how the two English papers discussed avian flu during a seven-month period. I utilized the Factiva database and searched for key words to conduct the search. A total of 349 stories were included which were identified using the Factiva electronic database specifying the selected dates of the review period. Newspaper articles were selected by completing a search for articles containing any or all of the following key words: H5N1,

[42] Berry, Wharf-Higgins, and Naylor, 2007, p. 35 to 44.
[43] Matas, et al., June 1986, p. 431 to 433.
[44] Driedger, 2007.
[45] Faulkner, Finlay and Roy, 2007, p. 180 to 192.

avian flu, pandemic, bird flu, avian influenza, antiviral, relenza or tamiflu. All articles were retrieved by completing a search of the Factiva database and were read for relevance and included as part of the study. This included articles from local news, world news, world-in-brief, commentaries, and business news, opinion, letters to the editor, entertainment and editorial stories. Letters to the editor were included as this forum gives a voice to the public or public health professionals on social issues. The letters to the editor provide an opportunity for correcting technical, medical or scientific information which might not have been reported accurately in previous stories. International, national and local news stories were all included; however, book reviews and movie reviews were omitted from the study as it was felt that these would not provide insight on newspapers framing norms. The study included news articles on the topic appearing in all sections of the newspapers. Editorials, opinion pieces and commentaries were considered as part of this analysis to be able to glean additional insight into framing and agenda setting.

The analysis was completed using a triangulation approach. Methodological triangulation allows for quantitative and qualitative research and using a number of different methods provides a "much richer analysis and provides a broader understanding of the social issues under consideration."[46] As Bryman and Teevan note, quantitative and qualitative enquiries are generally interpretive with an emphasis on understanding individuals' social reality, the intentions, motives, beliefs and social rules and values to evaluate meaning.[47] Quantitative methods not only emphasize measurement but apply the objective and value free methods used in the natural sciences to study social realities.[48] The analysis of the data from quantitative and qualitative perspectives allowed me to gain

[46] Bryman and Teevan, 2005, p. 72 to 73.
[47] Ibid, p. 14 to 16.
[48] Ibid.

a better understanding of how the newspapers cover health topics such as avian influenza, H5N1, government stockpiling of antiviral drugs, and pandemic preparedness. The combined methods helped to evaluate to what extent the two newspapers are using a panic frame in their coverage of these health issues.

Content analysis has been defined as a systematic, replicable technique for compressing many words of text into fewer content categories based on explicit rules of coding.[49] In their research, Cappella and Jamieson contend that content analyses and critical assessments of news practices have been indispensable in guiding research towards the potential effects of news frames making it ideal as a method of inquiry.[50] The advantage to content analysis in its quantitative form is that it is transparent and replication is easy; longitudinal analysis can be completed with relative ease; and it is referred as an unobtrusive method because it does not change the behaviour of participants.[51] Content analysis involves research questions around the same 5 Ws of any news report: *who* (does the reporting); *what* (gets reported); *where* (does the issue get reported); *why* (does the issue get reported); and *when* (it gets reported).[52] This type of analysis is not only interested in what gets reported but also what is omitted in the coverage.[53]

Second, I reviewed the census using discourse analysis. Discourse analysis views the purpose lurking behind the way things are said or presented and can be applied to forms of communication other than talk, and is very well suited to the study of newspaper

[49] Stemler, 2006, (n.p.).
[50] Cappella and Jamieson, 1997, p. 57.
[51] Bryman and Teevan, 2005, p. 348.
[52] Ibid, p. 332.
[53] Ibid.

articles.[54] This method is primarily concerned with the strategies authors employ in trying to create different kinds of effect.[55] According to Potter, discourse analysis "emphasizes the way versions of the world, of society, events and inner psychological worlds are produced in discourse."[56]

Finally, the third method used consisted of interviews conducted with key individuals responsible for producing the news - journalists and editors.[57] Two reporters from each newspaper agreed to participate in the research study. Tom Blackwell, a health reporter from the *Post* and André Picard, a health reporter with the *Globe*, agreed to being quoted by name in all proceedings. Two other reporters provided input but requested to be kept anonymous. Two editors who requested that their responses be kept anonymous also participated in the study. Since there are only a small number of editors who could have been asked to participate, I have not indicated the newspaper where these editors work to protect their identity. Two senior public health officials from the Public Health Agency of Canada agreed to be interviewed. Dr. David Butler-Jones, Chief Public Health Officer and Dr. Frank Plummer, Scientific Director General of the National Microbiology Laboratory high containment research facility in Winnipeg agreed to being quoted. The Senior Communications Officer of the National Microbiology Laboratory, Kelly Keith also agreed to participate. In addition, three communications officers from the Public Health Agency of Canada in Ottawa were also interviewed but these individuals preferred to remain anonymous in the proceedings. Communications officers were asked to participate so that I could glean more information about their personal

[54] Ibid, p. 344.
[55] Ibid, p. 345.
[56] Potter, 1997, p. 146.
[57] Sampert, 2006, p. 3.

experiences in dealing with the media and to gain an appreciation of those sources relied upon to contribute to reporting the news. One Medical Health Officer agreed to be interviewed but requested to be kept anonymous in the proceedings.

I chose to use a semi-structured interview so that I would have a series of general questions to begin the discussions. I allowed for flexibility in the sequencing of questions and to ask additional questions which were raised from the respondent's answers.[58] The majority of the interviews were conducted face-to-face as the preferred method so that I could build a rapport with the participants. In some cases, particularly with journalists and editors their preference was to participate either electronically or by phone. There are limitations with using the electronic and phone methods because it does not permit building a rapport with interviewees, the length of interviews are generally shorter, and it is difficult to pick up the non-verbal cues from interviewees.[59] Despite these limitations, offering potential participants the option to conduct interviews electronically or by phone increased the participation rate. These interviews helped to provide details about the newspaper business. They provided insight into how stories are generated and selected, the placement and visual attributes used in presenting the stories. The interviews of public health officials and communications officers sought to answer questions about their personal experiences with the newspapers when they are called upon to serve as a source.

To ensure validity in coding, I personally coded all data presented in this study and two individuals were enlisted to independently code the articles. As suggested by Weber "to make valid inferences from the text, it is important that the classification

[58] Bryman and Teevan, 2005, p. 71.
[59] Ibid, p. 72 to 73.

procedures be reliable in the sense of being consistent: Different people should code the same text in the same way."[60] I achieved a seventy-six percent inter-reliability check. Agreement in coding between me and one of the coders was eighty percent agreement while the total agreement between me and the second coder was seventy-two percent. This result falls well within the acceptable range for strong reliability.

Lay Out of the Thesis

I begin Chapter 2 with a historical context of the SARS crisis and the Canadian health care reform policy. This section reviews public health reform and the creation of the Public Health Agency of Canada. It briefly discusses the Canadian constitutional arrangement between levels of government and the jurisdictional responsibilities for public health bestowed upon the various actors. The release of a draft Canadian pandemic plan, the emerging avian influenza H5N1 strain and the stockpiling of antiviral drugs as a treatment option for avian influenza are explored. This section also provides context of the interrelationship between newspapers, policy and the public by addressing theoretical perspectives of agenda setting and media framing. The methodology used to answer the research question is also detailed in this section.

Chapter 3 defines agenda setting and contains the results of a quantitative content analysis of newspaper articles. Here I review the newspaper's attention on the population health topic by examining the number of stories, type of stories; the use of wire vs non-wire stories; the use of byline vs non-byline content and it concludes with analysis of the article placement which are the elements indicative of agenda setting. This chapter is concerned with agenda setting focusing on what Cappella and Jamieson define as "results

[60] Weber, 1990, p. 12.

from the frequency with which a subject is discussed in the news media with no attention paid to how the subject is treated."[61] Howlett and Ramesh see the media as crucial links between the state and society and see the function of the media as passive reporters and as active analysts who have "significant influence on the preferences of government and society in regard to the identification of public problems and their solutions. Yet at the same time, like political parties, their direct role in the various stages of the policy process is often sporadic and most often quite marginal."[62] Although Howlett and Ramesh admit that media have an important role in agenda setting, they caution that what media choose to write about do not necessarily address priorities but are focused on stories which "lend themselves so easily to narrative structures and first-person accounts and sound bites"[63]

Chapter 4 is concerned with media framing. It contains results of a discourse analysis of the level to which the articles within the census use an alarmist tone or panic frames in the reporting. I discuss the way that the newspapers frame articles using the concept of framing as defined by Cappella and Jamieson by focussing the audience's attention on its subjects in specific ways.[64] The analysis turns attention to how a story is told or produced using headlines, word choices, use of rhetorical or narrative forms. All elements of text, verbal or visual, are seen as contributing to framing the news.[65] An analysis of sources quoted also forms part of this chapter, along with a more detailed quantitative analysis of the topics covered during the review period. The chapter includes

[61] Cappella and Jamieson, 1997, p. 30.
[62] Howlett and Ramesh, 2003, p. 82.
[63] Ibid, p. 83.
[64] Cappella and Jamieson, 1997, p. 38.
[65] Ibid, p. 39.

a study of headlines, article placement, intensity scale and sources quoted as evidence of framing norms used by the journalists to report on the threat of avian influenza H5N1 and pandemics.

The concluding section, chapter 5, summarizes the findings from the content and discourse analyses, as well as concluding remarks from results of interviews. The conclusions serves as a test as to whether the information presented is sufficient to answer the research question.

CHAPTER 2

In 2002, an epidemic of a serious respiratory illness, known as Severe Acute Respiratory Syndrome (SARS), surfaced in China and quickly spread to countries around the world. This chapter provides background of the emergence of SARS as the trigger event which has been credited for focusing more attention on public health in Canada. It describes public health policy reform including a brief discussion on the Canadian constitutional arrangement governing primary health care and public health, as well as jurisdictional responsibilities within the federation to set the context for the study. The chapter also provides facts about avian influenza and how pandemics occur. Finally, the discussion turns attention to the role of media within a democracy and will segue into the theory of media convergence.

Health Crises in Canada

In the last twenty years there have been several public health crises in Canada which have highlighted gaps in the public health system. In the 1980s, many patients who had received blood transfusions and blood products contracted serious illnesses such as HIV/AIDS or hepatitis C through contaminated products which had not been adequately screened for blood-borne diseases. Hemophiliacs had been most at risk as these patients often require blood products several times per week. This crisis became known as the tainted blood tragedy. It was the largest public health catastrophe in Canadian history.[66] During the late 1970s and 1980s approximately one thousand people were infected with

[66] Wilson, 2007, p. 1387.

HIV, and an additional 30-thousand were infected with hepatitis C.[67] In 1989, the Government of Canada offered a $150-million compensation package for those who had contracted HIV from tainted blood. In 1998, the Government announced a $1.1-billion package to compensate those who had contracted hepatitis C which was restricted to those having become infected between 1986 and 1990. In 2005, an extension to the earlier compensation package was announced for individuals having contracted hepatitis C prior to 1986 since the blood supply during that earlier period had also not been subject to screening for blood-borne infections.[68] In the Commission of Inquiry on the state of the Blood System in Canada, Justice Krever wrote that "public health departments in many parts of Canada do not have sufficient resources to carry out their duties....Continued chronic under-funding of public health departments is a disservice to the Canadian public."[69] Krever urged provincial and territorial health ministers to provide sufficient funding for public health.[70] The Krever commission resulted in major governance changes with the creation of a national blood authority, the Canadian Blood Services and Québec developed its own blood system operated by Héma-Québec. This reformed blood system has been credited for regaining public confidence in the system.[71]

In May 2000, the drinking water supply for Walkerton, a small community in Ontario became contaminated with E. coli. Manure from a nearby farmer's field had drained into one of the town's wells as a result of heavy rains and flooding in the area which contaminated the drinking water. The local manager of the Public Utilities Commission received laboratory results showing that the well water was contaminated

[67] Ibid.
[68] CBC News, online, 2006.
[69] Krever, 1998, p. 1073.
[70] Ibid.
[71] Wilson, 2007, p. 1387.

with E. coli but he did not notify the public health authorities or the public.[72] Several hundred residents became sick from drinking the water and many needed to be hospitalized from complications related to the illness. In the town of 5-thousand residents, a total of seven died and more than 23-hundred became ill from drinking the contaminated water.[73] The inquiry into the incident produced two reports, one which addressed the Walkerton case, and the other provided recommendations for government on how to improve the safety of drinking water.[74] During the public inquiry it was discovered that those responsible were poorly trained for the job. The Ontario Government responded to the inquiry recommendations introducing the Safe Drinking Water Act in 2002.[75] The Ontario Drinking Water Standards[76] were introduced as part of the regulations stemming from the Act to protect the drinking water supply in that province.[77]

Finally, the SARS epidemic in 2002 was the latest high profile example of the Canadian population's vulnerability to public health threats. These events were characterized as failures of the health care system to respond to public health threats sparking several commissioned reports proposing solutions on how to strengthen the system. SARS is credited for being the case that ultimately changed the post 1966 focus on personal medical care to consider a more holistic health care policy to include public health. The SARS experience showed that the country's strength in dealing with a disease outbreak is more closely linked with the strengths of our public health system and not

[72] Driedger, 2007, p. 777.
[73] Ibid, p. 778.
[74] O'Connor, 2002a, 2002b.
[75] S.O. 2002, c 32.
[76] Government of Ontario, Regulations 169/03.
[77] Government of Ontario, online, June 25, 2008.

simply to the publicly-funded personal health services system.[78] The deficiencies noted in the SARS outbreak included problems in timely access to laboratory results, information sharing, data ownership, and epidemiologic investigation.[79] In a post-SARS report, Health Canada concluded that the experience illustrated that Canada is not adequately prepared to deal with a true pandemic.[80] The threat of pandemic, bio-safety and security threats after the terrorist attack in the U.S. after 9/11, and emerging diseases such as West Nile virus were credited for giving "the public new appreciation for the importance of preparedness and the need for coherent community response policies."[81] Mechanic admits that these threats are not new and that experts have been trying to focus attention on these issues for many years but he is hopeful that public health is now on the radar screen.[82]

Background on SARS

During the 2002/03 flu season reports of a mystery illness surfaced in Guangdong Province, China. This serious respiratory illness became known as SARS. Clinical symptoms of the illness mimicked other respiratory conditions with symptoms characterized by high fever, cough and respiratory distress and it caused many deaths.[83] The virus was particularly virulent – or life-threatening - with no known cure. Before the illness was contained over 900 died and 85-hundred people were infected worldwide. Of the non-Asian countries affected, Canada was one of the hardest hit, reporting 44 deaths

[78] Health Canada, 2003, p. iii.
[79] Ibid, p. 20.
[80] Ibid.
[81] Mechanic, 2003, p. 425.
[82] Ibid.
[83] Health Canada, 2003, p. 1 to 2.

and 438 probable and suspect cases.[84] During the crisis the media were important in reporting on the spread of this deadly virus and on the negative economic and social impacts that the crisis had on the affected countries.

The initial reports of SARS in China were tracked through the Global Public Health Intelligence Network (GPHIN) early-warning system.[85] This network scans the internet media sources for reports of infectious disease outbreaks around the world. The network captured stories of the emergence of SARS from reports in China of a serious respiratory illness, in early February 2003. The early detection of the virus allowed health authorities to alert public health practitioners of the beginning of the outbreak. The initial network advisories cautioned doctors to be alert for influenza like symptoms in travellers returning from China.

The virus arrived in Canada by the misfortune of a Canadian woman having been in brief contact with a 65-year-old doctor from Guangdong Province, China. The doctor had treated a sick patient who died of SARS. Soon after the patient's death, the doctor travelled to Hong Kong to attend a wedding and became ill during his stay at the Metropole Hotel in Kowloon, China. Twelve guests, from different countries around the world, including the Canadian woman, became infected while staying at the same hotel. The 78-year-old Canadian returned to Toronto on February 23, 2003 and soon became ill. The woman died at home on February 28, 2003. When she died the coroner classified the cause of death as a heart attack, missing the respiratory complications that had contributed to her death. Two days after the woman's death, her 44 year old son Mr. T showed signs of illness and arrived at the Scarborough Ontario Hospital's busy

[84] Ibid, p. 1.
[85] Ibid, p. 23 to 26.

emergency department where he waited for 18 - 20 hours for admission. This single case sparked the initial wave of cases in Canada. Despite the fact that the WHO issued advisories and other early warning systems reporting on this mysterious illness, there were problems in identifying the virus. A breakdown in information being disseminated to front line physicians and health care practitioners contributed to delays in recognizing the infection as an emerging disease unknowingly allowing the spread. When Mr. T's condition worsened the attending physicians recognized that they were dealing with a serious contagious illness. At this point a few other family members of the original case were admitted to different hospitals in the Greater Toronto Area suffering from similar symptoms. Many patients, visitors, and staff, who had been exposed to Mr. T while he waited in the emergency room, also fell ill. As patients began to show signs of illness and before physicians understood the gravity of the situation, family members were not questioned about their level of well-being and they continued to circulate within the general population resulting in more people becoming sick.[86]

On March 23, 2003, isolation measures were implemented in Toronto area hospitals. Affected hospitals were closed to the general public. New admissions and transfers from other hospitals were refused. Health officials asked those who had entered the affected hospitals, after March 16, 2005, to adhere to a ten-day home quarantine to try and contain the spread of the virus.[87] Hospitals implemented stringent infection control protocols, cancelling medical procedures and restricting visitors. Health care providers

[86] Ibid.
[87] Ibid.

were instructed to adhere to infectious control measures such as frequently washing their hands, wearing gowns, gloves, masks, eye protection, and the use of single or negative pressure rooms for isolating all SARS patients.[88]

The SARS experience highlighted weaknesses in Canada's public health system with "problems emerging with respect to timely access to laboratory results, information sharing, data ownership, and epidemiologic investigation of the outbreak."[89] What is meant by public health is the population focused functions such as "population health assessment, health and disease surveillance, disease and injury prevention (including outbreak or epidemic containment), health protection and promotion."[90] The outbreak also illustrated that Canada was not adequately prepared to deal with a pandemic.[91] Following the crisis, many advocates called for health care reform to strengthen public health and to avoid the problems experienced during SARS.

Catalyst for Public Health Policy Reform

The SARS epidemic focused attention on prevention and control of infectious diseases. As mentioned earlier, the outbreak highlighted weaknesses in Canada's public health system and sparked a sense of urgency for public policy actors to address the gaps. The Government of Ontario commissioned a report to review the failings in responding to the outbreak in Toronto. The Honourable Mr. Justice Archie Campbell chaired the Ontario 2006 SARS Commissioned Report. The report findings attributed the problems

[88] Health Canada, 2003, p. 26.
[89] Health Canada, 2003, p. 20.
[90] Ibid.
[91] Ibid.

with the response to the outbreak as having been caused by the inaction of governments.[92] Campbell criticized governments for their "lack of preparation against infectious disease, the decline of public health, the failure of systems that should protect nurses and paramedics and others from infection at work – all these declines and failures went on through three successive governments of different political stripes."[93] He observed that the failures were non-partisan and were indicative of systematic neglect from governments eroding investments in public health over time. He credited the success in containing SARS to the efforts of the nurses, doctors, paramedics and all others who put themselves in harms way to deal with the crisis.[94]

SARS garnered a great deal of media attention raising concern that the world was experiencing the beginning of a pandemic. It was particularly worrisome because it was a new virus not immediately identified. Initial symptoms in patients afflicted with this illness were often misdiagnosed because they mimicked other flu and respiratory conditions. Before health care practitioners realized that they were dealing with something new and serious the virus had begun to spread. Patients who presented in hospitals seeking treatment often waited in emergency rooms exposing other patients to the virus. The response to SARS crippled hospitals forcing the cancellation of non-SARS related health care activities.[95] Over a period of approximately eight months in 2002/03 SARS infected 8,442 persons in 32 countries and killed 916 worldwide.[96] Health officials feared that the world was experiencing the beginning of a pandemic but fortunately the outbreak was contained and a pandemic did not materialize. Emergency

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[92] Campbell, 2006, p. 3.
[93] Ibid, p. 2.
[94] Ibid, p. 3.
[95] Lam and Lee, 2006, p. 6 to 9.
[96] World Health Organization, 2006.

room doctors Lam and Lee credited global containment measures including isolation and quarantine of infected individuals and their contacts as the key actions which successfully stopped the spread of disease.[97] The Canadian governments' response to the crisis was deemed to have been inadequate and all levels of government were criticized for how poorly the emergency had been handled in this country. SARS was the event which ultimately turned much needed policy attention to public health concerns and the need for improvements to crisis management and security resulting in additional government investments for pandemic and emergency response planning.[98]

Critics spoke out on the poor state of public health in Canada post-SARS because historically the system had emphasized personal health services and not population health.[99] Since the introduction of the *Medical Care Act* in 1966 medical costs skyrocketed and Michael Mechanic notes that because advances in medical care have been seen as more influential in extending a person's life and improving overall health in a modern health systems the general public linked their well-being with the individual care they received.[100] Despite the limited attention on public health; however, Mechanic attributes a resurgence of interest in this area due to rising health care costs and recognition by most developed nations that they must spread the resources more widely and effectively to sustain the system.[101]

Following the SARS crisis, the Canadian federal government struck a committee to review the lessons learned from the event and to offer recommendations on improving the health care system. In October 2003, the National Advisory Committee on SARS and

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[97] Lam and Lee, p. 66.
[98] PHAC, 2004.
[99] Mechanic, 2003, p. 422.
[100] Ibid.
[101] Ibid, p. 424.

Public Health, chaired by Dr. David Naylor, submitted findings to Parliament. The committee's primary recommendation for strengthening public health in Canada was to create a dedicated agency with a mandate to provide leadership and action on public health.[102] In September 2004, the Public Health Agency of Canada (PHAC) was created.[103] The new Agency was created through order-in-council - an instrument that serves notice of decision taken by the executive arm of government – and headed by a Chief Public Health Officer. This served as a commitment to strengthening the pan-Canadian Public Health system.[104] This resulted in an immediate reallocation of public funds and human resources from Health Canada's Population Public Health Branch which became the backbone for the Agency. The order-in-council allowed the Agency to begin developing its organizational structure while the legislative instrument was being developed.

The Federal Government committed $805-million over five years "to deliver on the Government's commitment to invest in health care in direct federal support."[105] Of the total budget $665-million of initial funding was dedicated to the Agency. This included $100-million towards increasing front-line public health capacity; $300-million to support new vaccine programs and $10-million of improve surveillance systems. Additional funding of $165-million over two years was dedicated to strengthen infectious disease preparedness. These figures also accounted for the transfer of $404-million of operating and human resources from Health Canada.[106] The interest in public health post-

[102] Health Canada, 2003, p. 214.
[103] PHAC, News Release, September 24, 2004.
[104] Definition of Order in Council found at: Government of Canada, *Treasury Board of Canada Secretariat,* online accessed 18 December 2007 at: http://www.tbs-sct.gc.ca/ri-qr/ra-ar/default.asp@language=e&page=glossary.htm
[105] Government of Canada, *The Budget in Brief,* 2005.
[106] PHAC, Strengthening the Pan-Canadian Public Health System, 2004.

SARS resulted in heightening emergency response planning activities by the Agency and soon after establishing the PHAC a first draft Canadian pandemic plan was released.[107] A joint federal, provincial and territorial government cost-sharing agreement was struck to establish a national stockpile of antiviral drugs as part of pandemic planning.[108] Then in 2006, the Canadian Parliament enacted Bill-C5, *Creation of the Public Health Agency of Canada Act.* Shortly after passage of the Bill, amendments to the *Quarantine Act* took effect as a further indication of the Government's commitment to public health reform.[109]

The SARS issue and concerns over the rising health care costs led the federal government to institute reforms to the health care system in 2004. The reform was focused on strengthening public health within the parameters of the Canadian constitutional arrangements between the federal and provincial governments using a collaborative approach. Part of this included a plan to be initiated during a pandemic – a disease outbreak over a whole country or large part of the world.[110] The pandemic plan was designed to assign clear responsibilities for federal, provincial, territorial and regional levels of government in responding to health emergencies such as pandemics. The changes recognized that since Canada's provincial and regional health authorities have responsibilities for health care delivery it was imperative that they be included in every stage of planning. The reform also provided for the federal government to assume a leadership role in coordination, surveillance and response to health threats. Under the new structure, responsibility for responding to outbreaks is shared between levels of government as well as health authorities in a collaborative arrangement. Implementing a

[107] PHAC, News Release, February 12, 2004.
[108] PHAC, Pandemic Plan, 2004.
[109] Tiedemann, 2006, p. 2 to 6.
[110] Oxford Dictionary, 2001, p. 646.

national surveillance program to monitor public health threats such as avian influenza is critical for protecting the public. Shortly after the creation of the Public Health Agency of Canada, planning began for developing a national pandemic preparedness plan as a response measure against emerging and re-emerging health threats such as avian influenza.

Facts about Avian Influenza

Influenza is continually evolving. It can be mild, moderate or severe. It can cause epidemics and occasionally a strain will come along which will cause pandemics.[111] Influenza is a respiratory ailment with characteristics which make it particularly deadly because "when it kills, it usually does so in one of two ways: either quickly and directly with a violent viral pneumonia so damaging that it has been compared to burning the lungs; or more slowly and indirectly by stripping the body of defenses, allowing bacteria to invade the lungs and cause a more common and slower-killing bacterial pneumonia."[112] The virus spreads through droplets which are coughed or sneezed into the air by infected people. Different strains of the virus circulate within communities and some people build antibodies which help them to fight off the virus.[113] Occasionally new strains emerge for which people have little to no immunity and a larger number of people get sick. If the new virus has the ability to spread easily from person to person, many people around the world could become ill and possibly die. When there is a notable

[111] Ibid.
[112] Barry, 2004, p. 35.
[113] PHAC, Pandemic Influenza, online accessed 3 January 2008 at: http://www.phac-aspc.gc.ca/influenza/pandemic_e.html

increase in number of infected people with a particular strain reported globally this is referred to as an influenza pandemic.[114] There have been periodic influenza pandemics throughout history "usually several a century. They erupt when a new influenza virus emerges."[115] Flu strains which affect humans are influenza A, B, and C. Influenza B and influenza C are usually milder than the A type and do not circulate in birds. Types A and B are what circulate as yearly influenza cases in humans. Only influenza A viruses have the potential to cause an epidemic or a pandemic.[116] Type B does cause disease but not epidemics; and type C rarely causes disease in humans.[117] Avian influenza epidemics occur each winter and these epidemics are so common that we refer to the period in which they generally occur as the flu season.[118]

In recent years, the WHO has been warning of an emerging lineage of the highly pathogenic - an agent causing disease -[119] classified as H5N1 viruses for fear that it will mutate to a strain which could become transmissible human to human and cause a pandemic.[120] The H5N1 is an avian influenza A virus which usually infects wild and domestic birds but occasionally it infects human and can be deadly. Fears that this strain could mutate into a more virulent strain has prompted health officials to caution people who live within close quarters to domestic fowl to limit their direct contact with birds. Since 1997, the WHO has focused attention on H5N1 avian influenza due to its high potential to spark a pandemic because the spread of this virus has been gradually

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[114] Ibid.
[115] Ibid.
[116] Ibid, p. 30.
[117] Ibid.
[118] Lam and Lee, 2006, p. 28.
[119] Oxford Dictionary, 2001, p. 1065.
[120] World Health Organization, *Epidemic and Pandemic alert and response,* accessed on internet 17 December, 2007 at: http://www.who.int/csr/disease/avian_influenza/guidelines/nomenclature/en/index.html

increasing from the preceding years since it was first identified.[121] In a 2005 World Health Organization (WHO) report authorities warned of elevated concern over H5N1 because the world has never seen an influenza strain in poultry so deadly with high mortality rates in rare human cases.[122] Although H5N1 primarily infects birds, it has been known to infect humans. There is concern among influenza experts that H5N1 could mutate into a form which could be easily transmitted between humans and the WHO remains on high alert in case H5N1 crosses the species barrier to easily infect humans.[123] When the strain has been discovered in fowl, large scale eradications of flocks have been carried out to contain the spread of this deadly bird flu strain. Such concerns and reactions to this health threat have prompted global attention from political actors - those individuals who aspire to influence the decision-making process - to the pandemic issue.[124]

Facts about Pandemics

According to the WHO an influenza pandemic occurs when a new influenza virus capable of causing severe disease transmits easily among humans. As stated earlier, since there is no immunity to a newly emerging virus in communities, it can cause a pandemic – an epidemic on a global scale.[125] As mentioned, avian influenza evolved in the digestive tracts of wild birds and over the years "some strains learned how to infect other species and became dangerous in the lungs and bodies of other animals, such as pigs and

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[121] WHO, *Avian Influenza: Assessing the Pandemic Threat,* 2005, p. 5.
[122] Ibid.
[123] Ibid, p. 9.
[124] McNair, 2006, p.5.
[125] WHO, "Pandemic Preparedness", Retrieved August 12, 2007 from http://www.wpro.who.int/health_topics/pandemic_preparedness/

horses, and eventually humans."[126] The H5N1 is an evolving avian influenza strain which originated in Asia. Lam and Lee suggest that it spread into Eastern Europe over the 2005 and 2006 flu seasons and that:

> there have been outbreaks of highly pathogenic H5N1 avian influenza in over 50 countries in Asia, Europe, and Africa, including rich countries such as France, Germany, Denmark, and the United Kingdom. It looks as if the disease will continue to spread, and some predict it would inevitably arrive in Canada, as early as the fall 2006.[127]

Cases of H5N1 in domestic birds have proven to be particularly lethal. In recent years, "over 150 million domestic birds have either died or been culled in an effort to control the outbreak of H5N1."[128] H5N1 has infected humans with a high mortality rate with over 200 cases of human illness reported so far which have been limited to Asian countries.[129] To date no human-to-human transmission of H5N1 has been documented but infectious disease experts are keeping a watchful eye on the strain for fear that it could mutate to a strain which could cause the next pandemic. Over the last few years, the media have reported on the spread of H5N1 in birds and the rare human cases which have been documented since it emerged.

Policy and the Media

This first section of the chapter dealt with the impetus behind reforms to Canada's health care policy. However, it is important to understand the role that the media play in the policy reform process. Much of the literature on mass media impact shares the view that all forms of media, including television, newspapers, radio, films, e-mail and the

[126] Ibid.
[127] Ibid.
[128] Ibid.
[129] Ibid, p. 34.

World Wide Web are harmful to mass attitudes and behavioural patterns within a democracy.[130] It is claimed that mass media have a substantial and negative impact on politics and social life.[131] Research from a study on the influence exerted by media over United States state legislators concluded that the influence of media had grown over the years. Overall, respondents from this study felt that media had become more influential in the policy making process. Media were perceived as having become more confrontational.[132] Government issues do not generally affect the majority of individuals. In his study of agenda setting Stuart Soroka stated that governmental issues are rarely seen as significant by media because "the issues either do not present exciting or dramatic elements or are too abstract."[133] This is particularly true of issues which are complex and cannot be well explained within a reasonable length. Soroka agrees that governmental issues are important to policymakers (elected officials and bureaucrats) before they become important to the public or the media.[134] He states that the media may affect the public agenda but:

> This effect, however, is secondary: the media act primarily as a conduit for government-led issue cues. The policy agenda leads both public and media in this case. As with sensational issues, any relationship between the three agendas and real-world indicators is secondary to the effects of the policy agenda on the other two.[135]

Much of the communication study literature challenge Soroka's assessment and accept that media play an important role as transmitters of political communication and senders

[130] Newton, 2006, p. 209.
[131] Ibid.
[132] Moncrief, 1996, p. 60 to 70.
[133] Soroka, 2002, p. 21.
[134] Ibid.
[135] Ibid, p. 23.

of political messages.[136] Some argue that increasingly the mass media are recognized as key actors in building, influencing and setting the policy agenda. They influence what gains public attention, and what does not.[137] Although there are arguments on the efficacy of media in relaying messages, "there is no disagreement about their central role in the political process, relaying and interpreting objective happenings in the political sphere, and facilitating subjective perceptions of them in the wider public sphere."[138] Nimmo and Combs discussed the role of the media in democracy stating that "historically, the mass media were heralded as the ultimate instruments of democracy…[they] were destined to unite, educate, and as a result, improve the actions and decisions of the polity."[139]

Criticism of the media's democratic role is often expressed based on a journalist's objectivity in reporting news. It is often argued that "the media's political reportage is biased and flawed – subjective, as opposed to objective; partisan, rather than impartial."[140] As one of the first communications researchers, Lippmann wrote in his 1922 seminal piece on the topic: "every newspaper when it reaches the reader is the result of a whole series of selections as to what items shall be printed, in what position they shall be printed, how much space each shall occupy, what emphasis each should have. There are no objective standards here. There are conventions."[141] The media not only provide us with information on important events, they structure our political reality by elevating or diminishing the visibility of stories on the media agenda. [142]

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[136] McNair, 2006, p. 11.
[137] McCombs and Shaw, 1972/1993; McLeod et al., 1974; McCombs, 1981; Nelkin, 1987.
[138] McNair, 2006, p. 11.
[139] Nimmo and Combs, 1992, p. xv.
[140] McNair, 2006, p. 26.
[141] Lippmann, [1922] 1954, p. 354.
[142] McNair, 2006, p. 47; Bagdikian, 1997, p. 66.

To understand how the English Canadian newspapers reported concerns about pandemic during the 2005/2006 flu season, it is important to understand two important principles of media: agenda setting and framing. Agenda setting is defined as the prioritizing of problems to be addressed within a social system. It is characterized by the level at which issues gain attention of the media professionals, the public and policy elites.[143] Agenda setting has been defined in political terms as political controversies which are addressed at different points in time as they become important to the polity.[144] Agenda setting research is defined as issue salience or "the degree to which an issue on the agenda is perceived as relatively important. The heart of the agenda setting process is when the salience of an issue changes on the media agenda, the public agenda, or the policy agenda."[145] It is measured by how often a topic is discussed and who is discussing the issue. A second dimension is characterized as how the story is presented and the effects from framing which can "influence the pictures of those objects in our heads."[146] Dearing and Rogers see the role of media in agenda setting as the ones who "often launch the process, putting an issue on the public agenda, which then may lead to policy change. This instigating role defines the importance of media in a democratic society."[147]

Framing, on the other hand is defined as the stylistic choices that alter the interpretation of the topic. Framing determines what is included and excluded, what is important and unimportant to relay about a specific subject.[148] Framing and agenda setting are important because the media may shape readers opinions on a topic by first

[143] Dearing and Rogers, 1996, p. 1 to 2.
[144] Cobb and Elder, 1983, p. 32.
[145] Dearing and Rogers, 1996, p. 8.
[146] McCombs and Estrada, 1997, pp. 246 to 247.
[147] Dearing and Rogers, 1996, p. 99.
[148] Capella and Jamieson, 1997, p. 38 to 40.

paying considerable attention to it and second by constructing the story in a certain way. Entman argues that "to frame is to select some aspects of perceived reality and make them more salient in a communicating context, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation."[149] Entman agrees that framing may have an agenda setting function because it gives exposure to certain topics while forcing others into the background but he sees framing as more than agenda setting because it provides a way to think about events.[150]

It is important to study how the media shape the news, but it is also valuable to understand something about those who work to produce the content and interpret events. Journalists, editors and newspaper owners are important actors. They not only transmit political messages to the public but they "transform them through various processes of news-making and interpretation."[151] Newsroom factors such as editorial choices and the journalists' perception of which stories may be of particular interest to the public play a role in what is ultimately produced.[152] Elite theory suggests that a small group of men in society dominate all domains, including the domain of culture and communications.[153] It is believed that these elite, including media magnates, use their power and influence to manipulate the media so that they force their ideas on the masses who cannot resist.[154] This refers to what Antonio Gramsci described as hegemony - or the political and social

[149] Entman, 1993, p. 52.
[150] Ibid, p. 52 to 58.
[151] McNair, 2006, p. 43.
[152] Fallows 1997; Fuller, 1996.
[153] McNair, 2006, p. 83.
[154] Ibid.

domination of the elite.[155] Gramsci argued that hegemony is a cultural process in which the media played a great role and citizens "consented to the system and their place in it."[156]

Political Economy of Media

Through the late 1990s, and at the turn of the twenty first century, the Canadian media landscape has been significantly altered by a series of corporate mergers. The trend towards cross-ownership of outlets in different media, known as convergence, became prominent as ways for companies to combine sources of information and entertainment through the use of digital technology.[157] In their 2007 book on the state of newspaper ownership in Canada, Soderlund and Hildebrandt noted a trend toward consolidation of media into fewer and fewer hands which began with the consolidation of newspapers. This trend towards convergence increasingly concentrates power among those with wealth, social and corporate status.[158] Debate over the impact of convergence is divided between those who hold a libertarian (free market-place of ideas) philosophy and those with a democratic (governmental regulation for the public good) orientation.[159] Critics of convergence fear that the trend towards a monopolistic communication system in Canada means that "the proprietors might restrict the range of debate within newspapers and skew news coverage so as to favour select interests, thus propagandizing the

[155] Drislane, Robert and Parkinson, "Online Dictionary of the Social Sciences," Athabasca University online accessed 11 January 2008 at: http://bitbucket.icaap.org/dict.pl?alpha=H
[156] McNair, 2006, p. 57.
[157] Carlin, 2003, p. 51 to 69.
[158] Soderlund and Hildebrandt, 2005, p. 32.
[159] Ibid, p. 32 to 33.

population."[160] It is argued that this concentration of ownership and control weakens media pluralism.[161]

Media organizations operate in a complex environment and are subject to economic forces, laws, and the cultural and ideological rules of society.[162] Even before convergence was prominent some critics complained that there was little diversity of media coverage. Despite an abundance of topics to write about some suggest that the media output tends to be the same mass-produced, uniform, predictable, and repetitive product.[163] Under these conditions stories must be produced based on their commercial viability. The formula of what constitutes a good story which will favour one story over another - also called news value - is not easily deciphered.[164] The job of creating the news is to package "a complex series of events into a news package that audiences can understand."[165] Former journalist Peter Desbarats points out that "a good story, from the perspective of news values, is one that is simple rather than complex, unexpected rather than expected, and dramatic and visual rather than routine and descriptive."[166] Regardless of the interest in producing stories with significant news value many acknowledge that first and foremost newspapers are businesses and their primary interest is in printing what will improve circulation.[167] There are incentives for owners to present the news content which will appeal to the broadest possible audience. They can choose to use their newspapers for advancing partisan political commentary, but by doing this they run the

[160] Dornan, 2003, p. 98.
[161] Newton, 2006, p. 215.
[162] Nesbitt-Larking, 2001 p. 165.
[163] Ibid, p. 166.
[164] Ibid, p. 169.
[165] Ibid, p. 170.
[166] Desbarats, 1990, p. 110 to 111.
[167] Nesbitt-Larking, 2001, p. 113.

risk of alienating some of their readers, lowering their circulation which may have a negative effect on their advertising revenues and ultimately their profits.[168]

There is no question that newspapers play a pivotal role in disseminating information to the public on important social issues. The extensive media networks and the powerful information technology tools which are at their disposal enable messages to be quickly communicated to millions of people. Taras recognized that media owners operate businesses and therefore have responsibilities to investors but he maintains that they also have an obligation to serve the public interest.[169] Similarly, Cappella and Jamieson note that "cynicism about the health care reform debate was related to two perceptions about the media: its absence of balance and its overemphasis on conflict."[170]

In recent years the media institutions around the world have been shaken up by forces which are reshaping the way the news is produced. In his book on the topic, David Taras describes the phenomenon of convergence as the tendency for technologies, corporations, and cultures to merge rapidly and have an impact on a global scale.[171] Technological advances in cable and satellite television and the development of the World Wide Web provide an abundance of choices for audiences which have prompted a second phenomenon referred to by Taras as fragmentation. Increasingly audiences are broken down into smaller segments which have forced the media to become "more customized, more targeted, more tailored to small slices of the market as they identify

[168] See Bennett, 2001; Demers, 1999; Fletcher and Taras, 1995; Soderlund and Hildebrandt, 2005, p. 31.
[169] Taras, 2001, p. 2 to 3.
[170] Cappella and Jamieson, 1997, p. 165.
[171] Taras, 2001, p. 61.

narrow consumer needs."[172] Carlin defines convergence in several different ways stating that:

> First, the convergence of content: adapting material gathered for one medium for use in another (putting newspaper stories on the Internet). Second, the convergence of technology: using the digital media in combinations that extend the use of each (using new technology to combine and extend, for instance, the experience of watching TV news by accessing additional material from a library and having the ability to pause a live program while doing so). Finally, the convergence of ownership: control of different types of media coming under one owner.[173]

Although it may seem as though Canadians have the world at their fingertips with more media choices from around the world, Taras argues that we are actually media poor because these changes are weakening the ability of Canadians to communicate with each other.[174] He argues that having a larger assortment of the same thing is not the same as having many choices. Taras sees media moguls as failing the public by putting their own interests above that of the country and the citizens. Taras does not put the blame for what he considers as a media crisis solely on media owners. He argues that politicians and regulators have failed in their responsibility by muscling in and bullying some news businesses while being more lenient with powerful media owners because they have been too intimidated to act.[175]

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[172] Ibid, p. 61 to 62.
[173] Carlin, 2003, p. 53.
[174] Taras 2001, p. 1 to 4.
[175] Ibid, p. 2 to 3.

A special 2005 report published in *The Economist* discusses newspaper decline in profits in recent years because people are looking for their news on the internet or other sources causing circulation numbers to fall each year.[176] Newspapers are losing advertising dollars, the bread and butter of the industry with examples such as classified ads moving online.[177] Increasingly newspapers have begun dedicating more resources to their online service with positive initial results in website generated revenues. In 2006, the Newspaper Association of America announced that all the newspaper's websites grew by 35% from 2005, to a total of $613-million.[178] The increasing audience's reliance on the new technology for their news further contributes to fragmentation and threatens newspapers. In order to compete, newspapers will have to adapt their business to these new realities. Research into what content readers want in their news has shown that "people like short stories and news that are relevant to them: local reporting, sports, entertainment, weather and traffic."[179] There is recognition that the industry is changing to meet the needs of internet users who like to scan international news headlines in moments and are not interested in reading lengthy reports about foreign affairs.[180] *The Economist* report also suggests that coverage of national and international news is almost indistinguishable from one newspaper to the next.[181] In this competitive environment mergers acquisitions and partnerships have produced major media conglomerates resulting in substantial savings and pooling of human and capital resources.[182]

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[176] The Economist, 2006, online accessed 28 December 2007, at http://www.lexisnexis.com.libproxy.uwinnipeg.ca/us/lnacademic/delivery/PrintDoc.do?fr... at 1.
[177] Ibid, p. 1.
[178] Ibid, p. 2.
[179] Ibid, p. 3.
[180] Ibid.
[181] Ibid.
[182] Taras, 2001, p. 70.

However, the academic literature on the topic cautions that the move towards convergence has resulted in more homogeneity in what is being produced by media conglomerates around the globe.

Taras writes that media is experiencing a flood of change in the new millennium as "technologies, corporations, and cultures are merging at a rapid pace and on a global scale. Indeed, the convergence wave is so high that there is a fear that individual media, independent voices, and local and national expressions will be submerged - drowned in a deadly sea of conformity."[183] Taras believes that the very foundations of democratic and national communities are being shaken up resulting in significant societal change.[184] He sees fragmentation of audiences, to competing media as promoting more customized and targeted products as a way for media to meet narrow consumer needs. In his opinion, the two forces, convergence and fragmentation contradict and contest each other.[185] Taras expresses concern that with the convergence of media corporations and the growth of multi-media platforms, there are fewer reporters available to investigate the news resulting in a silencing of alternative voices.[186] It could be argued that in the age of technological advances, and ever increasing choices in entertainment and news sources, audiences have become more sophisticated and that their appetite for timely and salient news will force the media to adapt so that they can give audiences what they want or face extinction. Convergence may have been motivated by the corporate bottom line but in order to succeed in this increasingly competitive and divergent market convergence

[183] Taras, 2001, p. 61.
[184] Ibid.
[185] Ibid, p. 61 to 62.
[186] Ibid, p. 80.

forces may result in improving newspapers' content while conglomerates adjust to this new reality and make changes to be able to survive.

Large corporations are reportedly saddled with debt which is attributed to the trend towards convergence but on a long term basis there must be economic benefits for these companies to opt for convergence in an effort to help their bottom line.[187] Taras acknowledges that the major media conglomerates attempt to reduce their economic risk "by creating economies of scale, eliminating competition, and pooling their capital, talent and resources."[188] As has been stated earlier, critics caution that the trend towards convergence has a negative impact on news coverage producing homogeneity in the content. It not only erodes the quality and plurality - or opposing views - of newspaper reports but it gives an even stronger voice to the elites who own the conglomerates and in recognition that "when ownership falls into too few hands, abuses of power are more likely to occur."[189]

Nesbitt-Larking challenges the view that owners impose their ideology in what is published, saying that the concentration of media in the twentieth century has produced a climate where fierce competition between the media means that newspapers cannot overtly exhibit bias for fear of alienating potential readers.[190] Notwithstanding, there are many examples where owners have exerted influence on newspaper content. The most notable example was the public outcry against a decision of CanWest executives, in June 2002, to impose a gag order on journalists who had been critical of Prime Minister Jean Chrétien. The controversy arose from a feature article published in the CanWest owned

[187] Taras, 2003, p. 16
[188] Taras, 2001, p. 70.
[189] Taras, 2003, p. 16.
[190] Nesbitt-Larking, 2007, p. 101.

Ottawa Citizen which raised concern over Jean Chrétien's personal financial dealings. At issue was Chretien's perceived conflict of interest between his role as Prime Minister and his part ownership of a golf course in his Shawinigan, Québec riding. Chrétien was accused of having intervened personally to secure a federal government loan for the golf course's troubled adjoining hotel.[191] As a response to the editorial, the owner of the newspaper Izzy Asper, who was a close friend of Chrétien, fired the newspaper publisher Russell Mills. Critics denounced the move as a clear case of silencing of media. Government opposition leaders publicly spoke out. Outraged New Democratic Party leader Alexa McDonough raised concern over the silencing of voices and urged the government to take a stand to protect journalistic independence from convergence.[192] Liberal Member of Parliament John Bryden publicly attacked Asper for being immature in how he handled the situation and accused CanWest of not having the "foggiest notion of the concept of freedom of the press within a democracy."[193] This incident prompted several publishers, editors, and directors of CanWest to publish an open letter warning that "the free expression necessary for democratic debate was being imperiled."[194]

This example shows how owners can have influence over editorial content. Owners have the power to silence voices but as noted by Nesbitt-Larking, owners are also under pressure to resist interference so that they do not alienate their audiences, or the advertisers for fear of losing advertising revenues upon which they are so dependent.[195] Existing literature on the topic shows how market considerations shape the news products' selection bias in favour of those who buy the news and more importantly

[191] Soderlund and Romanow, 2005, p. 125.
[192] Ibid, p. 127.
[193] Canadian Press, June 19, 2002, p. 18.
[194] Soderlund and Romanow, 2005, p. 125.
[195] Nesbitt-Larking, 2007, p. 41.

the advertisers who support the media.[196] Advertisers can also exert power to have editorial and programming censored in their favour. Writing on this point Iyengar says that "the most dramatic example of the media's thematic self-censorship in order to protect a major advertiser has been the media's extraordinary silence and de-emphasis for the last sixty years in handling scientific evidence about a major killer of Americans: heart-lung disease as linked to tobacco use."[197] Therefore editors must select stories which they think will appeal to consumers who fit the ideal demographics for the advertisers.[198]

English-Canadian National Newspapers

Studying how the two Canadian national newspapers depict public health topics is important because these newspapers are in the "inner ring" in terms of influence and scope.[199] In 1990, Taras' analysis of the most influential media organizations in Canada found that the *Globe* had influence over what questions are asked in Question Period and that news organization relied on the *Globe* as a "reference point for their own line-ups."[200] Although this writing predated the creation of the *Post*, Sampert argues that the criteria used by Taras in 1990 (which included scope, national audience, resources, personnel size, and budget) could be applied in 2004 to both the *Globe* and the *Post*.[201]

[196] Gilliam et al. 1996, p. 20; Meyers 1997, p. 90 to 91.
[197] Bagdikian, 1997, p. 74.
[198] Lundman, 1996, p. 381.
[199] Taras, 1990, p. 87.
[200] Ibid, p. 88.
[201] Sampert, 2006, p. 85.

Dornan agrees stating that morning newspapers are the daily briefing book for broadcast media to decide on which stories to follow.[202]

Both the *Post* and the *Globe* belong to multi-media platform companies. The *Globe and Mail* was founded in 1844 pre-dating confederation. In 1980, the *Globe* was sold to the Thomson Group, a company run by the family of Kenneth Thomson, a wealthy Canadian businessman. In 2001, control of the *Globe* was sold to Bell Canada Enterprises Inc. (BCE), Canada's major telephone company, which controls CTV, Canada's major national private TV network. The *Globe*, and CTV, merged into a media company, Bell Globemedia, which was owned by BCE although the Thomson's retained a major stake. In late 2005, BCE announced it would significantly reduce its stake in Bell Globemedia, leaving the Thomson family, through their holding company Woodbridge, as the largest shareholder with 40%, while BCE, Torstar (which owns the Toronto Star) and the Ontario Teachers' Pension Plan each control 20% of shares. The *Globe* has long been viewed as the voice of the Upper Canada elite centered on Toronto business. It has a reputation for being a conservative journal which is capable of embracing social reforms of the left such as supporting rights for gays and lesbians, and the decriminalization of soft drugs.[203]

The *National Post* was created in 1998 by right-wing entrepreneur Conrad Black, a Canadian communications mogul, as part of Black's Hollinger Corp. The *Post* is said to have been created to provide direct competition against its rival paper the *Globe*.[204] In 2001, Black sold his shares of the *Post* to CanWest Global headed by the Asper family and headquartered in Winnipeg. The new acquisition was added to CanWest's extensive

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[202] Dornan, 2003, p. 104.
[203] Dornan, 2003, p. 116.
[204] Nesbitt-Larking, 2001 p. 111; Dornan, 2003, p. 116.

list of major Canadian circulation holdings. These include *The Calgary Herald, Montreal Gazette, Ottawa Citizen, Windsor Star*. Among its assets CanWest also owns many radio and television networks across Canada.[205]

Many communication researchers agree that the trend towards convergence has had an impact on how the two English-Canadian newspapers produce and deliver the news. The *Globe's* reputation as the English Canada's national newspaper, and as a news leader, has been largely built on high-caliber journalism.[206] The *Post* has tried to challenge this reputation and has been competing with the *Globe* since it began publishing in 1998, but so far this newspaper has yet to turn a profit.[207] Notwithstanding, Brooks asserts that "the political columnists and editorial writers of both the *Globe* and the *Post* are seen as influential players in defining the country's political agenda."[208]

[205] Brooks, 2004, p. 333.
[206] Brooks, 2004, p. 333.
[207] Barbara Shecter. *Ottawa Citizen,* 8 February 2006, [Final Edition], sec. D: D2.
[208] Brooks, 2004, p. 332 to 333.

Conclusion

This chapter highlights the development of the health care system in Canada which had traditionally been focused on primary health care - the health of an individual - and limited attention onto public health. High profile public health crises over the last two decades caused the government to reassess the current state of health care and lead to policy reform. The tainted blood tragedy of the 1980s; the Walkerton tragedy in 2000; and finally SARS in 2002, served as the catalysts for bringing about health reform in Canada and contributed to the policy decision to create the Public Health Agency of Canada. Because these events had a significant social, economic and political impact the media reported on the stories as they developed and on the government responses to these crises.

As the evidence suggests, media play an important role as transmitters of political communication and senders of political messages.[209] Newspapers play an important role in cueing other media on the newsworthiness of the stories they cover.[210] As has been discussed in this chapter, the media not only transmit political messages to the public but they use various ways of producing the news to offer an interpretation of events and their implications.[211]

The communication literature shows that media owners and advertisers have a strong influence over media and that the effects are more apparent during periods of convergence. Taras is hopeful that fragmentation might force the media to be more responsive and produce better quality reports in order to stay competitive and to keep their readership. Even in less convergent environments, the objective of the newspapers

[209] McNair, 2006, p. 11.
[210] Erickson et al., 1991, p. 43 to 44.
[211] McNair, 2006, p. 43.

to be objective, accurate, and to offer salient news in their reporting is paramount. Ultimately the survival of newspapers hinges on their ability to respond to economic forces and provide what their audiences want as timely and as accurately as possible.

This chapter began by providing background of the trigger events which have been attributed to policy attention to reform the Canadian health care system with renewed focus on public health. The discussion set the context of how SARS, avian influenza H5N1, stockpiling of antiviral drugs, and the threat of pandemic are related. It advances the predominant theory that media convergence has contributed to silencing voices leaving only one voice, and that the industry is hegemonic in how it presents health issues. The effects of convergence and hegemony are the theoretical concepts underpinning this discussion. This chapter also provides information on the Canadian constitutional arrangements between levels of government in managing public health. It provides context for readers about the recent health care reform and the need for strengthening public health and now shifts attention to the next chapter on agenda setting.

The following chapter discusses agenda setting drawing on the body of literature of how issues gain attention from media, the public, and policy actors. The chapter consists of a content analysis beginning with a review of the frequency and placement of articles appearing in the two English-Canadian national newspapers over the specified period.

CHAPTER 3

Agenda setting

The seminal 1968 McCombs and Shaw study and subsequent agenda setting research support the notion that the priorities of the media agenda influence the priority of issues in the public agenda.[212] Agenda setting as defined by Dearing and Rogers is the ability of issues "to gain the attention of media professionals, the public and policy elites."[213] Issues rise and fall on the agenda or compete with one another for attention.[214] It is also believed that "attention to an issue, whether by media personnel, members of the public, or policymakers, represents power by some individuals or organizations to influence the decision process."[215] This chapter begins with an overview of agenda setting and then examines the way the *Post* and the *Globe* set the agenda in their coverage of pandemic influenza.

Interest in agenda setting and the development of communication research began in the early part of the nineteenth century. In 1922, Robert Park was the first to describe what he referred to as media gatekeeping to describe the tendency of mass communication to place attention on certain topics while ignoring others. In his book on the study of mass communication, Park observed that:

> Out of all the events that happened and are recorded every day by correspondents, reporters, and the news agencies, the editor chooses certain items for publication which he regards as more important or more interesting than others. The remainder he condemns to oblivion

[212] Ibid, p. 238.
[213] Dearing and Rogers, 1996, p. 1.
[214] Dearing and Rogers, 1996, p. 2.
[215] Ibid, p. 3.

> and the waste basket. There is an enormous amount of news "killed" every day.[216]

Over the years the concept of gatekeeping has evolved to the concept of agenda setting broadly defined as "a set of issues that are communicated in a hierarchy of importance at a point in time."[217] Cobb and Elder define an agenda as "a general set of political controversies that will be viewed at any point in time as falling within the range of legitimate concerns meriting the attention of the polity."[218] They also recognized that an issue is two-sided and involves conflict which is inherently a political process.[219] Although there is value in studying what is reported, researchers agree that it is as important to report on what is not being reported because it tells us something about the attention given to a topic by the media, the public, and policymakers while not to others.[220] The relative attention to issues by media, policymakers or the public is said to represent the power by some individuals in influencing the decision process.[221]

Early agenda setting research of the 1960s and 1970s conducted by Shaw and McCombs studied undecided voters in North Carolina during the 1968 presidential election. Research findings from this study showed strong evidence of a close relationship between the political issues emphasized by the news media and the issues the voters regarded as important.[222] In a more recent study by Soroka to evaluate who sets the agenda among Canada's media, political elite, and citizenry, findings suggest that who

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[216] Park, 1922, p. 328.
[217] Dearing and Rogers, 1996, p. 2.
[218] Cobb and Elder, [1972] 1983, p. 14; Lang and Lang 1981.
[219] Dearing and Rogers, 1996, p. 2 to 3.
[220] Hilgartner and Bosk, 1988; Dearing and Rogers, 1996, p. 3.
[221] Dearing and Rogers, p. 3.
[222] Nesbitt-Larking, 2007, p. 333.

sets the agenda largely depends on the issue.[223] Expanding on Soroka's discussion, Nesbitt-Larking states that "for prominent issues that affect people personally and directly, such as unemployment and inflation, it is the general public that sets the agenda. For abstract policy issues, such as the debt and deficit and national unity, it is the government who sets the agenda. For sensational issues, such as AIDS and crime, the media set the agenda."[224]

As discussed in the previous chapter, post-SARS concerns over infectious disease and reactions to the H5N1 threat focused attention on the state of public health in Canada. At issue was whether the Canadian health care system was able to effectively detect and respond to infectious disease outbreaks. The Federal Government and the Province of Ontario each commissioned reports to study this question with the respective reports concluding that the governments were ill equipped to deal with a pandemic.[225] Subsequent and sustained interest from the newspapers, the public, and policy actors on the issue of pandemic preparedness serves as a good indicator to agenda setting.

This chapter focuses on agenda setting by examining the number of stories, type of stories and placement of stories within the two newspapers. As stated by Dearing and Rogers, "the heart of the agenda setting process is when the salience of an issue change on the media agenda, the public agenda, or the policy agenda. The task of the scholar of agenda setting is to measure how the salience of an issue changes and why this change occurs."[226]

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[223] Ibid.
[224] Ibid, 334.
[225] Health Canada, *Learning from SARS: Renewal of Public Health in Canada;* & The Province of Ontario *"Spring of Fear, the SARS Commission,"* 2006.
[226] Dearing and Rogers, 1996, p. 8.

Measuring the Agenda for Public Health

During the review period the topic of pandemic, the threat of avian influenza strain H5N1, and the stockpiling of antiviral drugs figured prominently in the two national newspapers with a total of 349 articles published between October 1, 2005 and May 31, 2006. Of the total, the *Globe* published 205 (58.7%) stories, while the *Post* ran 144 (41.3%) stories. The results indicate some interest in covering the topic by both newspapers with slightly more interest having been shown by the *Globe* since this newspaper ran a larger number of articles than did the *Post*. The total number of articles published was significant with interest having been sustained by both newspapers over the entire seven months. On most days at least one article appeared in either newspaper serving as a strong indicator of agenda setting.

Table 3.1: Number of news stories on influenza pandemic by newspaper

Newspaper	**Frequency**
Globe and Mail % within paper	205 58.7%
National Post % within paper	144 41.3%
TOTAL % within paper	**349** **100%**

Over any given week of coverage from the census each newspaper ran a minimum of two and as many as twenty four articles. Several spikes in the reporting were observed. Despite a difference in total number of articles published by the respective newspapers, increases or decreases in the number of stories appearing in both newspapers shared the same distribution pattern. This congruence in the reporting provides evidence that the two newspapers are homogenous in the frequency at which they cover the story.

This finding is also indicative of an editorial commitment by both newspapers in covering the story over time and contributing to agenda setting.

The first spike occurred in the week of October 23 - 29, 2005 which coincided with the International Health Ministers' meeting held in Toronto from October 22 - 23, 2005. This period represented the most coverage in a given week by both newspapers. The increased number of stories is not surprising, given that pandemic preparedness issue figured prominently on this international meeting's agenda. At the meeting, policymakers announced the stockpiling of antiviral drugs as a pandemic preparedness measure. Readers were introduced to the initial reference to the trademark names of antiviral drugs relenza and tamiflu reported from the meeting. As well, this was the first mention of governments around the world stockpiling these drugs as part of their pandemic plans. The drugs were hailed as the first line of defence against avian influenza. Stories on antiviral drugs continued to appear the week following the meeting. Reports ran of people stockpiling personal supplies of tamiflu antiviral drugs – drugs which have been found to be effective for treatment or prevention of influenza.[227] On October 27, 2005, the manufacturer of tamiflu, Roche Pharmaceuticals, made an unprecedented decision to limit sales of the drug citing that the reason for the decision was to avoid a global shortage of the drug due to the sudden increased demand.[228] It is interesting to note that both newspapers continued to cover this aspect of the story particularly after US President George W. Bush announced a $7.1-billion pandemic plan on November 2, 2005. Of the total number of stories in the two newspapers during this week, the *Globe*

[227] PHAC, Pandemic Influenza Plan, 2004, p. 34.
[228] Lisa Priest and Gloria Galloway. *Globe and Mail,* 25 October 2005, sec 1: A1.

published a total of 24 stories, while the *Post* ran 17 stories. This shows a strong interest by both newspapers in covering the story strongly contributing to agenda setting.

A second spike in coverage was observed during the week of November 20 to 26, 2005 with coverage of a confirmed case of avian flu in a duck from a farm in Chilliwack B.C. Stories over the course of the week speculated as to whether or not the strain was H5N1 while waiting for confirmation from laboratory tests. Stories ran on the culling of thousands of birds in and around the affected B.C. farm and the U.S. border was closed to B.C. producers. At the end of the week, the papers confirmed that the duck had not died from H5N1 but a mild form of avian influenza. At the same time, a few reports of human cases of H5N1 were reported in China. During this time frame, 12 stories were published in the *Globe* while the *Post* ran a total of 10 stories on the topic.

The third period of interest was from January 8 to 21, 2006, but unlike the previous two examples, the frequency of coverage by both papers was not similar. During this week, stories ran concerning the spread of the deadly strain of influenza H5N1 in birds found in various Eastern block countries. Stories warned readers that the strain was increasingly getting closer to Europe and there were predictions that H5N1 would soon find its way to North America. Several reports covered the declining sales of poultry in affected European countries due to concerns over H5N1. In this week, the *Globe* ran 14 stories, while the *Post* ran 6 stories about the developing concern that H5N1 was spreading into Europe.

The similarity in coverage by both newspapers over the entire seven month period suggests an editorial commitment to the story by both newspapers. The interest in the International Health Ministers' Meeting would have generated interest because these high

profile public policy meetings were held in Canada giving a more regional focus to what had previously been a foreign land story. The congruence in the reporting not only provides evidence that the two newspapers are homogeneous but it also speaks to the editors' decision to cover the story due to its newsworthiness and the level to which they feel it is of interest to their readers.[229] When stories are sustained over a period of time the newspaper may have a major resource investment and therefore the editors would be interested in sustaining the coverage to maximize their efforts. In fact, when newspapers have significant investment in a running series they will often consider front page placement to promote the story.[230]

Type of Story

In order to measure agenda setting it is not only important to study what is being published in newspapers but it is also important to consider how a story is told. Newspapers use a variety of ways of presenting news. Stories are selected based on their newsworthiness defined by Clayman and Reisner as observable social action and its immediate implications.[231] The criteria for what contributes to news values include timeliness, impact, geographical proximity, and conflict.[232] Communication research has concluded that the selection of certain stories over others is achieved through a subjective process of sifting and evaluating possible stories during conferences between journalists and editors.[233] The decision on which stories will be covered on any given day is made at the daily conferences. At the *Post* two daily conferences are held between assignment

[229] Clayman and Reisner, 1998, p. 186.
[230] Ibid, p. 195.
[231] Clayman and Reisner, 1998, 197.
[232] Clayman and Reisner, 1998, p. 179.
[233] Chermak, 1995, p. 27 to 28; Lundman, 1996, p. 359 to 360.

editors and reporters to discuss story ideas. At these meetings editors either assign stories or approve the ideas proposed by reporters.[234] The stories assigned to health reporters at the *Globe* are largely self-assigned. On occasion an editor will make a specific request to cover something happening in the political or business world.[235] At the *Globe* "beat reporters – those with a specific area of expertise - are expected to generate their own story ideas."[236] The type of report considered for print will depend on the story's news value.

Sections in the two national newspapers are dedicated to news stories (national and international), sports, entertainment, editorials, comments, features, in brief, business and travel. The news section contains the majority of the stories of any given day in the national newspapers. It provides information on newsworthy events which have occurred at a national or international level. The editorials and commentaries are used to push a particular view point on current events or a specific controversial topic. They offer dissenting views on stories which have recently appeared in the newspaper. Editorials are used to advance the opinion of the editor and do not have to be objective. The editorials can present political preferences while continuing to objectively present the news. Research of election campaign coverage has shown that while editorials do not have to be objective, they have been found to have some influence on electoral outcomes.[237] Commentaries give a voice to anyone wishing to wage in on debates raised within the coverage, or in response to editorials. The remaining sections are specialized as sports, entertainment, features, etc. Features are generally lengthier articles on a given topic and

[234] Blackwell, Interview, 2007.
[235] Picard, Interview, 2007.
[236] Ibid.
[237] Kahn and Kenney, 2002, p. 382.

they provide an opportunity for more comprehensive coverage of a particular issue. Where the story appears in the sections of the publication is indicative of the relative importance placed on the topic by the journalists and their editors.[238] The following table provides details of the type of stories carried by the two national newspapers during the study period.

Table 3.2: Type of Story by National Newspaper

Story Type	*Globe and Mail*	*National Post*	Total
News Story*	125	89	**214**
% within paper	61.0%	61.8%	**61.3%**
Editorial	4	2	**6**
% within paper	2.0%	1.4%	**1.7%**
Comment	18	4	**22**
% within paper	8.8%	2.8%	**6.3%**
Feature (Health Reports)	31	36	**67**
% within paper	15.1%	25.0%	**19.2%**
Business	21	13	**34**
% within paper	10.2%	9.0%	**9.8%**
Miscellaneous**	6	0	**6**
% within paper	2.9%	0.0%	**1.7%**
Total	**205**	**144**	**349**
% within paper	**100.0%**	**100.0%**	**100.0%**

* News Story section for the *Globe* includes 55 in-brief stories.
** Miscellaneous includes Sports, Entertainment and Travel stories. Of the number of miscellaneous stories, the majority ran under the travel section.

As expected, the majority of the stories published in both papers were news or feature stories 281 (81.0%). The *Globe* published 125 (61.0%), while the *Post* published 89 (61.8%) of their coverage under the news section. Although both newspapers published significantly more of their stories under the news section, it is worth noting that the *Globe* published 55 stories (27%) of their content as in-brief stories. These stories do

[238] Clayman and Reisner, 1998, p. 182 to 184.

not contribute to the discourse but provide a brief mention of what is happening on a particular story. When asked about this practice, one of the *Globe* interviewees who asked to be kept anonymous stated that in-brief articles are used to keep interest in a story. If an issue is widely covered, and there is a small advance for a particular day the newspaper will also use this type of coverage to keep the readers informed of developments.[239] Therefore this speaks to the agenda setting value of in-brief articles to sustain the story. Although the *Post's* news section coverage represented a large percentage of their overall stories, this newspaper relied more heavily on wire services for content which may not be indicative of a diminished interest in a story but may simply reflect the economic reality for this newspaper. Since its creation, the *Post* has yet to turn a profit.[240] The *Post's* financial struggle may mean that they must fill their daily newspaper with wire stories without spending resources on reporters to write stories or features. A few years ago the *Post* reduced its resources and with fewer staff they are not able to produce as much original copy. Regardless of having reduced their workforce the *Post* must still produce a daily newspaper which would explain a heavy reliance on news wire services for this newspaper.

Both newspapers ran the pandemic issue as a feature health story. The *Globe* published a total of 31 (15.1%) health features while the *Post* ran 36 (25%) of their stories as features. Both the *Globe* and the *Post* ran limited editorial and commentaries about pandemic. The *Globe* ran 4 (2.0%) editorials and 18 (8.8%) comment pieces; while the *Post* had only 2 (1.4%) editorials and 4 (2.8%) comment pieces. The low number of editorials on this topic suggests that there was nothing controversial about the

[239] *Anonymous,* telephone interview. 12 January 2008.
[240] Barbara Shecter. *Ottawa Citizen,* 8 February 2006, [Final Edition], sec. D: D2.

topic which required editorial dissent. A significant difference in reporting was observed in the number of business reports. Of the two newspapers the *Globe* ran more stories in the business section with 21 (10.2%) of stories categorized as one of these story types. Comparatively, the *Post* published a total of 13 (9.0%) stories as business section. This shows a preference by the *Globe* in reporting on the business aspects of the story compared to the *Post* reports.

As this analysis confirmed, the *Globe* printed substantially more articles than the *Post* with a few exceptions. Both newspapers published stories using a similar distribution pattern for their coverage of pandemic influenza stories within the census. Of the total coverage 140 (68.3%) of the *Globe* stories were national news; while 65 (31.7%) were from international news sources. In contrast, the *Post* published fewer national news articles with 63 (43.8%) under this category with an even larger percentage 81 (56.3%) of articles from international news wire services. The comparison of national news to international news shows the most significant difference in coverage between the newspapers. If we exclude the in-brief stories from the total news type the *Globe's* international content drops to 26 (17%) compared to the *Post's* 81 (56.3%) international wire service content. This provides strong evidence that despite showing an interest in the story by publishing a large number of articles, the *Post* did not allocate as many resources to produce original copy compared to the *Globe* coverage. The following Table 3.3 provides further details on the sources of stories by national newspaper.

Table 3.3: Source of Stories by National Newspaper

Source	*Globe and Mail*	*National Post*	TOTAL
International Newswire Services*	69	70	139
% within paper	33.7%	48.6%	39.9%
Canadian Newswire Service**	29	44	73
% within paper	14.1%	30.6%	20.9%
Staff Reporters	86	30	116
% within paper	42.0%	20.8%	33.2%
Other***	21	0	21
% within paper	10.2%	0.0%	6.0%
TOTAL	**205**	**144**	**349**
% within paper	**100.0%**	**100.0%**	**100.0%**

* Includes American and Foreign newswire services
**Includes stories from CanWest and Canadian Press newswire services.
*** Other represents stories not written by journalists such as letters to the editor, commentaries, opinion pieces etc.

Among the 349 articles published in both newspapers, a total of 212 (60.7%) originated from newswire services. The largest number of newswire service stories came from international services such as Agence France-Presse and Reuters and many of the reports were not by-line stories. The international newswire services accounted for 69 (33.7%) of the *Globe* stories while the *Post* ran 70 (48.6%) of their stories from international sources. The *Globe* published 29 (14.1%) while the *Post* ran 44 (30.6%) of their stories from Canadian newswire services. This suggests an over reliance by the *Post* on foreign news sources, including American source news which tends to skew our understanding of Canadian reality. Taras believes that "Canadian messages are being lost amid the cacophony – the endless din of American and global communications."[241] The influence of the American media on Canadian content is said to be threatening our

[241] Taras, 2003, p. 12.

identity and citizenship.[242] Although the reliance on international sources was more pronounced in *Post* coverage, both newspapers relied heavily on the newswire for content. In many of the international sources there was no author attribution leaving readers to wonder where the story came from. Since the pandemic issue and more specifically stories about H5N1 have been generated from incidents abroad the fact that no attribution is given to authorship is again indication that the story did not hold as much news value and was used as filler. The *Globe* ran more content from staff reporters with 86 (42.0%) compared to the *Post* reporters who were attributed for writing only 30 (20.8%) of the stories. The frequency in reporting suggests a higher commitment by the *Globe* to the story but as has been discussed earlier the lower frequency of reporting for the *Post* may be due to this paper being cash strapped and may not be indicative of agenda setting. The next indicator to agenda setting is where articles are placed in the newspaper.

Article Placement

Newspapers structure and present the news for maximum impact. Those stories appearing on the front page have an important role to play in delivering the news because "in newspaper dispensing machines, above the fold stories are accessible to all passerby, including those who never actually purchase a newspaper. Because they are more prominent, front-page stories also may be perceived as more important than other stories."[243] Many readers are drawn to stories because of headline content or the placement of the story. Kahn and Kenney note that "front page stories are more likely to

[242] Ibid.
[243] Clayman and Reisner, 1998, p. 178; Iyengar and Kinder, 1987, p 42 to 45.

be read than those buried near the back of the newspaper."[244] The decisions on the placement are made by editors during daily staff meeting known as editorial conferences. The editorial staff meets to decide which of the stories is the most newsworthy – or the lead story - which will be given the coveted position above the fold or which stories will be positioned below the fold of the front page. Editors from the various sections also decide the position of the remaining stories to be placed elsewhere in the newspaper as well as which ones will be referenced on the front page to draw attention.[245] Journalists who successfully have stories appear on the front-page are seen as having won professional status.[246] During the daily editorial conferences, reporters and editors discuss the merit of the stories and decide on which one will get front page placement. One of the editors interviewed confirmed that the front page stories for their newspaper are those stories which are most important on any given news day. Stories are selected from a broad range of possible events. This editor stated that there is never a shortage of stories to cover. During the conferences the journalists and editors sift through the possible stories and agree on which ones hold the most news value through a collaborative process.[247]

[244] Kahn and Kenney, 2002, p. 383.
[245] Ibid, p. 178 to 181.
[246] Clayman and Reisner, 1998, p. 178.
[247] Anonymous Interview, 2007.

Table 3.4 : Story Location by Newspaper

	Globe and Mail	*National Post*	**Total**
Front Page % within paper	11 5.4%	14 9.7%	**25** **7.2%**
Front Section % within paper	91 44.4%	73 50.7%	**164** **47.0%**
Editorials – Front Section % within paper	19 9.3%	19 13.2%	**38** **10.9%**
Commentaries – Front Section % within paper	30 14.6%	19 13.2%	**49** **14.0%**
Health Report – Second Section % within paper	5 2.4%	6 4.2%	**11** **3.2%**
Business - Second Section % within paper	24 11.7%	0 0.0%	**24** **6.9%**
Other – Second Section % within paper	25 12.2%	13 9.0%	**38** **10.9%**
Total **% within paper**	**205** **100.0%**	**144** **100.0%**	**349** **100.0%**

As shown in Table 3.4, stories from the census did not often appear on the front page of the two newspapers. Both newspapers ran stories on the front page a total of 25 (7.2%) times. The *Globe* ran 11 (5.4%) of their stories on the front page, while the *Post* ran more of their stories 14 (9.7%) in this coveted position. Although the percentage of front page stories from the census were low the choice of story placement provides further evidence of agenda setting. Since the *Post* dedicated front page coverage to more articles indicates a high commitment by this newspaper to highlight the story and is indicative of agenda setting for this paper.

One story that made it onto the front page of the *Globe* ran on October 25, 2005. The story detailed the decision by pharmaceutical company Roche Canada to halt the sale of tamiflu, because of a higher-than-normal demand for this particular antiviral drug. In a company letter Roche Canada indicated that it would proactively manage the tamiflu inventory in order to protect supplies for those who may be vulnerable to avian influenza. This report coincided with the International First Ministers' Conference held in Toronto where the question of pandemic and antiviral drug stockpiling was discussed between Health Ministers of member countries.[248]

A second front page story ran in the *Globe* on November 17, 2005. This report from Beijing detailed the first human case of bird flu in China amid rumours that the country had been keeping cases in "medical secrecy."[249] The story reported that a 12-year old had died and that there was a second suspected case of H5N1 in China raising alarm because "China is often an incubator of global epidemics, including several of the deadliest of the past century."[250] It is worth noting; however, that follow-up stories to those appearing on the front page were subsequently buried within the news section of the paper. Subsequent *Globe* stories of the infected human case in China appeared in the news section and not on the front page suggesting that the editors did not think that the story held as much news value on the second day of reporting. Since front page stories are in a more prominent position it makes them more apt to attract the attention of readers. Therefore stories which appear on the front page hold considerably news value than those positioned in subsequent pages of the publication. As has been stated, because of the prominence of the front page stories these may be perceived as being more

[248] Lisa Priest and Gloria Galloway. *Globe and Mail,* 25 October 2005, sec. 1: A1.
[249] Geoffrey York. *Globe and Mail*, 17 November 2005, sec. 1: A1.
[250] Ibid.

important. Based on the findings of this study it would appear that once a story appears on the front page it quickly disappears. The appearance of subsequent stories in a less prominent position in the two newspapers is indicative of less news value for the coverage of this story despite the suggestion that this case could spark a pandemic.

Another example from the *Globe's* front page coverage on the topic of avian influenza included a story of a flu scare in British Columbia which ran November 22, 2005. A single sick duck at a farm in B.C. prompted the culling of ducks within a five mile radius in order to contain an infection. The case prompted a ban of B.C. duck exports into the U.S. market. The story focused on the economic hardship that the ban was creating for Canadian producers and raised the possibility of the strain being the H5N1. The next day, a story appeared on the front page of the *Globe* about a second farm within the monitoring zone which was found to have infected ducks requiring the culling of an additional 2,000 ducks in B.C. Subsequent stories following the discovery of the infected ducks were placed further into the front-section of the paper and thus were less prominent than the original front page story. Moreover, less emphasis was reported on the lab results which confirmed that the B.C. duck had suffered from a more common bird flu strain and that the situation did not pose a health risk to humans. The coverage of this story focused on economic disruption for the B.C. producers due to the U.S. having closed the border to B.C. poultry.[251]

The front page coverage from the *Post* included a story that ran on November 1, 2005 concerning cases of a virulent strain of avian influenza found in birds which had been detected through routine surveillance activities in Canada. The bird flu was found and confirmed in wild ducks from Manitoba as part of that province's surveillance

[251] Petty Fong. *Globe and Mail*, 23 November 2005, sec. 1: A11.

program. The story reassured readers that the strain was not thought to be the H5N1 strain. The report provided historical context of the instances of H5N1 in Asia and cautions that the spread of the strain to North America would likely cause a different response.[252] The initial report raised concern about the virus potentially being H5N1, but a follow up story confirmed that lab results had ruled out the more serious strain of the virus. This good news story appeared in the news section, pages A4 to A14 with the placement of the story being progressively buried into the paper as the story evolved over several days. Despite the fact that lab results confirmed that this particular case was a mild strain of avian flu and not H5N1 it is curious that the placement of this reassuring fact in follow-up reports were not placed closer to the front page to reassure readers who would have been following the story.

A March 29, 2006 front page story which appeared in the *Post* provided a cautionary message for business owners to engage in emergency preparedness stating that "these next few months – or weeks – could be the last chance Canadian companies have to prepare for a flu pandemic, government and industry experts warn."[253] The story provides advice for business owners to ensure that they put in place a business continuity plan to mitigate potential work disruption if a large proportion of the workforce was to suddenly not be able to report to work due to illness. The President of the Human Resources Professional Association of Ontario is quoted saying that "the major thing is panic and that's what a business continuity plan would address."[254] In a front page *Post* story May 12, 2006 the journalist wrote about a published study from the journal *Science* wherein bio-ethicists discuss the prioritizing of vaccines during the event of a pandemic.

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[252] Tom Blackwell. *National Post,* 1 November 2005, sec. 1: A1 – Front.
[253] Philip Quinn. *National Post,* 29 March 2006, sec. 1: A1.
[254] Ibid.

The authors of the study argued that the "principle driving U.S. and Canadian flu planning -- which gives priority to those at highest risk of being hospitalized or dying -- needs to be rethought"[255] and they suggest that during an epidemic priority of vaccines should be targeted to those who have a better chance of survival. The story concluded with a Public Health Agency of Canada spokesperson stating that priority would be determined based on what the pandemic would look like and that different scenarios would warrant a different response. However, details were not provided on specifics of the government's plan for vaccine allocation and distribution. The debate over the prioritization of vaccines is the same as the one for the distribution of antiviral drugs. What is important here is that both newspapers raised the controversial ethical concerns of prioritizing the allocation of limited supplies for the general public, but they provided few solutions to the problem despite the serious implications it raises for citizens.

On May 16, 2006 the *Post* ran a story on the front page on the government's commitment to pandemic preparedness. This report presented the Vancouver Medical Officer of Health's opposition to the federal government spending millions of dollars for fighting pandemic. This expert was critical of the federal policy because in his opinion the money would be better used to fight other public health threats. This story focuses on the policy agenda and asserts that some health experts believe that the threat posed by pandemic had been overblown.[256]

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[255] Sharon Kirkey. *National Post*, CanWest News Service, 12 May 2006, sec. 1: A1.
[256] Tom Blackwell. *National Post*, 16 May 2006, sec. 1: A1.

Conclusion

This chapter explored how much attention the two English-Canadian national newspapers allocated to the topic of pandemic over the 2005/06 flu season. It provided context of public health with SARS as the trigger event that focussed attention onto reform and pandemic preparedness. As was concluded by Dearing and Rogers, "even when a variety of controls are taken into account in different types of designs and data analyses, the general conclusion of agenda setting research is that the *media agenda* sets the *public agenda.*"[257] Newspaper coverage in both national newspapers on the pandemic issue was significant with a total of 349 articles having appeared during the review period. The evidence on the frequency suggests that the story was important for agenda setting for both newspapers. The editorial commitment by both newspapers was found to differ slightly. The heavy reliance by the *Post* on newswire services with fewer by-line stories shows a tendency to cover the pandemic story in a peripheral way. However, this may be more attributable to economic realities for this newspaper and is not necessarily due to a lack of interest in covering the story. The fact that the majority of the stories were from foreign lands may have contributed to lowering the editorial interest in the story and had an impact on placement. This evidence shows that the story had a stronger agenda setting effect for the *Globe* since a large number of their published articles appeared on the first section.

[257] Dearing and Rogers, p. 50.

The media can play a positive or negative role in disseminating information by promoting health, or by sensationalizing health issues and causing fear.[258] Therefore, it is not only important to talk about who is setting the agenda, and how much attention is paid to a particular topic, it is equally important to analyze how the message is being delivered, or framed. The next chapter addresses media framing drawing on the body of literature on how issues are treated by the media with particular attention on whether the use of a panic frame was predominant in the coverage under review. Central to the analysis is the sentence structure, language use, use of symbols and meaning. Closer attention to how stories are framed provides the most tangible evidence of how journalists have reported on avian influenza and pandemic preparedness and is explored in the next chapter.

[258] Signorielli, 1993.

CHAPTER 4

Introduction

The way that newspapers construct and present stories shows what they consider to be of relevant importance for the readers. The sentence structure, language use, use of symbols and meaning, generally defined in communications research as framing provides the most tangible evidence of how health topics are depicted. The previous chapter measured agenda setting functions of English Canadian newspapers regarding pandemic influenza. This chapter moves to look at the framing of the information on pandemic.

Framing is "the subtle selection of certain aspects of an issue by the media to make them more important and thus to emphasize cause of some phenomenon."[259] Frames "can draw attention toward and confer legitimacy upon particular aspects of reality while marginalizing other aspects."[260] Cappella and Jamieson define news frames as "those rhetorical and stylistic choices, reliably identified in news, that alter the interpretations of the topics treated and are a consistent part of the news environment."[261] For these authors, framing the news is also "a question of slant, structure, emphasis, selection, word choice, and context."[262] When reporting on complex events, Cappella and Jamieson see the job of the news media to frame events in a way that is familiar to the audience so that they can understand.[263] They further note that a strategy frame – winning or losing - is being used by journalists to not only report on campaigns but they have

[259] Iyengar, 1991, p. 11.
[260] Lawrence, 2000, p. 93.
[261] Cappella and Jamieson, 1997, pp. 39 to 40.
[262] Ibid, p. 57.
[263] Nesbitt-Larking, 2007, p. 324.

extended it to report on governance and the discussion of public policy issues.[264] For example, in their analysis of the US 1994 health care reform debate, the content analyses of print and broadcast coverage in major media markets showed that 67 percent of newspaper articles were primarily strategic while 25 percent were basically issue oriented or factual.[265] Because strategic frames are focused on winning and losing they end up tainting the actions of the actors. These authors see winning as being "equivalent to advancing one's own agenda, one's own self-interest, so the actions stand not for themselves but for the motivational system that gives rise to them – narrow self-interest.[266]

This analysis examines the framing of pandemic along a panic frame. In other words, I examined the newspaper texts utilizing discourse analysis to determine the level of fear or anxiety inherent in the way the newspapers approached the topic of pandemic. Did the reporters utilize a panic frame to build up the news worthiness of the story or did they provide fact-based and well balanced pieces? Discourse analysis is concerned with the purpose lurking behind the way things are said or presented and is very well suited to the study of newspaper articles.[267] Particular attention was placed on the language use and context of the message being delivered in articles under review. As Bryman and Teevan suggest, discourse does not simply impart meaning but people seek to accomplish something when they speak or when they write. Discourse analysis is concerned with strategies employed in creating different kinds of effect depending on how the discourse

[264] Cappella and Jamieson, 1997, p. 33 to 34.
[265] Ibid.
[266] Cappella and Jamieson, 1997, p. 34.
[267] Ibid, p. 344.

is constructed.[268] For example, discourse on infectious disease topics gives us concepts of what the diseases are, the nature of an illness, treatment options and what precautions individuals can use against the illness.[269] Therefore discourse analysis is more than the study of language, it helps to explain aspects of the social world.[270]

Anecdotal evidence was offered by Dr. Frank Plummer, Scientific Director General, National Microbiology Laboratory, Public Health Agency on whether he felt that the two English-Canadian national newspapers have reported on pandemic using a panic frame. In his response he stated that he generally found that some outlets had sensationalized the story but his sense was that the national newspapers were effective and that they were generally accurate in providing balanced reporting on health topics. He felt that the media have created a mood of fear around pandemic but he did not have a problem with this approach because in his opinion the coverage has helped pandemic preparedness efforts. He recognized that in some cases sensationalizing an infectious disease story could hamper efforts in certain cases but it could also be helpful in securing additional federal resources which could have positive results for public health.[271] This is an interesting perspective but it is not supported by the findings from this research as will be detailed in the discussion that follows.

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[268] Bryman and Teevan, 2005, p. 344.
[269] Ibid.
[270] Ibid.
[271] Plummer, Interview, 2007.

Intensity Scale

To evaluate the newspapers' use of a panic frame, or the extent to which they use alarmist language in their reports, a scale of 1 to 3 is used to obtain a statistical representation of the data. The intensity of language use within articles speaks to how a story is framed. Number 1 was attributed to articles that were reassuring in tone; number 2 identified articles which were deemed to be neutral in tone - stating facts without offering predictions of the outcome as positive or negative - and number 3 was attributed to articles deemed alarmist or sensationalist in tone.

To elaborate, the first category of reassuring was reserved for articles which provided readers with information using a comforting tone. If articles began with a more elevated tone but provided readers with reassuring statements that the risks of a pandemic were less imminent they were coded to this lower classification. Articles worthy of the second level rating of neutral were those stories which simply provided the facts about the topic without leading readers. Finally, articles which used war metaphors, or presented doomsday scenarios of impending disaster were classified as alarmist or sensationalist. Articles which presented the spread of H5N1 as being on North America's doorstep was deemed to warrant this elevated rating. The articles which were written in a strong language predicting certain doom and suggested to readers that there was cause for serious concern fell into this category. Articles that sensationalized the issue using unsubstantiated or hypothetical worst case scenarios were also deemed to warrant this highest level rating.

The Panic Frame

The analysis continues with a review of tone and intensity of articles beginning with the study of headlines. Headlines are written by the editors and not the journalists. A review of headlines was completed to assess whether newspapers use a panic frame in introducing the pandemic topic. The study of headlines will be important as part of the analysis as van Dijk suggests that a headline "implies an opinion or a specific perspective on the events."[272] In his discourse van Dijk states that stories can upgrade a less important topic by expressing it in the headline and that this results in downgrading the importance of the main topic.[273] In his assessment of the use of headlines as a framing mechanism, Parenti asserts that a story can be packaged to influence a reader's perception of the content and that they are used as peripheral framing devices.[274] Parenti sees the use of headlines as a tool which cannot only mislead readers who skim pages but can also create the dominant slant on a story, establishing a mind-set that influences how we read the story's text.[275]

[272] Van Dijk, 1987, p. 51.
[273] Ibid.
[274] Parenti, 1993, p. 205.
[275] Ibid, p. 205.

Table 4.1 : Tone of Headline by Newspaper

Overall Tone of Headlines			
Frame	*Globe and Mail*	*National Post*	**Total**
Reassuring	31	22	**53**
% within paper	15.1%	15.3%	**15.2%**
Neutral	89	38	**127**
% within paper	43.4%	26.4%	**36.4%**
Panic / Alarmist	85	84	**169**
% within paper	41.5%	58.3%	**48.4%**
Total	**205**	**144**	**349**
% within paper	**100%**	**100%**	**100%**

Of the total number of articles in the *Globe,* the headlines in the majority 120 (58.5%) were either reassuring or neutral in tone; while a large number 85 (41.5%) were found to be structured using a panic frame. The analysis showed that the *Globe* had a tendency to discuss the pandemic issue using an alarmist tone with more than a third of its coverage having been found to be written using an elevated tone. This tendency was even more pronounced within the *Post's* headlines. The majority of headlines in the *Post* 60 (41.5%) were reassuring or neutral; while the balance 84 (58.5%) were found to be alarmist. The *Post* was found to contain more alarmist headlines than the *Globe*. This suggests a preference by the *Post* to use the headlines as a way of garnering some attention. Although the *Globe* had a higher percentage of headlines classified as reassuring or neutral the number of articles classified as alarmist is significant enough to suggest that this newspaper also has a tendency towards presenting the topic as alarmist and emphasizing a panic frame.

One of the *Globe* headlines found to be alarmist was published by a staff health reporter, Leonard Zehr. The headline read: "Biotech firm prepares for pandemic: Decries lack of public information on how to be protected in case bird flu breaks out."[276] The headline warns of a lack of information and public preparedness and elevates the sense of dread at the looming pandemic. In this particular example, however, it is important to note that the text of the article itself was deemed not to be overly alarmist. Since journalists are not responsible for writing headlines and given that the journalists wrote a less alarming account in the overall text shows how stories can be elevated in the headline to grab attention.

The headline from a CanWest article printed in the *Post* on December 10, 2005 read: "B.C. medical chief says $24 M spent on pills that won't last."[277] This headline is effective in setting up the story as adversarial with potential to escalate to a scandal frame. It introduces the story of the B.C. provincial health officials criticizing the federal government's public health policy on the purchase of tamiflu tablets for pandemic planning rather than the less expensive powder form of the drug for stockpiling. The article was granted the most prominent position of the newspaper appearing on the front page. The article was followed-up with a detailed article on the issue which appeared on page A12 punctuating the health officials' dissent of the public policy decision to purchase the drugs in pill form.

The headlines which were found to be most alarmist introduced stories with text deemed to also have an alarmist tone. The *Post's* October 20, 2005 headline read "Liberal MPs not clear on the plan for pandemic: One urging people who have traveled to hot

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[276] Zehr, *Globe and Mail,* April 21, 2006, p. B3.
[277] Fayerman, *National Post,* December 10, 2005, p. A1.

spots to burn their clothes"[278] framing the story as one of panic using a very alarmist tone. The article used a credible source, a Member of Parliament, with an outrageous message urging people returning from regions having confirmed cases of H5N1 to burn their clothes. The overreaction by this MP and the erroneous advice is countered by the Federal Health Minister reassuring Canadians that the government is prepared for the possibility of an outbreak.

Finally, one of the most alarmist headlines of the census appeared in the *Post* on February 21, 2006. The headline read: "Viruses, terror threaten global security: report: Canada poorly equipped to deal with crises."[279] The text of the article gave a doomsday scenario to the prospect of a pandemic. This article predicts that a pandemic will happen in the near future and that military force would have to be used to deal with civil unrest that would ensue. This article provides a good example of the use of a panic frame in presenting the story.

The study of *Post* headlines from the census confirms that this particular newspaper often uses headlines to frame the story of pandemic using a panic frame. Given that the *Globe* did not print any of the same newswire stories appearing in the *Post* it is clear that *Globe* editors viewed these stories as not being worthy of attention. These particular articles had no impact on agenda-setting for the *Globe* but did hold some news value for the *Post*. Having made observations about the tone of headlines I turn attention to study the use of tone within the article text.

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[278] Dawson, *National Post,* October 20, 2005, p. A5.
[279] Gordon, *National Post,* February 21, 2006, p. A8.

Table 4.2 : Overall Tone of Story by Newspaper

Frame	*Globe and Mail*	*National Post*	Total
Reassuring	40	25	**65**
% within paper	19.5%	17.3%	**18.6%**
Neutral	87	43	**130**
% within paper	42.4%	29.9%	**37.3%**
Panic / Alarmist	78	76	**154**
% within paper	38.1%	52.8%	**44.1%**
Total	**205**	**144**	**349**
% within paper	**100%**	**100%**	**100%**

Newspaper coverage of the story presents the possibility of pandemic influenza as being on our doorstep and posing an imminent threat to the public regardless of how remote the probability of an event occurring might be. As shown in Table 4.2, the two newspapers reported the story using a panic frame in 154 (44.1%) of the total census. Of the *Globe* reports 78 (38.1%) of their stories were found to be alarmist, while 76 (52.8%) of the *Post* reports were framed using panic. Statistically speaking the *Post* was more likely than the *Globe* to use an alarmist tone. The *Globe* was less likely and this found to be statistically significant at a $p<.05$. Findings for the overall tone of text, chi-square was a .019, while the chi-square for headlines was a .003. These findings are statistically significant. Notwithstanding the findings provide strong evidence that both newspapers often used a panic frame when covering the pandemic story.

The analysis of the tone within the text of the articles provides a slightly different picture to the review of headlines. During the review period, the *Globe* published 127 (61.9%) articles classified as reassuring or neutral; while it recorded 78 (38.1%) as alarmist. The *Post's* coverage included 68 (47.3%) as reassuring or neutral; while the balance 76 (52.7%) were classified as alarmist and framed using a panic frame. These numbers show a similar distribution pattern to results from the study of headlines. Generally the *Globe* was found to use less alarmist language in their reports with 78 (38.1%) of their stories being alarmist compared to 76 (52.8%) of *Post* stories having been alarmist. It is worth noting that the *Globe* was generally less alarmist than the *Post* in the overall text as well as in the headlines. Given that the *Globe* used more in-brief stories in their coverage this factor may have skewed the results in this newspaper's favour.

An article which appeared in the *Globe* April 7, 2006 serves as a good example of a story which exaggerated the threat of H5N1 reaching Canada to illustrate the point. The story carried the headline "Bird flu turns up in Scotland; Canada could be next destination,"[280] and the text warned of an increased bird flu threat to Canada. This claim was exaggerated since not one case of the deadly bird flu virus had been found in North America at the time the story ran. Although there is always potential that the H5N1 strain could jump the continental barriers there was no evidence to suggest that this was imminent in this case.

Hype over the probability of H5N1 mutating into a strain which could easily transmit human to human was presented as being inevitable within coverage towards the end of the review period. Although scientific evidence had been suggesting all along that

[280] Chan, *Globe and Mail,* April 7, 2006, p. A12.

human to human transmission was not possible, a suspected family cluster case in Indonesia was framed as proof that this type of transmission does occur. This story appeared as a news brief and carried the headline "Indonesian bird flu likely spread human to human."[281] This report presents the hypothetical scenario of human to human transmission as being likely despite the lack of scientific evidence to support the claim.

Another example of the type of articles which used a panic frame was published in the *Globe* with the following headline: "The killing machine; MATTHEW HART tracks the inexorable advance of the bird flu virus, which killed a cat in Germany this week. It's only a matter of time until it reaches us."[282] This story's lead sentences use a panic tone stating that "Something wicked this way comes. It has stormed out of Asia, made its way to Africa in a horrifying leap, and now appeared in Europe. With growing dismay, a nervous public watches the advance of a pitiless, infinitesimal machine with a few bits of acid in it: an influenza virus."[283] The report suggests that avian influenza will certainly develop the ability to transmit between species, and from human to human. The most striking statements in the report claimed that "For H5N1 to wreak the same havoc among people as it has among birds it must gain the ability to pass from human to human instead of from fowl to human. It would have to mutate. Other avian flu viruses have managed this quite well, causing the human pandemics of 1918, 1957 and 1968. There is no reason to think this latest version will not do the same."[284] This report presents the scenario as one of certainty rather than simply being a possibility.

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[281] Associated Press. *Globe and Mail,* May 25, 2006, p. A14.
[282] Hart, *Globe and Mail,* March 4, 2006, p. F7.
[283] Ibid.
[284] Ibid.

A report in the *Post* uses a panic frame raising the alarm that migratory birds had been responsible for spreading H5N1 into Europe and would undoubtedly spread to Africa. The story highlights concerns of H5N1 spreading to Africa because "in poorer African nations people live in close proximity with animals, such a situation would provide a dangerous crucible for the mixing of the bird and human viruses, vastly increasing the risk that the avian virus could gain the ability to readily spread among humans."[285] The report suggests that there are implications for transmissibility if the virus was to appear in Africa but few details are provided on the specific global implications the spread would have to this part of the world. Although the H5N1 virus was viewed as a problem for foreign governments, and was accurately reported as such, some stories often tried to give it a national angle by proposing that the virus would soon arrive in Canada. In one example a *Post* report stated that "Fears of a pandemic, or global epidemic, have grown in recent months with the widening outbreak of the highly virulent avian flu in Asia. The H5N1 bug there could not cause a pandemic in its current form because it is not easily transmissible between humans. But if it did mutate into a virus readily passed from person to person, the rate of infection and death would likely be enormous."[286]

These examples highlight the intensity of language used to report on the story of pandemic. Stories warn of the spread of H5N1 as an inevitability promoting a sense of urgency. However few details are provided on specifics of H5N1 or influenza pandemic more generally and few of the reports suggest to readers how they can protect themselves

[285] Rosenthal, *National Post,* October 20, 2005, p. A13.
[286] Blackwell and Tibbetts, *National Post,* October 17, 2005, p. A1.

from the threat. The intensity of language used in headlines compared to the tone of the text of articles provides clues on news value and the norms employed to present the story.

Comparative Analysis of Headlines versus Text

When comparing the tone of the headlines against the tone of the articles content, I had expected to find a correlation between the overall tone of the article and the tone of the headlines. It would be expected that articles deserving an elevated intensity rating for content would also have headlines with a tendency to be more sensationalistic. However, the result of the analysis showed that headlines were no more likely to warrant an elevated classification if the text of a particular article was more intense. The language used in headlines was generally factual and to the point, as would be expected from headlines. Headlines were deemed to be no more alarmist than required to garner some attention. The most striking example of an article which had a different intensity between the headline and text from the census, read "Al-Qaeda could spread avian flu, report warns: Intelligence study says Canada could be a target."[287] This article's headline sensationalizes the possibility of terrorists using avian influenza as a biological warfare agent against citizens and is similar to claims which have been reported in media throughout the years following the 9/11 terrorist attack linking the vulnerability of the population to these types of threats. Surprisingly the article associated with this headline ranked an overall neutral tone. The result of the headline analysis found that there was no correlation between the tone of headlines and the tone of the text of articles. Given that editors are responsible for writing the headlines it would explain the discrepancy found between the tone of the headline and the accompanying text. The analysis now shifts to

[287] Bell, *National Post,* October 25, 2005, p. A8.

assessing to what extent the intensity of the article will have an impact on the location or placement of a story within the newspaper. I posit that articles with a higher level of intensity would be more likely to be placed in the first section rather than being buried in the second section of the newspapers.

Table 4.3 : Story Location and Frame Use by Newspaper

Location of Story	Frame	*Globe and Mail*	*National Post*	Total
Front Page	Reassuring	1	6	7
	% within paper	0.5%	4.2%	**2.0%**
	Neutral	5	2	7
	% within paper	2.4%	1.4%	**2.0%**
	Panic/Alarmist	5	6	**11**
	% within paper	2.4%	4.2%	**3.2%**
Front Section	Reassuring	18	9	**27**
	% within paper	8.8%	6.3%	**7.7%**
	Neutral	38	17	**55**
	% within paper	18.5%	11.8%	**15.8%**
	Panic/Alarmist	35	47	**82**
	% within paper	17.1%	32.6%	**23.5%**
Second Section	Reassuring	21	10	**31**
	% within paper	10.2%	6.9%	**8.9%**
	Neutral	44	24	**68**
	% within paper	21.5%	16.7%	**19.5%**
	Panic/Alarmist	38	23	**61**
	% within paper	18.5%	16.0%	**17.5%**
Total		**205**	**144**	**349**
% within paper		**100%**	**100%**	**100%**

As was discussed earlier, only a small number of articles from the census appeared on the front page. Of these articles the *Globe* printed a total of 11 (5.4%) articles on the front page with nearly half of these having been written using a panic frame. The same was found of the *Post* front page 14 (9.7%) articles were published on the front page with 6 (4.2%) found to be written using a panic frame. More than half of the articles appearing on the front page of both newspapers were either reassuring or neutral in tone challenging the thesis hypothesis that the topic is covered using a panic frame. The *Globe* ran more articles as reassuring and neutral in the first and second section than did the *Post*. The *Globe* ran 103 (50.2%) of their stories in the first section

and 91 (44.4%) in the second section. The *Globe* reports were more evenly distributed between the first and second sections and are indicative of this paper's tendency to cover the story superficially. Of the *Globe* stories those which used a panic frame 35 (17.1%) ran on the front section while 38 (18.5%) ran in the second section. The *Post* ran a total of 73 (50.7%) on the front section and 57 (39.6%) in the second section respectively. Of the *Post* stories those which used a panic frame were more likely to appear in the first section. The *Post* had 47 (32.6%) of their stories appearing in the first section while 23 (16.0%) ran in the second section. The evidence suggests that the *Post* follows a similar pattern as the *Globe* in presenting the stories despite the higher number of articles framed as panic. This provides further evidence that these two newspapers were homogeneous in their reporting of the pandemic story. However, these findings do not tell the whole story. As has been suggested in the literature, it is not only important to study what is said but who is being quoted in the news. The next discussion focussed on who the newspapers are quoting in their coverage as a further indicator of framing preferences.

Sources quoted

Literature on the use of sources in health reporting suggests that for the most part, reporters rely on institutional actors, such as the health care authorities or government officials to help frame the agenda.[288] Iyengar and Kinder note that increasingly journalists come to rely on government officials and agencies as their primary source of information, and look to their activities for sources of news. They recognize a mutual dependence on the part of government officials who also need journalists to communicate with the public and with other elites.[289] The use of sources not only serves to add credibility to a story but the experts have a significant impact on public opinion. It has been shown that when experts are quoted as favouring a policy proposal, public opinion tends to support the proposal.[290]

In the case of journalists who specialize in medical or health reporting, Gandy laments that these journalists often choose topics of interest from conferences, journals and professional sources. He is critical of these science journalists for not taking more of an investigative approach to reporting on issues.[291] He notes that science writers have a tendency to rely on official sources and are less likely to engage in contentious scientific debates compared to their general assignment counterpart.[292] He sees a problem with journalists having frequent interactions with sources at conventions and development over time of a professional and personal relationship between these individuals as this

[288] Sampert, 2006, p. 11.
[289] Iyengar and Kinder, 1987, p. 131.
[290] Page, 1996, p. 109.
[291] Gandy, 1982, p. 103 to 106.
[292] Ibid, p. 106.

potentially clouds their judgment and their willingness to report on stories which might put the source in a less favourable light.

National Post Health Reporter Tom Blackwell agrees that in the health care industry it does happen that reporters will get their story ideas from conferences, journals and professional sources but in his case he is a bit unusual. He rarely does stories stemming from news releases, or stories on papers in the major medical journals. His goal is to cover stories which other media are not doing. He stated that he gets his ideas from personal contacts and Canadian studies in medical journals which are not promoted directly to other media. He also looks at documents posted online which have not been distributed to news agencies, by government departments and agencies. Another source of information comes from initiating access to information requests. Occasionally story ideas will come from stories Blackwell has read in other media if it has not appeared in major Canadian news outlets.[293] When the *Post* was first created it steered away from beat reporter system not wanting reporters to be tied down to one area, however, today there are a few beat reporters.[294]

Recognizing the importance of sources in contributing to their professional success it is understandable that journalists would not want to alienate these individuals for which their reputation and credibility are so dependent. Although this may be a consideration for the individual reporters we can also draw a distinction between the two national newspapers in terms of having access to sources.

[293] Blackwell, Online Interview, 2007.
[294] Ibid.

On the topic of the use and access to sources *Globe* reporter Picard stated that "in terms of getting the right experts, one of the advantages of working at a big paper like *The Globe*, and having years of experience, is that people return your calls. Other media are often jealous of our access to the right people."[295] He further states that "beat reporters – those with a specific area of expertise – are expected to generate their own story ideas."[296] It may be that the beat reporters have more autonomy in writing articles and have less of a personal relationship to sources, which may allow them more freedom to write on sensitive issues without considering long-lasting negative impacts for his or her actions. On the question of selecting a source, Blackwell admits that occasionally you must rely on those sources who happen to be available. He stressed that journalists always want to use credible sources and those people you have talked to in the past. Sources are also found by contacting hospitals, universities, specialist associations and government agencies. Often universities publish lists of experts who can comment on issues in the news which is very helpful in locating experts to speak on a particular topic.[297]

The use of sources has a direct impact on how a story is framed and according to van Dijk the use of sources has several important news functions.[298] The use of prominent sources can be "newsworthy in their own right, simply because they express the interpretation of opinions of important news actors."[299] For the most part, sources "enhance the credibility of the account, since their use suggests what credible news

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[295] Picard, Online Interview, 2007.
[296] Ibid.
[297] Blackwell, Online Interview, 2007.
[298] van Dijk, 1991, p. 151.
[299] Ibid, p. 152.

participants say about the events."[300] Finally, sources add credibility to the reports and "allow the insertion of subjective interpretations, explanations, or opinions of facts from opinions."[301] On this issue van Dijk indicates that the media's picking and choosing their sources allow them to insert subjective interpretations of their stories while maintaining an aura of objectivity.[302] Journalists can "easily practise selective reporting, attributing their views to outside sources and omitting information that does not fit their slant."[303] When asked about the choice of sources while keeping his personal biases in check, Blackwell stated that "That's part of the journalist's job no matter what you write about. It is simply something you must be conscious of at all times and work to avoid, in part by including a range of voices in the story if there is disagreement on some issue."[304] Picard stated that reporters have to be aware of their personal biases and recognize that these will influence the stories – for better or worse. It is imperative that reporters keep an open mind. Picard elaborated saying that:

> Scientists are often shocked when I tell them I have no problem quoting views that I totally disagree with. Mostly, you just have to be fair. But you also have to draw some lines, particularly in health and science coverage. You can't just quote people who make scientifically implausible claims, or who say outrageous things for the sake of being controversial. Journalists can't simply be typists; they have to take some responsibility for what they write and how they convey news, particularly during public health crises. Our role is to inform but also to do so responsibly.[305]

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[300] Ibid.
[301] Ibid.
[302] Ibid.
[303] Bennett, Johnson, Triplett, 1998, p. 143.
[304] Blackwell, Online Interview, 2007.
[305] Picard, Online Interview, 2007.

When asked about whether the media are accurate in representing his message, Dr. David Butler-Jones, Chief Public Health Officer, Public Health Agency of Canada, stated that:

> Journalists do misquote sometimes. It has rarely happened that journalists misrepresented what I have said. When it has happened I think that it was due to a lack of understanding of the context. Sometimes it is the editor not the journalist who change the shape of it. I'm not too fussed about it as long as the core message comes across. Journalists have a challenge because they may not understand the topic.[306]

Dr. Butler-Jones spoke of one occasion where his comments were misrepresented to suit a particular slant to a story. In this case sound bites were used to build the story rather than portraying what was really going on, but he stressed that this rarely happens.[307] In fact, Dr. Butler-Jones could only recall a few occasions of this type of reporting in his twenty five years of being quoted by the media. He concluded the interview by stating that in his experience the media are generally balanced in their reporting of public health topics.

One Medical Officer of Health who asked to remain anonymous stated that the media are generally accurate in their reporting, but the problem is that they do not get enough range of opinions on the facts. This individual found that media often base a story on one scientist or a single article, which is often taken out of context. This implies too much reliance to one study or one expert without asking enough questions of other people or presenting divergent views.[308] Therefore it is important to study those who are being quoted in the health reports, such as science experts, health officials, or government officials and academics, to evaluate the extent to which journalists use sources to reinforce and shape their message. In choosing sources for a particular story Picard said

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[306] Butler-Jones, In-person Interview, 2007.
[307] Ibid.
[308] Anonymous source, 2007, interview.

that his choice is made depending on the story and the circumstances. He qualified this statement by adding that:

> In a public health emergency, for example, you want the senior public health official who is on the ground, such as the Chief Medical Officer of Health. If you are dealing with a disease, you want someone who has published a lot on the topic – and you can find them with a quick literature search. But access does definitely come into play. There are maybe a dozen top-notch microbiologists in Canada, but there are two of them who are really good at speaking about the issues in a way that is comprehensible to the public. Naturally, we focus on them. The others complain but the sad reality is oftentimes scientists are really lousy communicators.[309]

Therefore having access to the right person does not only depend on who is available, but more importantly it hinges on accessing those experts who are effective communicators. Blackwell reiterated the sentiment stating that it is important to have a credible, knowledgeable source on the topic at hand. He stressed that the choice of source must be someone who is comfortable dealing with the media. Ideally you need someone who is articulate and adept at explaining science in layman's terms. A source willing to provide a critical view of how authorities are handling the situation would also be welcome.[310]

Kelly Keith, Senior Communications Officer with the Public Health Agency of Canada in Winnipeg stated that in her experience media do not generally want to speak to spokespersons. They generally want to speak with experts. She used Dr. Frank Plummer as an example. His position as an infectious disease expert means that people will believe what he says. He is seen as trustworthy and media often contact him for interviews when there are infectious disease related stories. So when media contact the Agency they

[309] Picard, Online Interview, 2007.
[310] Blackwell, Online Interview, 2007.

usually want to interview researchers, and not media relations staff. Keith confirmed that "they [the media] are more apt to believe what someone like Dr. Plummer says rather than communications."[311] On those occasions when she has been quoted in the media, Keith found that direct quotes are generally accurate. However, she notes that it does happen that there are misunderstandings when things can be taken out of context. Her perception is that media generally want to get things right and accurate but on the occasions when they get things wrong there is no malicious intent to mislead people. She stated that the reason is often related to the fact that most journalists generally cover many topics and therefore they do get things wrong on occasion because they may not have expertise in a certain area of focus for a given story. She stressed the importance of government officials and spokespersons when called upon to serve as a knowledgeable source to be clear in their communication with the media and to support journalists as much as possible to make sure that they have the information they need.[312]

As has been made clear from this discussion, the use of sources strengthen the credibility of the information but just as sources are important to provide context, the order in which they are presented in the story also serves as an indicator of framing. The source who is quoted first plays a role in adding credibility because "the most important or relevant information is put in the most prominent position."[313] In her study of sources quoted, Sampert suggests that "the person quoted first in a news story is considered to express the dominant idea, while the second source is put into the position of refuting or reinforcing the first source's perspective."[314] In his writing van Dijk states that the media

[311] Keith, Interview, 2007.
[312] Ibid.
[313] van Dijk, 1991, p. 43.
[314] van Dijk, 1991, p. 151.

tend to rely on primary sources in their handling of news stories, a practice which is prominent in health reporting.[315] Primary sources include government officials and health officials. Sources which were classified as secondary would include physicians, scientists and academics. Finally a classification of "other" would include farmers who have or are at risk of suffering financial losses due to bird flu scares, family members of victims having lost a loved one to H5N1 and private citizens voicing concern over government action to a looming pandemic. Therefore those sources viewed as credible or authoritative will figure more prominently as sources in the news.[316]

[315] Ibid, p. 213.
[316] van Dijk, 1988, p. 119.

Table 4.4 : First Person Quoted by National Newspaper

	Globe and Mail	*National Post*	**Total**
Health Official – Primary Source	53	45	**98**
% within paper	25.9%	31.3%	**28.0%**
Government Official - Primary Source	30	28	**58**
% within paper	14.6%	19.4%	**16.6%**
Other	43	29	**72**
% within paper	21.0%	20.1%	**20.6%**
Scientists	9	6	**15**
% within paper	4.4%	4.2%	**4.3%**
Physicians	5	10	**15**
% within paper	2.4%	6.9%	**4.3%**
Academics	11	3	**14**
% within paper	5.4%	2.1%	**4.2%**
Articles with no sources quoted	54	23	77
% within paper	26.3%	16.0%	**22.0%**
Total	**205**	**144**	**349**
% within paper	**100%**	**100%**	**100%**

All articles were read and the sources were coded a first or second source. Primary sources includes individuals who have a responsibility for making decisions on the delivery of health care and includes provincial Chief Medical Health Officers, Regional Health Authorities as well as officials from national and international organizations such as the Public Health Agency of Canada, Health Canada, and the World Health Organization. Those classified as Government officials included bureaucrats and elected officials with decision making powers at the federal or provincial levels of government such as the Minister of Health. The sources quoted captured under the other category included individuals with no specific training or expertise in health such as farmers, citizens and business leaders.

To complete the analysis of the use of sources the data were coded according to their first or second appearance in the story. In the overall news coverage during the 05/06 flu season on pandemic influenza there was a reliance on primary sources by both newspapers. Primary sources were quoted first in 156 (44.7%) of the census and served as second sources in 87 (24.9%) of the stories. This confirms a heavy reliance on officials to provide perspective in pandemic reporting.

Within the national newspapers sources were used in 151 (74%) of the *Globe* stories and in 121 (84%) of the *Post* stories. The larger percentage of first sources quoted in the *Post* may be a deliberate attempt by this newspaper to add credibility to their stories; however, as mentioned earlier since the *Globe* coverage includes more in-brief stories which do not contain sources quoted comparing the two newspapers in terms of sources quoted does not provide a realistic representation of what was happening. For example, the in-brief stories, commentaries and opinion pieces would be the ones most likely not to quote sources. Of the number of articles the *Globe* ran 54 (26.3%) while the *Post* ran 23 (16.0%) with no sources quoted under these story types. This suggests a superficial focus on the pandemic issue. When excluding stories without sources quoted in the analysis both newspapers were found to be identical in their reliance on health and government officials to report on pandemic.

Not surprisingly health officials were the most often first quoted in the census. The largest number of *Globe's* first quoted were from health officials with a total of 53 (25.9%) articles having quoted them first; while the *Post* quoted health officials in 45 (31.3%) of their stories. Government officials were quoted first in 30 (14.6%) of *Globe* stories compared to 28 (19.4%) of the *Post* stories. Physicians, scientists and

academics were first quoted in 25 (10%) of *Globe* stories while they were quoted in a total of 19 (13%) of *Post* stories. This showed a slightly greater reliance by the *Post* to quote health and government officials. Sources representing the "other" category were quoted first in 43 (21.0%) of *Globe* while the *Post* had 29 (20.1%) of these type of sources in their coverage and would not be considered credible. In both newspapers the percentages of first source quoted represented similar percentages for each category, but given that the *Post* ran fewer stories it is worth noting that they placed more emphasis on having credible primary sources quoted than their competitor.

Table 4.5 : Second Person Quoted by National Newspaper

	Globe and Mail	*National Post*	**Total**
Health Official – Primary Source % within paper	28 13.7%	32 22.2%	**60** **17.2%**
Government Official – Primary Source % within paper	9 4.4%	18 12.5%	**27** **7.7%**
Other % within paper	31 15.2%	14 9.7%	**45** **12.9%**
Scientists % within paper	6 2.9%	10 6.9%	**16** **4.6%**
Physicians % within paper	5 2.4%	4 2.8%	**9** **2.6%**
Academics % within paper	6 2.9%	1 0.7%	**7** **2.0%**
Articles with no second sources quoted % within paper	120 58.5%	65 45.2%	**185** **53.0%**
Total	**205** **100%**	**144** **100%**	**349** **100%**

The *Globe* quoted a total of 85 (41.5%); while the *Post* quoted 79 (54.8%) second sources. Although there were a large number of second sources quoted overall, both newspapers printed the largest number of articles with no second source quoted. The *Globe* printed a majority of their articles 120 (58.5%) without a second source quoted and the *Post* printed nearly half of their articles 65 (45.2%) without quoting second sources. Citizens were not often given a voice in either newspaper. Of the total number of articles in the census, the *Globe* quoted five citizens, while the *Post* quoted four citizens. This finding is not surprising as citizens would not be seen as experts on the topic. Citizens are rarely used for discussion of important issues "except as story props, victims, or wrongdoers."[317] Stories which included quotes from citizens focussed on personal

[317] Taras, 1999, p. 36.

tragedies of those having lost loved ones to H5N1, or farmers who spoke of the economic impact of losing flocks to avian influenza.

The *Globe* quoted primary sources in only 37 (18%) as second sources; while the *Post* used primary second sources in 50 (35%) of their stories. These sources quoted were either government officials or health officials. The majority of the second sources quoted were used to support the primary source and strengthen the story. Having reviewed the use of sources as a tool for framing it is important to consider the context in which journalists have framed the story of pandemic influenza by what is omitted in the coverage.

Story in Context

As has been suggested in the introduction, content analysis of news coverage should not only be interested in what gets reported but it should also look at what is omitted in the coverage as an indication of framing norms. The complex and technical nature of health topics and the space constraint in newspapers present certain challenges for journalists in covering these types of stories. Journalists must make decisions on how to report the news and consider what to include or exclude. The most difficult challenge is that they must write in plain language for the average reader who is generally unfamiliar with the topic. The space limitation also plays a role on the extent to which a story can be developed. Given that the topic of pandemic influenza held some news value for the newspapers during the review period, the focus shifts to whether a sufficient level of details were provided for the readers to gain a thorough understanding of the debate surrounding the potential threat of pandemic and the associated discussions. If we accept

that the primary role of media is to inform we could expect that stories relating to this scientifically focused topic would include a considerable amount of scientific details. To determine the level of information provided, I coded the data focussing on three elements of structure which should be included in the coverage. First, stories must provide scientific details of how pandemics occur. Second, stories must provide an explanation of the use of antiviral drugs such as why they are important, under what conditions antiviral drugs should be used (i.e. are they safe for all at risk groups?), and potential side effects of the drugs. The last element which should be included would be precautionary advice. Providing advice to readers on how they might protect themselves or their families against infection would ensure that all the elements of the coverage were addressed.

I began the analysis focusing on whether the newspapers provided scientific information on pandemic and the threat posed by the H5N1 virus strain. First, the expectation was that the topic would be approached by reporters first providing necessary details such as how the influenza virus sparks a pandemic and who is at greater risk. Secondly, articles which discussed the topic of antiviral drugs were coded separately to determine whether details were provided on the proper use of antiviral drugs as a prophylactic - a preventive medicine – as an alternative treatment, or the potential side effects of the drug. The third category used for coding was to identify those articles which provided precautionary advice as this would close the loop on what readers would potentially need to know about this health threat. The criteria used for assessing whether articles provided scientific information were broadly set. The articles which contained even minimal details were given credit as meeting the definition. The following table 4.5 provides the results of the coding.

Table 4.6 : Extent of Information Provided by National Newspapers

	Globe and Mail			*National Post*		
	No	Yes	**Total**	No	Yes	**Total**
Scientific Information	177	28	**205**	116	28	**144**
% within paper	86.3%	13.7%	**100%**	80.5%	19.5%	**100%**
Antiviral Explained*	30	19	**49**	27	4	**31**
% within paper	61.2%	38.8%	**100%**	87.1%	12.9%	**100%**
Precautionary Advice	195	10	**205**	133	11	**144**
% within paper	95.1%	4.9%	**100%**	92.3%	7.7%	**100%**

*Of the 205 articles which ran in the *Globe and Mail,* a total of 49 discussed antiviral drugs; while the *National Post* ran 31 of the 144 articles on the antiviral topic.

The analysis showed that newspapers provided limited technical, medical or scientific information in their coverage of pandemic. Within the 205 *Globe* articles only 28 (14%) provided some scientific information, and of the *Post's* 144 sample 28 (19%) of their total number of stories were credited with including information. Although the *Post* was found to have included more information than the *Globe,* the content within both newspapers' coverage was incredibly low. Not surprisingly for articles written by health or science reporters the inclusion of scientific details in the coverage was greatly improved. A typical example of an article which provided scientific information appeared in the *Globe* on November 21, 2005. This report discusses an avian flu outbreak in a flock of ducks in British Columbia. The author reported that "although officials say that the bird tested had a low-pathogenic strain, or mild, variant of the virus they have

nevertheless ordered that 67,000 birds be killed."[318] Although the article was of significant length, few details were provided as to the peculiarity of the virus strains found within the flock, other virus strains and similarities to the H5N1 strain. Regardless of this discrepancy, the article was credited with providing scientific information. Many of the news reports took for granted that readers were familiar with details of the H5N1 virus. One *Post* article which ran February 9, 2006, reported on the discovery of the first case of H5N1 at a poultry farm in Nigeria. The report states that "the highly pathogenic form of H5N1 virus had killed 40,000 birds."[319] This report was short contains 219 words, and no details were provided of what the implications of this virus would be to human health and why the reader should be interested in reading this story.

When reporting on the use of antiviral drugs, none of the articles discussed in detail the potential risks of using antivirals for prophylactic - a preventive medicine - or any adverse events reported in clinical trials with antiviral use, or the efficacy of the drugs in treating avian influenza symptoms. A *Globe* article which ran on November 2, 2005, is a good example of this type of limited reporting. This article reports on the U.S. plan to battle avian flu with a focus in this country on buying sufficient doses of vaccines for their population. The Canadian Minister of Health, Ujjal Dosanjh wages in saying that the Canadian plan is similar to the U.S. but that the focus in the Canadian pandemic plan is to purchase antiviral drugs. The stockpiling of antiviral drugs is discussed simply stating that "The U.S. plan also calls for $1-billion to be spent on antiviral drugs, including Tamiflu and Relenza, which can reduce the severity of the illness if taken within 48 hours. Canada has 35 million doses of antiviral drugs in stock and another five

[318] Julius Strauss. *Globe and Mail*, 21 November 2005, sec. 1: A6.
[319] Knight Ridder, *National Post,* February 9, 2006, p. A13.

million on order, which would be enough to treat four million." The report mentions the use of antiviral drugs but does not offer background information on the difference between Tamiflu and Relenza or the proper use of the drugs as a prophylaxis. The report assumes that the readers have prior knowledge of the issues and offers limited details.[320]

This analysis concluded that both newspapers failed to fully address the scientific and medical questions and the debate surrounding the efficacy of the antiviral drugs and the ethical dilemma raised by doctors prescribing antiviral drugs to patients for personal stockpiling that has yet to be reconciled between medical experts. However, the policy of prioritization and distribution of limited drug supplies was framed as a failing of government to stockpile enough drugs for the entire Canadian population. At the same time little attention was focussed on the appropriate use of antiviral drugs as a prophylactic and the efficacy and effectiveness of the drugs. When considering the likely pandemic scenario, the newspapers have concentrated on economic disruptions particularly as it relates to transportation challenges the country would face to distribute the limited supply of antiviral drugs. They have raised ethical questions of how the government would prioritize the allocation of the limited stocks to individuals. Notwithstanding, little attention was focussed on providing details such as: What are antiviral drugs? How effective are their use in treating avian influenza? What if any are the side effects or risks associated with the use of these drugs? What are other precautionary measures? This serves as further evidence of superficial coverage of the topic by the newspapers and the limited news value the pandemic story held for these two circulations.

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[320] Alan Freeman, *Globe and Mail*, November 2, 2005, p. A19.

Finally, it would be expected that balanced reporting on the question of pandemic should also include precautionary advice. Since avian influenza has the potential of affecting each individual it is reasonable to expect that precautionary advice would be an important and necessary element to include in coverage. Articles which simply suggested to readers that they should wash their hands were credited for providing the precautionary advice. Results of the inclusion of precautionary advice within the newspapers, was the most dramatic and surprising of all study findings. In the total number of articles attributed to the *Globe* 10 (4.9%) provided precautionary advice; while the *Post* included a mention in only 11 (7.7%) of the stories they ran. This result is further evidence of a lack of commitment by these newspapers in reporting on the story. It shows a preference of the newspapers in focussing on a panic frame. The inclusion of reassuring statements or the inclusion of precautionary advice in the reports would counter the panic frame. During an interview with one of the editors who asked to remain anonymous, the individual stated that the responsibility for providing precautionary advice does not rest with journalists but with public health authorities and therefore newspapers are justified in not specifically addressing this issue in their coverage.[321] In response to this, Dr. Butler-Jones stressed the importance for journalists and for governments to be accurate and transparent in reporting on disease outbreaks. The prevention piece is critical for the reporting because people need to know how they can protect themselves. Dr. Butler-Jones recognized the important role of media as an effective way of getting information out and confirms that in a problem situation the media are eager to take on the role to inform and that in these situations media are not just interested in selling or advertising

[321] Anonymous, Journalist Interview, 2007.

but "they want to be conveyors of information particularly in a crisis."[322] However, Dr. Butler-Jones recognized that you can't tell them [the media] what to do.[323] He stressed that the media are the most effective means of disseminating information to the public quickly during a crisis. Therefore if newspapers take the position as suggested by this editor that it is not their responsibility to relay precaution advice but that it is incumbent on health authorities to relay the message how can these two positions be reconciled? The media cannot simply defer the responsibility to health authorities and assume a passive role in the duty to provide precautionary advice.

Conclusion

This chapter tested the thesis hypothesis that newspaper reports on pandemic influenza have been written using a panic frame. It further tests to what extent media use a single frame when reporting on avian influenza, the threat of H5N1 and pandemic using fear or panic frames compromising the dissemination of valuable information to the general public on a complex scientific and an important public policy issue. The findings from the discourse analysis focussing on the overall tone of articles support the hypothesis that the two national newspapers often used a panic frame in pandemic influenza coverage. The analysis of the tone of articles over time found that articles categorized as alarmist were concentrated around trigger events and these would be responsible for giving the impression that media are alarmist in covering the story given the larger number of articles clustered around these events. The tone of subsequent coverage to the trigger event saw a gradual decline of intensity over time.

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[322] Dr. Butler-Jones, Interview, 2007.
[323] Ibid.

The most surprising finding of the thesis is not so much what was reported, but what was omitted in the coverage. Most articles were found to be lacking in technical, medical or scientific information. They provided few details on the proper use, efficacy and risks associated with the antiviral drugs which were presented as the silver bullet for protecting the public against the pandemic threat. Finally, in the analysis of the extent to which the newspapers provided precautionary advice as a standard practice to complete the information loop, findings from this research show that the majority of the coverage failed to provide the basic information, and even fewer stories provided the much needed precautionary advice. Since H5N1 avian influenza and pandemic are complex topics, and that scientific terminology is not easily explained, and considering that newspapers are restricted by space, journalists must make tough decisions on what details to include or exclude in their reports. In order to meet these criteria journalists must assume that the readers have a certain level of knowledge about a topic when they write on these complex issues. On the coverage of highly technical topics Blackwell stated that the reporter's key objective is to explain the concepts in a way which is easily understood. If the story includes details about the development of a new drug or vaccine, or a medical discovery would obviously include more technical details. He further stated that "a story exploring the potential seriousness of an epidemic might also need to delve fairly deeply into the science. On the other hand, if the story is, for instance, about the political response to the threat, it would include less scientific detail."[324] One of the editors interviewed confirmed that when producing the news assumptions are made that readers have a certain level of knowledge of the topics covered. This individual, who asked to be kept anonymous, stated that "You need to refresh details for people overall and you assume that people

[324] Blackwell, Interview, 2007.

have heard of it, for example AIDS or West Nile. Certain assumptions are made about what readers might know and you write your stories accordingly."[325] This editor agreed that the news must be accurate but it was stressed that stories must not be repetitive. Justifying the choice not to repeat facts and to reduce repetitiveness the editor agreed that certain assumptions are made that readers have some acquired knowledge of a topic, particularly if the story has been carried in the newspaper over an extended period of time.[326]

[325] Anonymous source, Interview, 2007.
[326] Ibid.

CHAPTER 5

This study has shown that despite significant Canadian government investments to public health reform, and advancements made in pandemic preparedness the two national newspapers have framed their discourse on the pandemic issue as one of panic. Coverage has focussed on the more problematic aspects of the Canadian pandemic plan including economic and social disruptions which would be caused by workplace absenteeism due to illness which added suspense to the story. When reporting on the implementation plan for pandemic preparedness the newspapers have focused on the problems of transportation, storage, distribution and allocation of the government's limited supply of antiviral drugs. They have reported on the policy decision to stockpile antiviral drugs focusing on the ethical dilemma surrounding the allocation of the limited resources. In many reports they provided limited information about antiviral drugs, their use, efficacy rates or potential side effects.

Media coverage on various health threats such as West Nile, SARS, and with more recent hype over the bird flu H5N1 outbreaks in flocks within countries overseas during the 05/06 flu season, increased awareness of these infectious disease threats. The arrival of West Nile to North America in 1999 is an example of how easily diseases can jump the continental divide. The emergence of cases of disease can occur without warning with serious consequences. The experience of SARS was the wake up call to show Canadians that they are not immune to serious illness in today's borderless world. West Nile, SARS and increasing reports of humans succumbing to the avian influenza H5N1 strain of bird flu in Asia, contributed to an increased number, and more frequent reporting, on public health threats. Many of the stories reported were framed using

speculative language and promoting doomsday scenarios promoting the panic frame as I had hypothesized.

Much of what was reported came out of policy decisions or reports of disease outbreak in foreign lands. The initial trigger event which elevated the pandemic topic in the media was the International First Ministers' Conference where policymakers discussed pandemic preparedness. Policymakers were found to be the agenda setters with member countries having made policy decisions to stockpile antiviral drugs and announcing pandemic preparedness plans. However, the newspapers were not the agenda setter for reporting on disease outbreaks. The story was sustained during the review period with reports of the spread of avian flu in wild birds and in rare cases human cases were found in Asia. This supports Nesbitt-Larking argument stated earlier about agenda setting that "for prominent issues that affect people personally and directly, such as unemployment and inflation, it is the general public that sets the agenda. For abstract policy issues, such as the debt and deficit and national unity, it is the government who sets the agenda. For sensational issues, such as AIDS and crime, the media set the agenda."[327]

Given that a pandemic threat has the potential to affect each and every person it would be reasonable to expect that information on such a highly technically topic for the average reader would benefit from detailed coverage. The research found that limited scientific details were provided within the census. The story was constructed over time with details often having been omitted. One of the interviewees admitted that coverage often omit some basic facts about viruses, their mode of transmission or preventative advice because of space limitations. Stories which are sustained in the media over an

[327] Nesbitt-Larking, 2007, p. 334.

extended period require that details be refreshed for the readers to ensure that the audience has prior knowledge of the topic. For example, when reporting on AIDS or West Nile reporters assume a certain level of knowledge by their audience. Stories can only have a certain amount of repetition and you cannot be expected to cover the whole story. This person completed the statement on the issue saying that "What you want to cover is the newest element of a story on that particular day." Recognizing the constraints of limited space under which newspapers must work, the research shows that many reports failed to provide the basic information on avian influenza, bird flu H5N1, antiviral drugs, and even more importantly reports generally neglected to provide precautionary advice. Not surprisingly, those reports which were credited for providing the necessary information were generated by health reporters who generally have more expertise in the subject matter. Therefore, this research suggests that when newsprint media are interested in reporting factually about a topic it is important for assigning these stories to those who have the knowledge and expertise. Since the *Globe* published more reports from their health reporting staff shows a greater commitment to the story than the *Post* who relied more on newswire content to cover the story. The extensive use of newswire stories by both newspapers suggests that these newspapers were not as committed to the story as the frequency of coverage might otherwise suggest. The coverage may have been used more as filler rather than a true commitment to report on the story.

The pandemic topic has generated much interest over the years since SARS. Many have speculated that the hype over pandemic has needlessly exaggerated and will result in desensitizing the public. On this topic, Ottawa journalist Ken Pole compares the

past use of fear to report on pandemic with the Y2K threat. In this case reports were sustained over a lengthy period of time warning people that computers would shut down at the turn of the millennium resulting in major crises since we have become such an electronic dependent society. Information technology experts predicted a doomsday scenario because it was believed that computers were never programmed for the turn of the century and dire predictions were made about computers failing. Of course, nothing happened but Pole raises the question: "Was it never a threat?" He also suggests that: "Now, the threat of an avian flu equivalent is so widely reported that many are becoming, or already are, desensitized."[328] Research into whether or not people are becoming desensitized to the reports on pandemic remains to be undertaken but speculation about our level of preparedness and the stress caused by the worst case scenarios continues to generate interest. In September 2005, the authors of a MacLeans article argued that fear had become the epidemic – and safety, or our perceived lack of it, an obsession. The sub-title of the article is self explanatory saying that: "We keep bracing ourselves for one cataclysmic threat after another. Our perceived lack of safety has become an obsession."[329] Are Canadians better prepared today to deal with a potential disease outbreak than they were during SARS? Is fear really at the epidemic level?

Despite the fact that North America has not reported one single case of bird flu in fowl, and no human cases of the disease, raises the question of why there is so much interest in reporting the story as an imminent threat. Notwithstanding, the findings of this thesis suggests that the problem with the reporting has not simply been on how the pandemic story has been framed, but more importantly the omission of critical details for

[328] Ken Pole, 2006.
[329] Lianne George, with Karin Marley and Danylo Hawaleshka, *Maclean's Magazine*, October 3, 2005.

the audience to fully understand the story. The fact that so many articles were written on the topic confirms that it was newsworthy; however, responsible reporting should include facts and statistics on the probability of events and should not simply be presented in the context of a worst case scenario.

Increased media reports during the 2005/06 flu season, with accounts of personal stockpiling by Canadians of antiviral drugs, may be indicative of citizens responding to fears of an imminent threat of a pandemic but reports around this issue did not quantify how widespread the practice of personal stockpiling had become. Although the reports failed to quantify the instances of personal stockpiling I would expect that instances where individual citizens actually went to their physicians requesting a prescription was likely overestimated.

The findings of this research concluded that the two national newspapers were homogenous in how they wrote about this public health issue. Both newspapers relied heavily on newswire services for content. The story did not hold much news value for either newspaper since they did not dedicated many resources to the coverage. Both newspapers relied on government and health authorities as primary sources for its health coverage. The literature suggests that attention of media translates to attention by the policymakers. This study of pandemic coverage did not support this generalization. Since the reports followed the Canadian health reform the policymakers were the policy leaders in this instance.

Chapter 2 discussed Canadian health care reform and the creation of the Public Health Agency of Canada. It provides background on the events which brought the topic of pandemic to the forefront on the media and public agendas. This chapter also provides information about avian influenza and on how pandemics occur in order to set the context for the discussion.

The large number of articles published during the period of study, and the level to which the topic was sustained over time suggest an interest in the newspapers on the topic, but the reliance on foreign newswire services and the lack of attribution to the originating source of the information indicated that the coverage served as filler rather than providing an indepth reporting of the issues. Further, the coverage found that while there was a great deal of articles that were balanced in their reporting, there was still a high reliance on the panic frame. It was also found that both newspapers had a heavy reliance on primary sources such as government and health authorities. The most significant finding of this research project was the fact that generally speaking coverage in both newspapers provided insufficient information on why readers should be concerned about the H5N1 strain and pandemic threats. Additionally, limited information was provided on the policy and ethical debates surrounding the stockpiling and distribution of antiviral drugs in the event of a pandemic. Finally, the coverage was found to be lacking in much needed precautionary advice.

Policy Implications

This research contributes to the discourse on agenda setting. The observations made can be used by policy actors and communicators to address gaps in the reporting on health related topics. This discussion highlights areas which could benefit from improvement to ensure that the public receives the necessary information to prepare for a possible pandemic. There is opportunity for policymakers and communicators to consider these findings when drafting their communications plans. The information would also serve as a training guide for institutional spokespersons. Using the findings from this study, policymakers can make necessary adjustments in how they deliver their messages placing more emphasis on certain aspects of health topics to be covered. It is incumbent upon policymakers to ensure that media not only report on the cause of disease outbreaks but that precautionary advice is offered whenever possible to inform the public. Recognizing, as Dr. Butler-Jones has stated, that the media cannot be told what to do, the research contributes to building awareness for policy actors on how to better communicate with newspapers in order to improve the overall content in newspaper reports. It is incumbent on primary sources to stress the importance of precautionary advice and ensure that they set the record straight when stories are taken out of context since newspapers are so reliant on their expertise. This can be achieved through letters to the editor or contacting the reporters directly to correct misinformation. Recognizing that retractions and corrections are rarely printed, the contact with the journalists directly to correct details of reports would help in future coverage on the topic.

Opportunity for Future Research

Although this inquiry does not delve into the sustainability of the pandemic story over several flu seasons it raises possibilities for future research. It would be worth conducting a longitudinal study of coverage during the subsequent flu seasons following health care reform to assess coverage and to evaluate whether the story maintained its news value consistently through the years; however, this inquiry was outside the scope of the thesis.

There is no question that SARS served as the trigger event which elevated the topic of avian influenza and pandemic in newspaper coverage. The proponents for public health reform had been lobbying the Federal Government to take action for the last twenty years.[330] Global epidemics like AIDS, concern over the appearance of antibiotic resistant bugs, the arrival of West Nile virus in North America, and finally SARS have all contributed to focussing attention onto public health and contributed to the federal government decision to reform the system. The media obviously had a role to play in raising awareness to the system failings and contributed to the discourse over policy reform and may very well have had some influence over the policy decision makers. However, the dynamics at play in the decision making process and the fact that it took over twenty years for public health reform, would indicate that the newspapers did not have a direct impact and likely did not have a strong influence over the policy agenda. It could be argued that the coverage contributed to setting the public agenda but this was not the focus of this research and cannot be confirmed solely on these findings. The literature supports the view that media have the power to sway public perception of health issues simply by choosing what to publish and how it is presented. Research

[330] Jones, 2007, p. 5.

shows that the media can play a positive role in promoting public health and influencing debate on health issues.[331] In fact Berry, Wharf-Higgins and Naylor have written that "some issues seem to generate a stronger response in the public, and this may be related to how the media construct messages. Most often, health messages are framed in terms of risk, by expert sources using strong language."[332]

There is value in further testing of the research hypothesis. It would be worth conducting additional research on avian influenza coverage which has appeared in subsequent flu seasons to determine whether the topic has remained as salient since the early days following SARS. It would be worth replicating the methods of this research to determine whether the news value on the topic of avian influenza has been sustained in years following the review period, or whether it has waned on the media and policy agendas. The research could be expanded to include local newspapers and broadcast media as further proof of agenda setting norms. The research could also benefit from a longitudinal research project using West Nile as the topic of interest. The study could include coverage of the build up that West Nile was coming; the first North American case of West Nile and then study the summer seasons which have followed the initial reports to test framing norms in this instance to gauge how media frame infectious disease topics more generally. This was outside the scope of this research project but offers interesting possibilities for future research.

[331] Wallack, Dorfman, Jernigan, Themba, 1993.
[332] Berry, Wharf-Higgins and Naylor, 2007, p. 43.

This research has been extremely rewarding. My journey began with research for one term paper on this topic. I had no idea at the time how much was possible in studying a topic so extensively. Along the way I learned much about the newspaper industry. The most intriguing part of the study was the few nuggets of unexpected findings. Of course, this is what makes research worthwhile. I look forward to applying the methods learned from this experience in future research.

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Appendix A

Coding Sheet

1. Case ID

For *National Post*, label NP and then run concurrent numbers, example NP01, NP02
For *Globe and Mail*, label GM and then run concurrent numbers, example GM01, GM02

2. Name of newspaper
    1. *National Post*
    2. *Globe and Mail*

3. Date of Story (dd/mm/yy)

4. Time frame
    October 1, 2005 to May 31, 2006

5. Location of story
    1. Front Page
    2. Front section
    3. Editorial page
    4. Comment section
    5. Health Reports Section (Special Features)
    6. Second section (Business)
    7. Other

6. Main topic
    1. Pandemic preparedness; Bird Flu
       Stories addressing the pandemic issue or bird flu. Articles must have actual reference to avian flu, pandemic or bird flu.
    2. Coverage of bird flu outbreak
    3. Impact on economy
       Any story that refers to the economy or confidence in Canada's economy as a result of fear of a pandemic.
    4. Federal Government's response to pandemic
    5. Other

7. First source quoted – use with actual quotes or attributions.
   For example: Dosanjh says "--" or Chretien responded with "--" or Butler-Jones believes that: "--".
    1. Government Official
    2. Health Official
    3. Physicians
    4. Scientists
    5. University Professor
    6. Other

7. No Sources Quoted (used to identify articles which did not quote sources)

8. Second source quoted
    1. Government Official
    2. Health Official
    3. Physicians
    4. Scientists
    5. University Professor
    6. Other
    7. No Sources Quoted (used to identify articles which did not quote sources)

9. Source of Stories by National Newspapers
    1. International Newswire Service
    2. American Newswire Service
    3. Canadian Newswire Service
    4. Staff Reporters (by newspaper)
    5. Other (stories not written by journalists such as comment and opinion pieces)

10. Type of Story
    1. News story
    2. Editorials
    3. Comment
    4. Feature
    5. In Brief
    6. Business
    7. Miscellaneous (Includes: Sports, Entertainment and Travel stories. The miscellaneous stories ran primarily under travel.)

11. Tone of Article
    1. Reassuring
    2. Neutral
    3. Alarmist

12. Frames
    1. Breakthrough
    2. Disaster
    3. Ethical Controversy
    4. Strike
    5. Epidemic
    6. Official report or speech
    7. Scandal