

THE REPRESENTATION OF ENVIRONMENTAL
NEWS:
A COMPARATIVE STUDY OF
THE MALAYSIAN AND
NEW ZEALAND PRESS

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Abstract

This comparative study examines trends in the representation of the environment in Malaysian and New Zealand newspapers over an eight year period. By comparing the two media contexts, it explored the role of journalism's occupational norms, of the relationship between journalists and sources and of media ownership in determining the quality of news coverage of the environment. The sample was made up of eight mainstream newspapers which were selected based on biggest circulation figures, sampled in 1996, 2000 and 2004. The four Malaysian newspapers, all nationally distributed, were the English-language papers *The New Straits Times* and *The Star*, and the Malay-language papers *Berita Harian* and *Utusan Malaysia*. The four New Zealand newspapers, all regionally distributed, were *The Press*, *The Dominion Post*, *The New Zealand Herald* and *The Otago Daily Times*. The study employed content analysis as the prime method to observe trends in environmental news; while in-depth interviews with 40 respondents were used to verify from subjects' experiences the various forces that might cause the trends. Major content analysis findings were that environmental news is underrepresented in both countries and that the news patterns in the two countries are quite similar. The study raised questions about the quality of the news, with much of the coverage being conflict-framed, one-source event stories, with high dependency on government officials. These problems were less acute in New Zealand. Trends were largely stable across the three years. The most significant change in Malaysian coverage was an increase in the use of the public and scientists as sources over time. Interviews revealed some differences between New Zealand and Malaysia in journalists' awareness of organizational determinants of news, editorial policies towards the environment, sources criticisms of journalists' laziness, but also many common problems, including journalists' lack of knowledge about environmental issues and science. In Malaysia, government control of the news and editors' self-censorship of sensitive news was identified as a problem. The study concludes that newspapers in both countries do not operate as information providers or educators, but most of the time are reactive towards environmental issues.

Glossary

Academics: Academic science researchers who work for local universities.

Editors: Persons who edit, make change and determine a final content of a text (for a newspaper).

Environmental journalism: The collection, verification, production, distribution and exhibition of information regarding current environmental events, trends, issues and people.

Environmental journalists: Specialized journalists who write on environmental issues. They must have an understanding of scientific language and practice, knowledge of environmental events, the ability to keep abreast of environmental policy decisions and the work of environmental organizations, a general understanding of current environmental concerns, and the ability to communicate all of that information to the public in such a way that it can be easily understood, despite its complexity.

Environmentalists: People who work for the environmental movements or organizations.

General desk journalists: Journalists who report about all types of story and not specialized on certain issue.

Government officials: People appointed to administer the government environmental agencies.

Investigative journalism: Investigative journalism requires the scrutiny of details, fact-finding, and physical effort. An investigative journalist must have an analytical and incisive mind with strong self-motivation in reporting news.

Public relations officers: Public relations (PR) officers use all forms of media and communication to build, maintain and manage the reputation of organisations.

Scientists: See Academics.

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Chapter 1

Introduction

Humans are part of the environment. All our actions with respect to the Earth could affect both the natural ecosystem and human society. Communicating information concerning human interaction with, and the impact on, the environment is essential because public knowledge and understanding of the environment could help us appreciate and conserve the environment for future generations. Nevertheless, communicating information about the environment is very challenging due to the complex nature of such environmental information. Some meanings could be lost throughout the news construction process. The speed and accuracy with which environmental information can reach the public has also been the subject of much debate.

I have a deep interest in the environment and this has led me to develop a further interest in how it is communicated via newspapers. The original contribution of this study lies in the extensive data it gathers about the way in which the environment is covered by newspapers in two countries, namely Malaysia and New Zealand, and the factors shaping the coverage in each. This comparative study is designed to examine the differences and similarities of patterns and trends within the environmental coverage between the two different countries with two different backgrounds, and what each can learn from the other regarding such coverage. Further, as there is little research in either country on media coverage of the environment, it is important to conduct this research as a pioneer study in the field. I also hope the study will provide a platform for the understanding of environmental coverage in newspapers for readers and future researchers. Through content analysis and interviews, this study provides an in-depth analysis of environmental news in the Malaysian and New Zealand press.

1.1 Overview

This thesis is a cross-cultural research and it intends to study cases that are surrogates for types of societies or units. This comparative study looks at the environmental news in developing (Malaysia) and developed (New Zealand) countries in order to examine patterns of similarities and differences across cases and try to come to terms with their diversity (Ragin 1994, 108). Therefore, this section gives a brief overview of the historical backgrounds of Malaysia and New Zealand, their media structures and newspaper circulation as a foundation of the research.

Malaysia is a federation of thirteen states: the Peninsular Malaysia comprises eleven states, while East Malaysia consists of two states. It is a multi-ethnic, multi-cultural and multi-lingual society with population of 26.6 million in 2006; consisting 62 percent Malays, 24 percent Chinese, 8 percent Indians and the rest are others and indigenous people (Department of Statistics Malaysia 2007). This population composition is a result of colonialism, when indentured labor from China and India was brought into what was then Malaya to work in the tin mines and plantations.

Many of Malaysia's existing economic and political problems have their roots in the colonial experience and stem from the multi-ethnic nature of its population (Gomez & Jomo 1997, p. 1). The divide-and-rule policy introduced by the British left the people with a strong sense of belonging to their own ethnic group to protect their own interests. Most political parties are ethnically based, encouraging ethnic political mobilization and consciousness, thus intensifying the ethnic problem. This can be seen in the set up of political parties according to ethnic groups like the United Malays' National Organisation (UMNO), Malaysian Chinese Association (MCA) and Malaysian Indian Congress (MIC). These three parties formed a coalition in 1955 that later with other parties formed the *Barisan Nasional*, the present ruling coalition.

The colonial experience and population patterns have also influenced the distribution of newspapers in Malaysia and the segmentation of readers which is divided along ethnic lines. Currently, Malaysia has 45 daily and weekly newspapers with a total circulation of approximately four million (ABC 2007a). This includes the National language or Bahasa Malaysia dailies¹, English², Chinese³ and Indian⁴ language dailies. The Malay readers of the population account for 55 percent, followed by the Chinese at about 36 percent, while Indian and others make up the remaining nine percent.

In 2003, Wang speculated that the drop in circulation of the *New Straits Times* and the *Berita Harian* circulations, of around 13 and 21 percent respectively as compared to 1998, was possibly due to a perception of Malaysians that the mainstream newspapers are partial in their reporting (Wang 2003). This was particularly in regard to the economic and political crisis faced at that time. Although the *Berita Harian* circulation continued to drop about 19 percent between 2001 and 2006, the *New Straits Times* circulation had a small increase of around eight percent for the same period. Similarly, the *Star* circulation marked an increase of six percent, although the *Utusan Malaysia* circulation decreased about 13 percent. Wang (2003) claims that this was because the Malay papers were trusted less compared to the English papers. I argue this phenomenon might have other possible causes such as the economic downturn, a trend towards less news consumption in general or towards the greater use of the internet or television for news or perhaps the competition between newspapers resulting in sensationalist coverage by some news outlets. The implication of these changes for coverage of the environment, which was never very extensive anyway, gives cause for concern. In fact, the content analysis section of this thesis shows that during the period from 1996 to 2004, environmental coverage did suffer in quantity and quality in all papers except for *Berita Harian*. The number of environmental news stories also dropped by approximately 30 percent in all papers studied with a small

¹ The Malay dailies are *Utusan Malaysia*, *Berita Harian*, *Harian Metro*, *Metro Ahad* and *Utusan Melayu*.

² The English dailies are *New Straits Times*, *Malay Mail*, *Star*, *Sun*, *Edge* and *Business Times*.

³ The Chinese dailies are *Nanyang Siang Pau*, *Sin Chew Jit Poh*, *Guang Ming Daily*, *Kwong Wah Yit Poh* and *China Press*.

⁴ The Indian dailies *Malaysian Nanban*, *Tamil Nesan* and *Makkal Osai*.

amount of event stories throughout the years. The interview section also shows that newspaper editors place little importance on environmental news because it is not seen as a way of building readership. The thesis draws attention to this trend and the underlying problems.

New Zealand on the other hand consists of two large islands situated in the south-western Pacific Ocean, and is notable for its geographic isolation. Approximately 76 percent of its population of 4.1 million (as of 2006) are ethnic Europeans who are mostly of British and Irish ancestry. The indigenous Maori are the largest minority, accounting for 11.6 percent of the population with non-Maori Polynesians (6 percent) and Asian people (7.2 percent) as other significant minorities (Department of Statistics New Zealand 2006).

Currently, New Zealand has 21 dailies, five weeklies and four non-daily papers distributed regionally (ABC 2007b). The significant difference in newspaper distribution between the two countries is that the Malaysian papers are distributed nationally⁵; while the New Zealand press serves specific regions⁶. The segmentation of New Zealand readers is not influenced by differences in race or language as in Malaysia. However, the regional distribution does somewhat shape the news content that readers receive based on their location.

Previous research has argued the importance of examining the structure of media ownership because the owner's ideology as relayed by their media can work to achieve their own objectives (Starke 2004, p. 24; Bennet 1982). Starke (2004) states in her study of concentration of New Zealand press ownership that 'journalism has been strongly influenced by three trends: (i) the concentration of media ownership and foreign dominance; (ii) increasing competition which is more aggressive than it used to be and; (iii) the consolidation of ownership on a global level.

⁵ Except for *The Star* and *Utusan Malaysia* which are not distributed to the East Malaysia.

⁶ Except for *New Zealand Herald*.

In Malaysia, the docile press is owned or directly owned by political parties and politically influential businessmen. The pattern of ownership and stringent government regulations, such as the Internal Security Act (ISA) of 1960 which allows for indefinite detention without trial and the Printing Presses and Publication Act of 1984 which requires all print media to obtain an annual licence and abide by strict regulations, have combined not only to reduce transparency, but also to reduce profitability and to control the content of the press (Gomez & Jomo 1997, p. 2; Gomez 1993). At the same time, it is believed that the government-controlled media have been used by the *Barisan National* to promote and legitimize the ruling party by references to the necessity of ensuring political stability, ethnic harmony, economic redistribution, economic growth and accelerated modernization, especially industrialization (Gomez and Jomo 1997, p. 3)

Another study by Mustafa of the 1990 and 1999 Malaysian election campaigns also found that the majority of news coverage was focused on the *Barisan National* to serve its own political and ideological interests (Mustafa 2003, 1990) which perhaps helped secure their victory in the 2004 election (Gomez 2006). Therefore, it can be concluded that Malaysian state control and commercial interests certainly have an impact whether directly or indirectly, on the ability of its readership to access adequate and accurate information (Wang 2003, p. 121).

The current ownership situation could affect environmental coverage in two ways: (i) by eliminating environmental stories in favor of other sensational stories in order to increase circulation and profits as required by the newspaper owners and; (ii) by reporting at a surface level, or not reporting at all on environmental issues which are related to government projects needed for the harmony of multi-ethnic interaction.

New Zealand has a different pattern of newspaper ownership. The New Zealand daily newspaper market was previously owned by two family businesses before it was later owned by multi-national media giants. By 1985, about 76 percent of the newspaper market (daily newspaper circulation) was

owned by only three companies: New Zealand News (25 percent), Independent Newspapers Ltd or INL (24 percent) and Wilson and Horton (27 percent). The trend toward foreign ownership started in the 1960s when Rupert Murdoch moved into Wellington and has intensified since the early 1990s. In March 1987, Murdoch's News Corporation took on a 40 percent interest in INL. In August 1988, New Zealand News decided to sell its Auckland suburban newspapers, the Auckland Star and the Sunday Star (Starke 2004, p. 12 -14). In 2001 Wilson and Horton sold its shareholding to APN News and Media (ANM) an Australian registered company. Soon after, another Australian company, John Fairfax Holdings Limited bought its New Zealand empire in June 2003 from Independent New Zealand Limited (INL). Today, the two major newspaper owners left are Fairfax which has nearly half (48 percent) of the daily newspaper circulation; while APN News and Media (ANM) has about 43 percent (Rosenberg 2007).

Based on previous research on the New Zealand media, it appears difficult to determine whether ownership has any influence on the media content. However, Starke's study on the concentration of ownership in the New Zealand press reveals that the content of daily newspapers was actually affected by commercialism, rather than the management of the newspapers (Starke 2004, p. 123). This leads to news competing with advertisements for space. The contribution of advertisements to the high revenues for newspaper companies could lead to a smaller allocation of space for news stories, with environmental stories being among those that are most vulnerable to being cut.

This research is not particularly intended to show if ownership has some influence on environmental content, but I am quite keen to observe if there is a relation between media ownership and coverage of environmental stories in the Malaysian and New Zealand press. I am also interested in examining whether the different backgrounds of the countries could also lead to the environment being represented in different ways. These differences are the focus of the comparative dimension of this study. The goal is to find out the reason for any differences between the two countries and also to discover reasons why these factors generate such variations.

The inspiration to conduct this research came from the fact that there is very little research on media coverage of environmental issues in Malaysia. Much news content research focuses instead on the political discourse (Karthigesu 1994; Gomez 1993; Mustafa 1990). Similarly, New Zealand also has a small amount of research concentrating on environmental issues in the media. However, there are a few examples of coverage focusing on science reporting and related issues. For example, Sessions (2003) discusses the verification of science reporting by considering the environment as part of her definition of science and finds that interest in science in the mainstream New Zealand media is just beginning to grow. Sessions argues that New Zealand media might operate differently in science coverage than in other countries because of the differences in culture, geography, population and economy.

Further, the comparative orientation improves measurement and conceptualization of a research because it is difficult to detect hidden biases, assumptions, and values (Neumann 2000, p. 402) in a single separate research technique. This type of study also offers alternative explanations for causal relationships and stimulates theory building for future research. Therefore, it is hoped that this cross-cultural study of the representation of environmental news in the Malaysian and New Zealand press will provide a foundation for further research into the media coverage of environmental stories.

1.2 Assumptions

I begin this research with the assumption that the public depend heavily on the media for environmental information, but the coverage of environmental news is rather limited as compared to other areas, for instance politics and business, in both the Malaysian and New Zealand press. Most environmental stories are event stories, such as flooding and landslides, which are simply just reporting an event and not educating the public.

This scenario could possibly be due to the occupational norms of journalists or their daily routines which suffer time and space constraints, their gatekeeper

role, or the policies of their companies and ownership which could limit the desire of the journalists to write more feature articles on the environment. Also, the information could change according to how it is interpreted by the journalists (Campbell 1999, p. 2). Thus, information on the environment could be represented inadequately for public consumption.

Secondly, the objectivity at which journalists aim is too idealistic to be achieved (Fiske 1987). The various routines and techniques of journalism, for instance in selecting and framing stories, makes journalism open to the production of biased and inadequate stories focused on more negative consequences of the environment. Apparently objective stories on the environment are likely to be shaped by political and cultural factors that are grounded in the way of thinking of the journalists.

I also presume that the relationship between journalists and sources could influence the representation of environmental news in the press. The closeness between the two groups, which Friedman et al. (1986) describes as a symbiotic relationship, may have some influential factors on each others profession (Friedman et al. 1986). For example, there is high dependency on government officials as sources because they are available, credible and able to legitimize the issues. Therefore, I argue this could lead to several issues such as biased reporting of environmental issues.

Another point is that the environmental subject is cyclical and reporting is based on numerous factors and events. Ward (2002) believes that there is a connection between environmental coverage and significant environmental issues, for example, the rainy season in December each year resulting in massive flooding in Malaysia. The environmental subject itself is strongest when perhaps there are less political or economic stories to be reported, or when a disaster strikes (Ward 2002). As a result, the media role of being a “watchdog” and of educating readers about issues such as the environment is incompatible with reality. Hence, the establishment of environmental journalism is important to provide a better public forum for environmental debate.

Finally, my last assumption is that the state of environmental coverage in the New Zealand press could be relatively encouraging, especially compared to that in Malaysia which has only recently paid extra attention to environmental issues. This assumption is based on factors such as population, the level of public awareness of environmental issues (Coyle et al., 2003) differences in media systems, political, cultural and economic backgrounds, and ethnic make up. Furthermore, as little research has been carried out into the media-environment relationship in Malaysia, I am particularly interested in observing Malaysian coverage over the three years covered by this study. I am also interested in comparing such Malaysian coverage to New Zealand as one of the nearest western countries to Malaysia which also has less academic studies conducted in this field.

The thesis does not choose countries such as the UK or the US with which to compare to the Malaysian environmental coverage because environmental coverage in both of those countries has been the subject of previous extensive and well-researched study. However, those previous studies are used to establish guidelines for analyzing the situation in Malaysia and New Zealand. Secondly, the natural environment plays a less significant role in shaping the UK and US economically and politically than it does in Malaysia and New Zealand, which both depend heavily on natural resource extraction and where natural forces can have a big impact on the way of life of people. Thirdly, the small size of New Zealand allows a clearer and more complete picture of the forces shaping environmental coverage to emerge from one study. It gives a clearer set of findings with which to compare to Malaysian coverage.

1.3 Research objectives

The general aim of this research is to examine environmental news coverage in the Malaysian and New Zealand press. The main objective of the work is to analyze, explain and compare the differences and similarities of the

representation of environmental news in mainstream newspapers as described below:

1. What are the differences and similarities in environmental news trends and patterns between the two countries, including the use of sources, topic selection, and news content; and how do these trends and patterns change over time?
2. Do journalist occupational norms – tight deadlines, space constraints and editorial pressure – influence the coverage?
3. Does the journalist and source relationship influence the news representation in the press?
4. Does media ownership restrict journalists to produce analytical environmental articles?

1.4 Definitions

For this study, environmental news is defined in the broadest sense as all stories on environmental matters, not just issue-based coverage. Some earlier studies have also used a similar definition. Therefore, for this study, environmental news consists of all environment-related issues that are dealing with Mother Nature such as weather, volcanic eruptions and tornadoes and also human influences, whether positive or negative, on the environment.

I follow scholars such as Sessions (2003, p. 6) who, in her study on verification and balance in science news used the term “science” in a broad sense and adapted the definition of science by Friedman’s et al. as “[not only] the biological, life and physical sciences but also the social and behavioral sciences and such applied fields as medicine, environmental sciences, technology and engineering” (Friedman et al. 1986). Friedman et al. used a broad definition because they argued that science discourse could be related to some other elements but was either not reported in-depth or not reported at all. I similarly argue that coverage of the environment which misses out day-to-day coverage of the weather, of floods and the like, as well as coverage that is specifically themed on the environment is only telling part of the story.

Sessions (2003) and Friedman et al. (1986) also included some environmental issues in their research on science news. I will also take into account any science or health stories within this context that have some connection to the environment. For example, Campbell's (1999) study on the construction of five major environmental issues in Scotland considered some science elements, such as the effects of air pollution on respiratory diseases. This is necessary because environmental issues are always complex and interrelated with other elements.

1.5 Thesis outlines

This study is composed of seven chapters. Chapter 2 outlines the theoretical framework. It focuses on the media theory of framing and agenda setting in the news. I also describe theories of objectivity, social construction of responsibility and news sources as a framework for this study.

In Chapter 3, I begin the literature review with arguments made by a few groups of people in describing the meaning of the environment in order to get a deeper understanding of the overall meaning. Then, I focus on the roles of news sources. The literature also considers the importance of news values in the process of reporting the environmental news.

Chapter 4 explains the methodology use for this study in detail. Content analysis is used to observe the trends and patterns of environmental news coverage specifically on news characteristics, news sources, topics and content. The interview questions were designed to examine the news content and possible forces which shape news trends and patterns.

The last three chapters consist of research findings which explain the representation of environmental coverage in the Malaysian and New Zealand press and, the discussions of this study. Chapter 5 begins with content analysis findings that reveal a high degree of similarity in environmental news trends and patterns between the two countries. However, Chapter 6 reveals

some differences in the possible forces which shape the environmental news representation.

Finally, Chapter 7 concludes this study with a summary of the major findings. This chapter also deals with future prospects for change in the Malaysian and New Zealand environmental press coverage.

1.6 Limitations of the study

There were some limitations faced in the process of completing this thesis. One such problem was the difficulty in compiling a list of comparable measurements of environmental concerns that could apply to both countries. With obvious different backgrounds, both Malaysia and New Zealand have different environmental concerns. For instance, the New Zealand government classifies food and farming as one environmental concern but it is not seen as an issue by the Malaysian government. This resulted in difficulties designing the content analysis coding sheet. However, at the end of this study, this problem produced valuable findings in this comparative approach as to how the environment is constructed differently in the media of the two countries. For example, the Malaysian press presented forestation issues in relation to extensive logging which led to massive landslides; while the New Zealand press portrayed such issues in terms of forest fires due to extremely hot weather.

Second, an environmental issue addressed by the government might not be seen as an important topic by the media. In order to avoid having a long list of environmental issues for the content analysis coding sheet, only environmental topics that are mostly reported in the media and also considered as important by the government are selected to be studied. This was done by conducting two pilot tests before the final list of environmental concerns were produced as attached in Appendix 1.

I also had some difficulties in accessing Malaysian data because it was not available for researchers. The facilities needed such as microfiche machines

and microfilms were mostly available at the newspaper companies which required extremely high fees for outside users. Further, respondent reluctance to be interviewed, especially Malaysian respondents, delayed the interview process.

Finally, the content analysis and in-depth interview methods were less able to explain how news texts operate ideologically or how the readership understands them. Further, the interviews could only present data on how interviewees understand what the newsprint media do. However as not much research has been done in this area, I believe this is an important starting point from which to compare the approach of the newsprint media within the two countries.

1.7 Significance of the study

Malaysia and New Zealand both have a historical connection with the British through their colonial activities. However, the two are different in terms of how they have been connected and the respective impacts on the countries which have resulted in different political and media systems. This study intends to examine and distinguish the media's representation of the environment in both countries which are different in terms of politics, economics, geographic location and population patterns. Also, to explore the extent to which these factors influence the way the environment is covered in the press. Further, despite the increasing numbers of internet and television use, newspapers are still relevant source of information in both countries. For example, there is an increase of 8 percent in newspapers readership between 2003 and 2006 in Malaysia (ABC 2007c). As there is little research on environmental coverage in the media, especially newspapers, in either country, I think it is worth studying how environmental issues are portrayed because there are still many open questions to explore.

The two countries also differ in the extent to which the environment is a public and political issue, so the study will be able to cast light on the role of the media in shaping and tackling the politics of the environment. Although

there is very little evidence to show that environmental awareness amongst Malaysians is increasing, some indications suggest that environmental issues are getting more attention from the Malaysian government. These include the introduction of environmental issues into the curriculums of schools and higher education, the increased number of environmental organizations in the country, and inclusion of the environment for the first time as one element of discussion in the 7th Malaysian Plan (The Prime Minister Department 1996).

On the other hand, some research suggests that environmental awareness in New Zealand is relatively high. For example, Coyle et al.'s (2003) study on the understanding of biotechnology by New Zealanders revealed that New Zealanders often remark that "clean green" is important to New Zealand's image and they realize the importance of living in a "healthy" and "good" place for the future. It is one of the attributes of the country and is symbolic of New Zealand culture and national identity (Dew 1999).

The media is an important agent of environmental information and can be used to increase awareness amongst the public (Sessions 2003; Young 1999; Bell 1989; Singh 1982). For instance, environmental awareness amongst Malaysians has been inspired partly by the increased coverage of the exploitation of natural and mineral resources and rapid urbanization of Malaysia immediate post-independence (Singh 1982). Another 1995 study on the level of awareness perception and acceptance of scientific issues amongst Malaysians discovered that knowledge of science among Malaysians may be described as being generally low, with slight variations according to subject matter (Merican 1998). This situation can perhaps be attributed to how the science news is represented by the media. In the USA, Young's study on the level of environmental awareness among university students found that the consciousness of environmental issues has heightened perhaps due to an increase in environmental media coverage in that country (Young 1999).

In order to create environmental awareness amongst the public effectively, media should be reporting environment news in details and more often. Singh (1982) argues that media reporting of environmental issues in Malaysia is

neither consistent nor of sufficient depth. The Malaysian mass media highlighted the tremendous pace of development projects but hardly the consequent problems of industrial pollution and unplanned logging methods that were threatening the country with extensive deforestation and soil erosion. In addition, in view of the nature and extent of environmental degradation that exists today, a high and sophisticated level of awareness is required amongst the public to ensure the future of the Malaysian environment. Therefore, a thorough study of environment reporting by the media is necessary in this field.

A study of media coverage of the environment and science is very new to Malaysia as compared to other developed countries (Merican 1998; McDowell 1993, McCormic 1992). Much research worldwide has also focused on the relationship of environmental issues to other variables. Amongst this research are studies of media – source relations; case studies of big disaster stories such as Chernobyl, Exxon Valdez and Braer; a study which used a semiotic approach to reveal the meanings manufactured by the media; and studies of environmental risks that looked at the journalistic products – risk stories – rather than at the processes that affect story construction (Campbell 1999; Dunwoody & Griffin 1993; Dunwoody & Ryan 1987; Friedman et al. 1986). However, most research on environmental issues in Malaysia focuses more on scientific elements such as the degradation of the wetlands in Malaysia, haze problems, flash floods in Kuala Lumpur, massive landslides, uncontrollable logging and the abuse of the highlands (Singh 1982).

Meanwhile, there have been few studies on environmental-science related issues in New Zealand. In 1989, Bell conducted a study on the coverage of climate change which revealed that the media are a primary source of scientific information for the New Zealand public. However, most stories contain a similar number and type of inaccuracies as presented in the US and European research. Also, scientists confirm the most accurate source is the press release which is used in one-third of climate change stories (Bell 1989).

Another recent research determined that the public failed to understand even basic science coverage. Tanaka et al. (2000) found in a preliminary survey of 100 Christchurch residents that almost 93 percent of the respondents said that science was interesting but overall they were dissatisfied with the media coverage of science. Sessions's (2003) study on verification and balance of science news found that verification was uncommon in New Zealand, but both journalists and audiences valued a balanced and unbiased approach to science reporting.

The above arguments clearly show that there is a need to study how the environment is represented by media because: (i) the media is an important element in creating awareness of environmental issues amongst the public and, (ii) very few studies have been conducted on this topic in Malaysia or New Zealand. Further, among the many other studies conducted, so far I found none that examined the trends and patterns of environmental reporting as this study aims to achieve.

Therefore, it is hoped that this research will establish a platform for understanding on environmental news patterns and trends in the Malaysian and New Zealand press and will identify the factors which determine how environmental news is selected and presented.

Chapter 2

Theoretical Framework

This chapter discusses four theories: (i) agenda setting and news construction, (ii) objectivity and bias, (iii) social construction of reality and, (iv) news sources. These theories are selected because they give an in-depth examination of the agenda of journalists; how they frame the community in order to achieve their so-called objectivity in reporting the environment; and what forces shape the news reporting.

2.1 Agenda setting and news construction

Agenda setting theory helps us identify why it is important to study the media as a force in shaping public knowledge of the environment. This small section discusses how the environment draws on agenda setting and how these agendas are set.

News is a humanly constructed product, not just information which spontaneously appears in a random order (Hall 1970). Hall also states that:

Journalists and editors select from the mass of potential news items, the events which constitute 'news' for any day... News selection, thus, rests on inferred knowledge about the audience, inferred assumptions about society and a professional code or ideology (Hall 1970).

As a result, it is widely argued that the news the public receives is not a simple reflection of what they want or need or of what is happening in society, but is the result of complex processes. Public knowledge about the natural environment and public responses to environmental issues will be shaped by these processes. This selection process is often discussed as the agenda-setting power of the media.

The term “agenda-setting” was first introduced by McCombs and Shaw in 1972 to describe the way media affected what the public thought about (Berkowitz 1997; Willis 1991, p. 202). It is a process where the media select and set the agenda by telling the public ‘what is important’ for them (Weaver et al. 1981).

Halloran (1998) states that agenda setting influences the public at two stages. First, at the societal level whereby the media creates ‘climates of opinion’ and sets the agenda so that the amount of coverage given to certain issues in the media can affect the importance of an issue for the audience. For example, Mazur (1981) found that coverage of a scientific controversy increased public opposition to the technology even when the coverage was not negative. However, Atwater et al. (1985) contend that coverage of certain scientific issues is rather small so that it is difficult to achieve agenda setting.

The media are not all-powerful here. At the individual level, the media are not seen as a one-way force affecting public understanding, but rather the media’s messages interact with the experiences and biases of the individuals and also cultural values and social factors (Halloran 1998; Miller 1993). Different individuals will approach stories with varying frames and it will cause individuals to gather different meanings from stories or to respond differently.

Hallinan (1995) argues that the public agenda set by the media coverage is not necessarily what the public are concerned about, but may simply be the issues they are aware of. If an issue such as inflation has been discussed heavily in the media, then the public are likely to think of inflation when asked which issues are important.

At the same time as the media set public agendas, media owners are seeking to produce content that reflects the needs and desires of the audience. This is to maximize their profits. Newspapers also aim to increase readership by presenting readers with what sells. There is a powerful culture within management and newsroom staff of newspapers that is concerned primarily to increase readership and so to present readers with material that sells. Thus,

the news is unlikely to challenge readers but it is only to affirm the public's expectations and structured belief systems. In this case, journalists might assert some influential elements in their writing, but perceive it as a responsibility to increase circulation and to serve the public with what they want to read (Parenti 1978, p. 44).

Gans (1990) stresses that the media could succeed financially by reflecting and affirming the prevailing values inherent in society. He has developed some work by earlier theorists in his book *Deciding What's News* and termed as "enduring values" which define the characteristics of society which are reflected in the selection and perspective of media content. He also managed to highlight the coherence that exists between society and the press, and illustrates the role of the press as an agency which socializes the individual to accept society's structures as legitimate. Gans (1990) believes that the media propagate the conception of society. By referring to the UK and US values he says:

...moulded around the notion of the democratic system as the right system; reflecting a democratic and egalitarian system; altruistic capitalism; moderatism; individuality; and leadership (Gans 1990, pp. 41 – 52).

Earlier theorists, Galtung and Ruge (1965, p. 62), have argued that enduring values such as the "conventions of newsworthiness" by which media organizations evaluate the saleability of information or make a selection of information that will be transformed into news are based on the ability of a newspaper to return a profit. It was found in a content analysis which revealed that the news, when measured with reference to conventional subject matter categories, exhibits relatively stable and predictable patterns over time. Galtung and Ruge (1965) stated that the significance of events is culturally determined, and the news reported is a matter of cultural convention. Later theorists have claimed that the news is determined by variety of external factors such as institutionalized conventions in the newsgathering process, political, ideological and cultural requirements (McQuail 1993, p. 142).

Many scholars' arguments are based on enduring values (Gans 1990; Galtung & Ruge 1965) but it is less help in identifying why issues get on the media agenda, and in particular how high environmental issues are on the agenda. Downs (1972) theory of Issue Attention Cycle is helpful here, suggesting that certain issues would be at the forefront of the social agenda, maintain this level for a period of time and then slip down the hierarchy and fade away.

The cycle begins when, perhaps through a dramatic event, a piece of investigative journalism, or the revelations of a crusading individual, the general public is suddenly made aware of the existence and evils of particular problems which may well have been festering unnoticed for a considerable time (Lowe and Goyder 1983, p. 31).

Downs divides the cycle into five main stages. The first stage is pre-problem stage, whereby "a disagreeable social situation exists but it is unknown to the general public". It is at an expert level where specialists are aware of and disturbed by it. The second stage is "the alarmed discovery and euphoric enthusiasm level where due to some dramatic events", the public is made aware of the problem and is alarmed by it. At this stage they desire to have an instant solution to the problem. However, as Downs theorizes the cost of significant progress is often extremely high (stage three) and a gradual decline of intense public interest follows the other three reactions which Downs describes as: discouraged, threatened and bored. At the same time some other issues usually enter at stage two. These new stories would have put more powerful claim upon public attention. The final stage is the post-problem stage. The old issue would then move off the agenda and remain as an issue of lesser concern.

Downs applied this cycle to environmental issues which he found could stay in the news longer as compared to political news. He thought the possible reasons for this are because of the visibility of the environment; the fact that technology could combat environmental problems; and the costs involved could be high but need not necessarily be redeemed through taxation.

Although Lowe and Goyder (1983, p. 32) agree with Downs' model, they also suggest that the shift in attention is related to changes in social values too.

On the other hand, after testing the model on political issues, Hogwood (1992) argues there is no Issue Attention Cycle pertaining to environmental issues in Britain, but it would be seem reasonable to apply the five categories highlighted to environmental concerns.

For example, Campbell (1998, p. 12) applies this model to the Braer⁷ oil spill which received world wide coverage in January 1993. After extensive analysis of a local paper, it was noticed that the movement of the issues down the news agenda was fairly rapid. The story had been reported for only ten days after the incident before it had been dropped entirely from the newspaper. Hence, I expect the environment gets into the news typically for disaster stories and the story would fade quickly from the newspapers a few days later.

Why events are newsworthy is perceived differently by different theorists. Galtung and Ruge (1965), for example, identified organizational, genre related and cultural elements which they considered influence media organizations in their selection of news stories.

Masterton (1992, p. 11), condenses these categories into three main qualities which must be present before any piece of information can be considered news. These are interest, timeliness and clarity. For information to become news it must "hold interest for a substantial number of people...it must be new, or newly available...and it must be information which is clearly understandable to the recipients". This illustrates how the media propagate social values. Understanding which values they conform to and affirm will be important in understanding how the environment becomes news, and this is discussed below.

⁷ The Braer was an oil tanker which ran aground off Shetland, Scotland, in January 1993.

Masterton (1992) adds that the three elements are also dependent on the presence of six international news criteria. These are (i) the consequence in terms of the number of people affected by the information; (ii) the proximity of the story in terms of society, culture, religion, audience and geography; (iii) the presence of conflict; (iv) the human interest people have in others who would not make the news for any other reason; (v) novelty value; and (vi) the prominence of information because of who said or did it, rather than the action itself. The important point is that these are not values which are pure, but they are loaded in value by virtue of their relationship with the social context in which they function, a society whose conditions they affirm and reinforce.

The news agenda is also influenced by the newsroom structures and processes which create conventions that ensure the survival of the newspaper. This creates processes which are more influential and alluring to attract readers. Gans (1990, pp. 41 – 52) identified some of these conventions, which are mostly embedded in organizational constraints – the principal way in which the newsroom limits journalists is through the organizational systems and structure which organize the newsroom and define the role that journalists play, both individually and collectively.

First, in the process of defining topics and story selection, the community is divided into manageable spheres of interest and activity in order to deal with the large number of diverse events that a newspaper covers everyday. This results in a pattern of coverage which reflects how the newspaper has organized and orientated its coverage rather than how the events actually happen. This concept of the community frames is how a story is approached by a reporter and how it is selected and edited in the newsroom.

Second, what Gans (1990) calls it ‘a random eruption of events’ is reduced to a routine procedure. Thus, the press’s ability to deal effectively with random events that are incompatible with the divided community could be questioned. This is because events are not able to be grouped neatly or which “require an additional depth of analysis are reduced to routine treatment by the press”.

Third, the newspaper's resources are mostly allocated by publishers. Therefore, a newspaper's effectiveness and ability to act as a social commentator are dependent on the largess of the owner.

Fourth, the news sources are able to dominate the perspective and content of the news. It is easier for a reporter to be able to contact official sources, such as government officials, as they are easily identifiable and accessible; while alternative sources are less well known, and therefore less accessible.

Fifth, the use of literary forms and devices to manage the tremendous flow of events, for example the pyramid story structure in which information is ordered throughout the story in paragraphs ranging from the most to least important. This enables editors to consider as much information as they wish to be included in the story.

The above arguments suggest that the concept of agenda-setting can be applied to the news process, people and issues. If a particular issue or a person appears regularly in the media, it could indirectly suggest to the public that they are important. In Malaysia and New Zealand, the news media usually aim to be objective in reporting but the above arguments suggest that the media would not mirror public priorities as much as they influence them. Therefore, this provides a framework for this study that agenda setting is embedded in the news process; and that news sources and environmental topics that appear in the media frequently have important status conferred upon them by the media.

2.2 Objectivity and bias

The desired goal of journalism is often stated to be objectivity, the unprejudiced gathering and dissemination of news and information. In theory, objectivity should allow people to make their own decisions about the events without any influence from the views of journalists. This is nearly impossible as the news processes, as discussed above, have some control over the news production. Hence, this discussion can also be understood at the individual

journalist level as an argument about the bias or subjectivity of the production of news.

Objectivity is a method of acquiring knowledge by reasoning solely based on the facts of reality and in accordance with the laws of logic (Rand 1990, p. 4). Objectivism derives its name from its concept of knowledge and values as an “objective”. According to Rand (1990), “neither concepts nor values are intrinsic to external reality, nor are they merely subjective”. Rather, valid concepts and values are “determined by the nature of reality but to be discovered by man’s mind”.

Given the organizational pressures, selection processes and source strategies which contribute to news production, news can never be “objective” in the sense of being uninfluenced by the processes that makes it (Manning 2001, p. 68). Hence, it is more appropriate to regard “objectivity” and “impartiality” as labels that journalists use to refer to the sets of rules which guide their professional practice (Golding & Elliott 1979, p. 208). In other words, “objectivity” is not something that journalists can achieve in the sense of producing value-free and comprehensive accounts of “real” events; rather, the term, in this context, describes a set of practices that journalists can defend as objective.

This argument was first made by Gaye Tuchman in 1972 when she defined a ritual as “a routine procedure which has relatively little or only tangential relevance to the end sought” (1972, p. 661). She argues that journalistic rituals can never obtain objectivity, rather it just helps journalists to construct an account of reality that can be justified in the name of objectivity. Thus, “rituals” or a set of techniques are employed by journalists to “guard” them against competing pressures – they have to work quickly to meet deadlines and concurrently they must produce excellent reports.

Tuchman (1972) suggests that in order to discuss objectivity comprehensively, three important factors have to be taken into consideration. These are the (i) news procedures as formal attributes of news stories and newspapers, (ii)

judgments based on interorganisational relationships and, (ii) common sense used to assess news content (p. 678). Her study concludes that there is no clear relationship between the aim (objectivity) and the method (news process). She states that:

Objectivity refers to routine procedures which may be exemplified as formal attributes...and which protect the professional from mistakes and from his critics...the word objectivity is being used defensively as a strategic ritual (Tuchman 1972, p. 678).

Soloski (1989) makes a similar point to Tuchman's and adds that objectivity not only serves as a defense against anticipated external attacks but also helps news organizations to exercise "informal social control over" their own journalists. Similarly, Fiske (1987, p. 287) also argues that objectivity is impossible to achieve due to the fact that the news process itself is subjective and could place different meaning on the information causing its format to change and altering it so that it becomes, subjectively, an organized collection of facts.

This suggests some possible bias throughout the news gathering process. Bias is a term often associated with negative views of the news process because it implies a subversive role which the media plays to influence the audience ideologically. However, the bias which is implied in news reports is often unintentional and more often than not unavoidable (McQuail 1993, p. 185; Fiske 1987, p. 289). Rather, it is a consequence or symptom of the news process itself. However, information is not only biased due to the process but also indicates and reinforces the idea that news is an extremely structured product which is assembled under the pressure of competition from other journalists and advertisers (McQuail 1993, p. 184). Information also has to be selected and presented to please consumers and to attract attention, thus emphasizing form more than content. The study of journalism, itself, as a profession, has always been founded on the fact that "information was produced; selected, organized, structured and, therefore, biased" (Collins 1990, p. 20). Furthermore, according to McQuail (1993, p. 185) there is an

enormous volume of potentially relevant information, requiring selection more than collection, which has to be processed under the pressure of time. Therefore, it is not all about bias, but also a long and complicated news process which could influence the story selection. This results in a limited version of reality covered by news.

Therefore, bias exists in journalism and today's journalism is unable to present the facts in an unbiased manner because it is often embedded in the very practice of objective news reporting, into the media's information production and data retrieval techniques (McQuail 1993, p. 184; Koch 1991, p. 5). For instance, in dealing with news sources as Koch states:

For news to be “objective” it must treat all sources equally. To serve as an unbiased source of information, media outlets must be able consistently to describe events not as one or another specialist group wants them to be portrayed but rather in someway distanced from those partial, limited interpretations (Koch 1991, p. 5).

Litchenberg (1991, p. 230) however argues that most journalists use the same “balanced” sources because of their inability to escape the pressures of the production process which encourage routine dependence upon the usual, routine voices within political elites. But Tuchman (1972) thinks the “balance” that journalists offer as an implicit substitute for objectivity is important because it affords the access which news sources may seek to exploit in order to secure news media coverage. For example, journalists get some views from pressure groups to “balance” the claims of truth by official sources. However, not all sources are regarded as “authoritative” to be included in the news as journalists usually assume a hierarchy of credibility (Becker 1972) with sources close to government considered as more credible than the public.

The above argument is important to examine as reporting fair views from a wide range of sources is important in complex environmental stories. In 1987, Luke's study on the Chernobyl tragedy (cited from Campbell 1999, p. 37) describes Soviet coverage of Chernobyl as biased because the news

information was selected by the government which had a hidden political agenda.

While objectivity is impossible, the attempt to be objective has important effects for the role the news plays in social values:

[Objectivity] plays an important role in the ideology of news and the reading relations that news attempts to set up with its audiences. The impossibility of objectivity and the irrelevance of notions of bias (based as they are upon an assumption that non-bias is possible) should be clear, but should not blind us to the ideological role that the concept of 'objectivity' plays (Fiske 1987, p. 288).

Fiske also thinks that "the notion of objectivity is impossible but the fact remains that news is ideological". According to Hartley (1982) ideology is the belief systems perpetuated by the dominant social power groups, including the elites who form the government, thus the ideology is implicit in news discourse.

Implicit in this notion is the idea of the journalist/news relationship positioned between the two poles of "objectivity" (mediated) reality and the 'subjective' (experienced) reality. This relationship determines what meanings will finally be produced. It follows that both poles have an influence in the 'dialogic' production of meanings and that is relevant for ideological meanings as much as for any others (Hartley 1982, p. 142).

Therefore, the ideological meaning implicit in news text emerges as a mixture of the mediated and experienced concepts of reality. The journalists add meanings to the issue due to the nature of the news process. In attempting to be objective, Campbell (1999, p. 162) argues within the news process a journalist with very little knowledge on an environmental issue has a tendency to compress long complicated environmental information to fit into a small space within a short period time, and it has to be written in layman's terms to give readers a better understanding. This could lead to losing the meaning or creating a misleading story. In her study, Campbell (1999) found that the

environmental information on five different subjects - chemical pesticides, effect of air pollution on respiratory disease, a funicular railway through the Cairngorms, overfishing in the North Sea and oil pollution – was reduced to manageable segments, the meanings of which were radically simplified for audience consumption.

McNair (1994) believes that journalism is not and never can be a neutral, value free representation of reality (p. 31); also that the news and journalism professions are social constructions and that news is ideological and cannot, therefore, be value free as Fowler (1991), Fiske (1987) and, Hall (1970) argue. He also believes that news has to be about conflict which generates negativity because this is more newsworthy and newsworthiness is linked to economic and organizational considerations.

This suggests some important implications for our understanding of the mass reporting process such as newsroom culture, source selection and “objective” measures of reality applied by journalists.

2.3 The social construction of reality and environmental issues

This theory is discussed in order to understand the process of how journalists construct and how the public defines environmental issues. The discussion will first be based on different views of how reality is constructed, who conceptualizes the social construction and then we will consider Hannigan’s (2006) arguments of constructing environmental problems.

The term “social construction of reality” is associated with theorists Peter Berger and Thomas Luckmann’s 1967 book, *The Social Construction of Reality*. They argue that “all knowledge is derived from and maintained by social interactions, with the understanding that their respective perceptions of reality are related, and as they interact, their common knowledge of reality becomes reinforced” (Berger & Luckmann 1967). Thus, it can be said that reality is socially constructed.

Furthermore, central to the social construction of environmental issues is the idea that the issues would not rise and fall according to some “fixed, asocial, self-evident set of criteria. Rather, their progress varies in direct response to successful claims-making by a cast of social actors that includes scientists, industrialists, politicians, civil servants, journalists and environmental activists” (Hannigan 2006, p. 63).

It also needs to be noted that the social construction theory discusses how this “unconscious formation of reality” is a mechanism for helping humankind reach its own consensus and it must evolve over time with the changing attitudes and environments of the community. McCarthy (1996), for example, argues that mass communication, through social constructs, could affect the public on a broader level by helping to shape their worldwide relations and influencing their social and political destinies.

In considering the media as tool of mass communication, McNair (1994, p. 19) believes journalists as reporters of news are at the same time social actors, with a key role to play in shaping our perceptions of what news is and how to react to it. News uses cultural maps to help the audience understand “the unusual, unexpected and unpredicted events which form the basic content of what is newsworthy” (Hall 1994, p. 19) particularly for environmental issues as they are scientific, complex and unfamiliar to the public. The news also assumes that culture or society are ranked hierarchically in an order of importance as “some people, events, spheres are more important than others and the hierarchy is centralized both socially and regionally” (Hartley 1982, p. 82) as such for the discussion of news values above. Hartley (1982, p. 83) also adds that another category of knowledge which journalists take for granted is the idea of “consensual reality”. Consensus is the idea that society is united in its view of key issues, thus giving shape to ideas of community and national identity.

Many scholars make a link between these cultural-political maps and economic issues. The fiercer the competition between the media, the greater the desire to simplify the content in order to attract larger audiences (Cohen

1990) and the less desire to challenge that consensus as suggested by Hartley (1982, p. 83). For example, many of the subject specialists who were referred to by the press during the Braer incident (cited in Campbell 1999, p. 13) are of the opinion that the intellectual content of some environmental issues was lost due to the fact that journalists reduced the concepts to the lowest point of comprehensibility, although, this is almost unavoidable in practical journalism. In Campbell's (1999) study, the local newspaper journalists state that the job of a reporter is to "render officialese meaningful to the lay reader" (p. 21).

Hannigan (2006) and Hartley (1982) emphasize different aspects of reality construction. Hartley highlights the cultural forces which shape society's consensus in defining the environment; whereas Hannigan's argument is based on the process of social construction that would help the public to define environmental problems. It can be argued that Hartley's (1982) theory is less applicable for this study because of its rigid focus on fragmentation of society and assumption of unity of society in interpreting issues. On the other hand, Hannigan's holistic concept of constructing environmental problems, which includes factual claims, news sources influences, news process and journalists attitudes toward the issues, is used as a model of social constructionism for this thesis because it does not make those assumptions and so allows the operation of different social forces to be traced.

However, this is not to say that the thesis begins from the idea that the construction of the environment is an open process. Events are clearly portrayed in the news with less complexity than they are when they occur in real life. This reinforces Cohen's (1990) theory. Fiske (1987) explains how the reality factor works, by saying:

Realism does not just reproduce reality, it makes sense of it – the essence of realism is that it reproduces reality in such a form as to make it easily understandable. It does this by ensuring that all links and relationships between its elements are clear and logical, that the narrative follows the basic laws of cause and effect and that every element is there for the purpose of helping to

make sense: nothing is extraneous or accidental (Fiske 1987, p. 24).

On the other hand, MacGuen and Coombs (1981) suggest that there may be a case for supposing that individuals make decisions and judgments based on their own objective environments and not simply on the media's interpretations. This is because news is selected according to members of the public's own awareness and it is selected based on certain rules of newsworthiness. Here, Hannigan's (2006) theory is more satisfactory as it describes the social construction of reality in a holistic manner, the meaning of the environment is not assumed to be as restricted as Fiske's (1987) model proposes.

In general, the processes in the social construction of environmental problems follow a certain order of development as they progress from initial discovery to policy implementation. Hannigan (2006, p. 67) identifies three central tasks: assembling, presenting and contesting claims, that characterize the construction of environmental problems based on two prior models: Carolyn Wiener's (1981) three processes through which a public arena is built around a social problem, and William Solesbury's (1976) three tasks which are necessary for an environmental issue to originate, develop and grow powerful within the political system.

Wiener (1981) shows the collective meaning of social problems as "a continuing ricocheting interaction" among three processes: animating, legitimizing and demonstrating the problem. These are presented as overlapping rather than sequential processes; that is, they interact with one another rather than operate independently.

Solesbury (1976) notes the "continuing change in the agenda of environmental issues" that may be partly accounted for by changes in the state of the environment itself and partly through changing public views as to which issues are important and which are not. All environmental issues must pass three separate tests: commanding attention, claiming legitimacy and invoking

action and these tasks may be pursued simultaneously in no particular order (Cracknell 1993, p. 5), although it would presumably be difficult to invoke policy changes before the problem is recognized and legitimized.

The process of environmental construction by Hannigan (2006) is shown in Table 2.3.1 below. Much of the time, environmental issues are discussed in other terms, and only become environmental knowledge as such in specific ways (which Hannigan helps me unpick). This study will look at all stories concerning the environment, so it is able to see how often the environment is made an explicit topic of substantial knowledge and how often it is just a simple story about trees or the weather in order to see how often the process Hannigan describes does or does not happen. Besides, news sources of environmental information are an important element to examine because they are specialists in the field. Their influence on the news content also has been debated in much previous research. As Hannigan (2006) states, it is the people rather than social structures, therefore, who actually construct the environmental news and this is a new question to be explored in this study.

This study will be focusing on the second task that is called *Presenting* as the frame for this study. However, the whole process structure will also be looked into in order to compare Hannigan's table with the findings of this study, for example, on news sources, limitations of reporting and the knowledge of journalists of environmental news. This will be done by examining the table horizontally, for instance to study the limitations on journalists in reporting environmental problems, the fifth row is used as a template and compared with interview findings to get a deeper interpretation of Hannigan's (2006) proposed tasks as stated below.

Table 2.3.1: Key tasks in constructing environmental problems

	Task		
	<i>Assembling</i>	<i>Presenting</i>	<i>Contesting</i>
Primary activities	discovering the problem	commanding attention	
	determining the basis of the claim	legitimizing the claim	
	establishing parameters		

Central forum	science	mass media	politics
Predominant layer of proof	scientific	moral	legal
Predominant scientific role(s)	trend spotter	communicator	applied policy analyst
Potential pitfalls	lack of clarity	low visibility	co-optation
	ambiguity	declining novelty	issue fatigue
	conflicting scientific evidence		countervailing claims
Strategies for success	creating an experiential focus	linkage to popular issues and causes	networking
	streamlining knowledge claims	use of dramatic verbal and visual imagery	developing technical expertise
	scientific division of labour	rhetorical tactics and strategies	opening policy windows

(Hannigan 2006)

The three keys will now be reviewed individually.

Assembling

Among activities engaged at this initial stage are naming the problem, distinguishing it from other problems, determining the scientific, technical, moral or legal basis of the claim and gauging who is responsible for taking ameliorative action. Hannigan (2006, p. 67) claims that environmental problems frequently originate in the realm of science because generally ordinary people have no expertise or resources to find problems, unless, of course, with some problems they could draw a causal link such as with dump sites seeping of toxic wastes and an increase in health problems in the neighbourhood. Further, this is a difficult stage with some notable exceptions, research scientists are normally handicapped by a combination of scholarly caution, excessive use of technical jargon and inexperience in handling the media.

Presenting

In presenting an environmental claim, claim makers have a dual mandate: they need both to command attention and to legitimate their claim (Solesbury 1976) and these are two quite separate tasks.

In order to command attention, a potential environmental problem must be seen to be novel, important and understandable – the same values which

characterize news selection in general (Gans 1990). One way of doing that is by “evocative verbal and visual imagery” (Hannigan 2006, p. 72). For example, the ozone layer became much more saleable as an environmental problem when depicted as an expanding “hole”.

Environmental issues may also be forced into prominence when exemplified by particular incidents or events, for example, the nuclear accidents at Chernobyl and the wreck of the oil tanker Exxon Valdez (Campbell 1999, p. 32). Dramatic events like these are important because they assist “political identification of the nature of an issue, the situation out of which it arises, the causes and effects, the identity of the activities and the groups in the community which are involved with the issue” (Solesbury 1976, pp. 384-5). This negative aspect of news is considered “newsworthiness” by newspapers to return a profit (Galtung & Ruge 1965, p. 62).

Besides the above, an event could provoke an environmental issue when it: (i) stimulates media attention; (ii) involves some arm of government; (iii) demands governmental decision; (iv) is not written off by the public as a freak, one-time occurrence; and (v) relates to the personal interests of a significant number of citizens (Enloe 1975, p. 21). These criteria are partly a function of the incident itself but also depend on the successful exploitation of the event by environmental promoters.

Emergent environmental problems should also be legitimized. However, commanding attention is not sufficient to get a new issue on the agenda for public debate (Solesbury 1976, p. 387). One way of doing this is through the use of rhetorical tactics and strategies. Environmental rhetoric has become increasingly polarized. For example, green radicals such as ecofeminists, deep ecologists and other purveyors have tended to adopt a “rhetoric of rectitude” which justifies consideration of environmental problems on strictly moral grounds (Dryzek 2005). By contrast, environmental pragmatists, who advocate other versions of the “sustainable development” paradigm, tend towards rhetoric of rationality. However, Yearley (1992, p. 15) argues that the construction of the environment is derived more from scientific findings than

from moral debates. Therefore, it can be argued that Yearley's (1992) theory is more practical in getting public attention because people prefer to believe in factual evidence and issues that could affect their lives.

Political-economic factors are not considered as limiting forces affecting the *Presenting* task by Hannigan (2006) as Hartley (1982) and Cohen (1990) argued earlier. Rather, Hannigan (2006) relies on internal factors such as the frequency of events, whereby news is not news anymore if it is passed the deadline. These factors are embedded in the reporting process. I partly agree that political-economic factors could have some influences on the news process in general – such as reporting based on political ideology and to increase circulation – but to what extent it influences environmental news will be explored in this study.

Contesting

Although environmental claims manage to attract public attention, it would not automatically ensure that action will be taken. Solesbury (1976, p. 39) has noted a number of factors that can contribute to an issue being lost at the point of decision or action. For instance, an environmental claim could be postponed or altogether abandoned if there are major external constraints such as a national economic crisis. Environmental claims also require an ongoing contestation by claims-makers seeking to effect legal and political change. At the same time, environmental claim makers also must skillfully guide their proposals through conflicting political interest groups, which could sink their proposals.

Based on the above arguments, Hannigan (2006, p. 78) concludes that there are six factors for the successful construction of an environmental issue. First, an environmental problem must have scientific authority for and validation of its claims. Second, it is important to have one or more scientific “popularisers” who can transform the difficult aspects of scientific findings into “proactive environmental claims”. Third, a prospective environmental problem must receive media attention in which the relevant claim is “framed” as both real and important. Fourth, a potential environmental problem must be

dramatized in highly symbolic and visual terms. Fifth, there must be visible economic incentives for taking action on an environmental problem. And finally, there should be an institutional sponsor who can ensure both legitimacy and continuity of the environmental issues. Hannigan's (2006) theory suggests that the role of journalism is just a part of a larger process. Thus, this thesis will study that small part of Hannigan's (2006) theory of environmental issues in the public arena.

In conclusion, environmental news, and disasters in particular, is generally framed pessimistically and coverage is intense, thereby, reinforcing the negative images which surround such issues. Perhaps the audience receives a picture of reality but whether this influences them negatively or misinforms them, is another matter and conclusions should not be drawn without evidence from an effects study. The research of MacGuen and Coombs (1981, p. 88) was not conclusive on this. They believe the public clearly appears much more sensitive to symbolic representations of public life than to any measure of the world they were actually experiencing. However, the media's accounts of the environment might not affect people in a negative way. I also argue on Hartley's (1982) point concerning dominant consensus shaping by media as it is in fact embedded in the news process; which also includes other factors, for example, news sources.

2.4 News sources

This section discusses the framework of news source selection in order to understand their role in the news process. News sources are one of the important elements in the construction of the environment as journalists are not able to experience most environmental events first hand. The complexity of environment information which mostly originates from scientific disciplines, and sometimes the seriousness of the issues require journalists to search for reliable sources to be able to produce trustworthy news for the public.

The press forms a symbiotic relationship with sources which allows organizations to define the facts of the world. Erickson et al. (1989, p. 15) argues that this interaction between organizational sources and the press leads to a sharing of the core values in the dominant culture as news orientates towards society's governing political and social structures. This relationship works when journalists and sources assume, rightly or wrongly, that their values are universal and dominant. Gans (1990, p. 185) states that journalists' facts remain facts as long as the unconscious value and reality judgments that go into them are not questioned by trusted critics, or when they are validated by "common sense".

The basis to enable journalists to detect news events is based on "commonsensical understanding" that society is bureaucratically structured. This understanding provides journalists with a "map of relevant knowers" for newsworthy topics (Fishman 1980, p. 51). For example, a journalist who covers a massive landslide would normally know where to find his sources based on his common sense, or as Fishman calls it as, his "bureaucratic consciousness".

Through bureaucratic consciousness, journalists select sources of information according to a "hierarchy of credibility" with the assumption that sources in a higher ranked group know best due to their "knowledge of truth" (Becker 1967). In other words, the higher ranked group is believed to have more knowledge and authority thus their words could legitimize the news, as compared to the lower group whose information could be partial and distorted. Journalists accept the notion as a factual because, according to Fishman (1980, p. 96), "journalists participate in upholding a normative order of authorized knowers in society [and] it is also a position of convenience". This type of source is always available, thus it is the easiest way to reach sources and consequently could help journalists to make their stories more credible. As Hall et al. (1978) argue, the media prefer to quote sources with accreditation such as those who have advantage of their "institutional power, representative standing, or claims to expert knowledge" (p. 258). However, Schlesinger and Tumber (1994, p. 260) contend that if political actors are dominant, their

massive investments in political public relations and marketing in order to establish themselves as authoritative sources in the media suggest that conceptualizing news sources is not as simple as presented by Fishman (1980) and Hall (1978). Both scholars are not wrong, rather it needs further explanation as to which sources will create the story. Thus, there is a need to conduct empirical research to determine who the actual source is.

Much research identifies some similar criteria for source credibility. The concept of credibility of journalists also reflects that news statements are almost always dependent upon objective and authoritative statements from legitimate institutional sources. Hall et al. (1978) states:

Such institutional representatives [M.P.s for political topics, employers and trade-union leaders] are “accredited” because of their institutional power and position, but also because of their “representative” status: either they represent “the people” or organized interest groups (Hall et al. 1978).

It indicates that the routine structures of news production are designed to represent the “opinions of the powerful”. This process also familiarizes the media with the definitions of social reality which their accredited sources provide.

Erickson et al. (1989) perceives the news as a presentation of authority and comments that in a contemporary knowledge society, news represents who are the authorized knowers and what their authoritative versions of reality are. News from authoritative sources is accepted as the “truth” of the matter without further investigation, as it reflecting an assumption that they serve the public interest and that their organization is accountable. These types of sources who have a high status in society are called the “primary definers” by Hall et al. (1978). He argues that their selection is “crucial” to the maintenance of power because they can eliminate other voices.

This structured relationship allows the primary definers to be dominant to set the initial definition of news which, Hall et al. (1978, p. 58) stresses, “are

forced to insert themselves into its definition of what is at issue” and this initial framework is extremely difficult to alter. Thus Hall argues that the media plays an important ideological role confirming the power of the “primary definers”.

Allan (2004, p. 65 - 66) contends that Hall et al. (1978) overemphasizes the news media’s ability to form public debate which is dependent on the willingness of the public in allowing some degree of influence from such powerful sources. Manning (2001, p. 15) illustrates three reasons for this situation to occur: (i) the powerful institutions provide newsworthy material; (ii) these institutions enjoy the “status of being a representative” either of powerful groups or of strategically important sections of society; and (iii) some sources enjoy credibility not as representatives but as disinterested or objective experts, contributing expertise and authoritative knowledge.

Meanwhile, Schlesinger and Tumber (1994) agree with the general notion that media supports the views of authoritative sources, but still insist there are more opportunities for non-official news sources and politically marginal groups to define the concept of primary definition. Hall et al. (1978) also underestimated the “potential openness” of distinct media sites and his work suffers from a number of serious theoretical flaws (Schlesinger 1990, p. 68). Not everyone agrees with the theories and models of Hall et al. (1978) and Fishman (1980), hence different perspectives will be explored further as below. Schlesinger and Tumber (1994) illustrate six specific points of criticism as below:

First, it is not always clear who is the primary definer because the primary definition suggested by Hall et al. (1978) fails to recognize possible disagreement between official sources struggling to influence the production of a news account. The cohesiveness of primary defining institutions should not be overestimated.

Second, some official sources would be willing to pass on information but want them to be unknown to people. They normally are presented as “for

background only” comments, such as: “according to a well-placed government source”, “sources close to the Prime Minister say” and so forth. However, this attribute is not sufficiently recognized by Hall et al. (1978).

Third, it is important to recognize competition among the official sources to over-access the “discursive field of debate” through different media strategies. An accredited source could be discredited by the political vulnerability resulting in him or her being unable to control the direction of public and media debate. Thus, it suggests that primary definition has to be won and also be “sustained interpretatively and evaluative through a series of battles” (Deacon & Golding 1994, p. 202).

Fourth, the structure of access changes over time as new forces and their representatives emerge. Hansen’s (1993, p. 151) investigation of the strategies employed by environmental groups stresses that they only managed to get media coverage for a short period of time and in relation to specific issues. They are also unable to stay long in the news and to maintain a position as an “established”, authoritative and legitimate actor in the continuous process of claims-making and policy-making on environmental matters.

Fifth, Hall et al.’s (1978) approach tends to “overstate the passivity of the media as recipients of information from news sources: the flow of definitions is seen as moving uniformly from the centers of power to the media”. Thus, Schlesinger and Tumber (1994) point out that there are variations between news media which need to be addressed, both in terms of the respective medium (such as between television and the press) and at the level of rival news outlets (such as different newspapers).

Sixth, the process of negotiation between power-holders and their opponents needs to be brought to the fore by granting equal priority to the perspectives of the sources themselves as they work to generate ‘counter-definitions’.

Gans (1990, p. 128) comments on the way reporters and sources work to elevate an individual representative by saying:

What is news seems to depend on who the sources of the news are, which in turn seems to depend on how reporters gather the news (Gans 1990, p. 128).

Representatives from the established structure are tailored to fulfill the prerequisites of what the press need in a source for public expectations. These are requirements that alternative sources struggle to meet.

In contrast, Schlesinger and Tumber (1994) believe that there is still the possibility to contest definitions offered by the powerful and to use power in different directions. In fact, some marginal groups have strategies to gain access through an exchange of relationship or by negotiation with journalists. Therefore, it is important to analyze methods used by sources to get into the media.

For instance, marginal sources have to produce precise messages and make themselves known to the media in order to get their voices into the media (Schlesinger & Tumber 1994). The success of getting the message out is directly tied to its capacity to reutilize its own activities, especially with respect to preparing copy-ready informational materials with an eye to the needs of the time pressured journalist. Bell's (1989) study on principal sources drawn upon by newspaper journalists in New Zealand reveals marginal stories which are already written and available maybe selected in preference to a much more newsworthy story which has to be researched and written from the ground up such as environmental information.

In particular, expert-sources are commonly used by journalists to verify and provide facts. Therefore, expert-sources may not appear in every story but they are an integral part of a journalist's working life, frequently providing background information (Levi 2001, p. 12; Conrad 1999, p. 291) and it can said that expert-sources are used, as Tuchman (1972) claims, to defend the objectivity of the reports produced by the journalists.

A normative theory of expertise argues expertise is “central to our notion how our society works” (Collins & Evans, 2004). Experts are divided into three categories: contributory, interactional and none. Contributory experts are able to contribute to the core set of knowledge in a specialism. This group also is acquired through linguistic engagement with contributory experts. That these two categories believe expertise to be real leads to the last category, which is having no expertise. In Collins and Evan’s (2004) definition either you have expertise or you do not. There is no lay expertise.

This theory proposes that experience is central to expertise and that without experience one is not an expert. But experience would not be a sufficient criterion of expertise or anyone could be an expert in anything. For example, frequent use of government officials for environmental news raises questions if they are the real experts for the issue, which this thesis aims to explore. This is a key point, Boyce (2006, p. 5) stresses, when discussing expertise and journalism – the idea that experience is mistaken for expertise is common in journalism.

This phenomenon could be common as journalists are not well-versed in environmental issues and newsroom pressure could force them to get the most available sources for comment. The function of journalism is limited to the mere transfer of information from science to the media for the education and enlightenment of readers. Thus, it is fair to say that environmental stories need to be written in an investigative manner in order for journalists to achieve their objective to be accurate in their reporting.

In order to help conceptualize news sources in environmental news, three Muckraking⁸ models are given below because they provide a template for thinking through the role of sources alongside the public and investigative journalists.

⁸ President Roosevelt coined ‘muckrake’ on March 17, 1906 to describe the investigative journalists in the America’s industrial revolution era whose writing inflamed the masses. Presently, muckraking also known as investigative reporting, adversarial journalism, advocacy reporting, public service journalism, and expose reporting which has evolved over the years in style and technique.

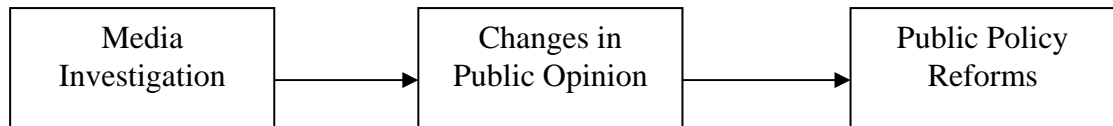


Figure 2.4.1: Muckraking Model 1: Catalyst model

The first model shows a linear paradigm which acts as a catalyst, stimulating changes in public opinion and later public policy reforms. This model is ideal for a watchdog media (Protess et al. 1991, p. 15) and it demands ‘the professional values of organizational sovereignty and social responsibility [of the news media]. In this paradigm, journalists remain independent of the governing process; while still influencing it for the public good’ (Protess et al. 1991, p. 15).

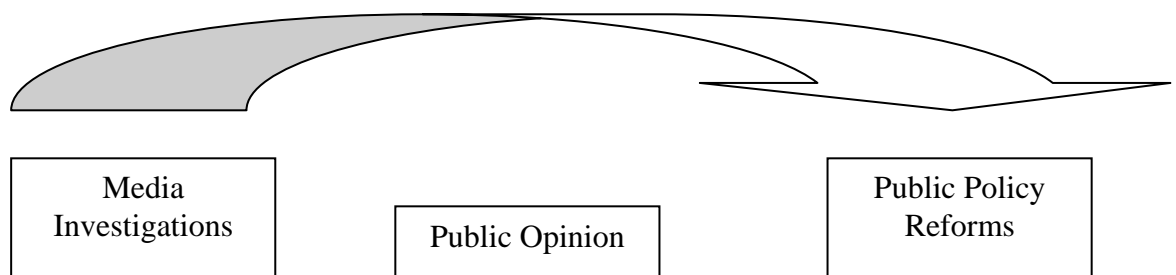


Figure 2.4.2: Muckraking Model 2: Dummy Model

Contrary to Catalyst Model, Protess et al.’s (1991, p. 15) study of local investigative reporting in Chicago during the 1980s, revealed that public policy reforms often occurred anyway, “regardless of the public’s reaction to the investigative reporting”. He speculated that “reform was created not by an aroused citizenry, but by media elites in collaboration with policy-making elites even before any stories were made public”.

In this linear model, the real actors are the media and policy makers and public opinion is essentially bypassed on the road to reform. The model also shows that the media speaks for a public that acts like a passive dummy. Contrary to the earlier Catalyst Model, in the Dummy Model investigative reporting “would not stimulate public opinion, it stimulates it”. Here, the investigative media originates the message and sets the agenda.

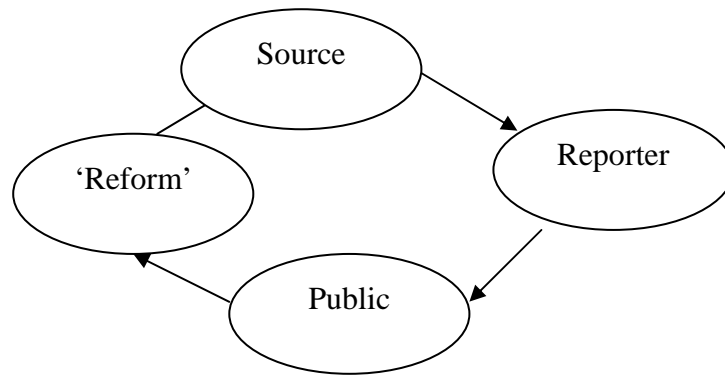


Figure 2.4.3: Muckraking Model 3: Ventriloquist Model

In many news stories – for investigative as well as beat reporters – the agenda is set not by the communicator but by the ‘news shaper’ or other sources who provide the journalist with information in the first place (Manheim 1998; Soley 1992).

In this model, the process is initiated by the source, not the reporter. The source is the real catalyst here for change. Equally important, the source may play a pivotal role both at the very beginning of the process – by planting the story – and also at the very end of the process, when ‘reform’ or other actions are taken. The source may also well have leaked the story in the first place as a way to manipulate events, to achieve their own intentions. Unlike the Catalyst and Dummy models, which are strictly linear, this Ventriloquist Model involves a loop, in which the source uses the media to promote a particular agenda.

Nevertheless, only sources with frequent contact with reporters are able to initiate the process. Ryan’s (1982) study on the opinions of newspaper science writers with sources for science news reveals that it is important to have social interaction between the two groups in order to achieve, as Tuchman (1972) claims, a balance of reality for journalists and news sources.

Based on these three typologies, Feldstein (2007) concludes that whatever a source’s specific motives which often involve a healthy dose of self-interest, the source, not the investigative reporter, is often the real catalyst who sets the

agenda. Often the journalist is merely the conduit, merely an interchangeable vessel selected as the vehicle for furthering the informant's objectives. In other words, although investigative reporters are among journalism's most independent actors, they are often still dependent on establishment sources and vulnerable to manipulation by them.

This may be true in the relationship among journalists and government officials (Gans 2003; Paletz & Entman 1981, p. 134; Sigal 1973, p. 54), but it can be also argued that the same scenario could occur among journalists and scientists or public relations officers as their interactions are believed to have mutual influences and dependencies on both sides (Bentele et al., 1997). Hence, the above discussion on the investigative journalism framework will help to observe how environmental news is constructed and who dominates the news.

All the above discussions on agenda-setting, news values, objectivity and construction of environmental news lead to my concern of whether or not the public receives sufficient environmental information. Environmental news is not simply reflecting what happens in the environment but needs to be understood in terms of the media's complex relationship with the society in which it operates. The media contributes to public knowledge on a variety of issues by giving strong encouragement to the public on what to think about. The complexity of environmental information has led journalists to rely heavily on sources in constructing environmental problems for their coverage. Hence, there is a need to examine how the environmental news is represented and who is the real source of information as limited research has been conducted in this area in both selected countries.

Chapter 3

Literature Review

3.1 The definition of environmental (news)

This section discusses the building of different interpretations of the environment by a few groups of people in order to help define the closest possible meaning that could be used to guide the reporting of environmental news. This discussion is important as the public's perception of what constitutes the environment plays a crucial role in how they recognize and respond to environmental problems (Coyle et al. 2003, p. 53); whereas, journalists often take for granted their own perception that society is united (Hartley 1982) and share the same perception when viewing certain issues.

Many experts and researchers define the environment based on their own fields of expertise and interpretation. This is because one definition would not necessarily fit all fields of study. There is no absolute consensus as to what distinguishes and characterizes the correct definition of the environment. It has always been debated.

MacNaghten and Urry (1998) suggest that these experts and researchers are roughly divided into two groups: (i) social scientists and; (ii) natural scientists. The social scientists are dependent on the natural scientists. In the environmental context, they perceive the role of the social scientist as identifying social causes, impacts and responses to environmental problems. Nevertheless, these problems were first identified and brought to attention by the natural scientists.

The environment has traditionally been defined by agricultural researchers, who are also seen as natural scientists. However, in the last few years there has been development of alternative thinking and research on the environment can now be found within disciplines such as anthropology, archaeology, cultural history, politics, literary studies, the analyses of modernity and post

modernity, sociology and so on. This perhaps has begun the development of what MacNaghten and Urry (1998) call “a more socio-culturally embedded analysis of nature”.

According to MacNaghten and Urry (1998), there are currently three doctrines used in recent thinking about nature and the environment. First, the environment is seen as a “real entity” in what they term as “environmental realism”. It is separated from social practices and human experience. Hence, the concept of nature can be “scientifically researchable” by modern rational science. The second doctrine is “environmental idealism” and it was partly developed as a critique of the first. It explains that the way to analyze nature and the environment is through identifying, critiquing and realizing various values that relate to the character, sense and quality of nature. And the last doctrine is termed “environmental instrumentalism” which specifically concerns the responses of human beings to nature and the environment; justifying the appropriate human motivation to have environmentally sustainable practices which result in environmental “goods” and “bads”.

However, MacNaghten and Urry (1998) argue the above doctrines eliminate and misrepresent certain aspects such as contemporary environmental change and human engagement. They believe there is only “a diversity of contested natures, not singular nature” (p. 78). Each nature is comprised of so many social-cultural processes. Hence, such natures are not likely to be separated. In fact, the responses to and engagement with nature are highly diverse and embedded in daily life. For the purpose of this thesis this suggests that the environment is not only complex, but also interrelated to other elements. It means the definition of the environment should be in a broad sense of environmental discourse. The above very brief history of the term “nature” helps MacNaghten and Urry (1998) conclude that there are only natures that are historically, geographically and socially constituted.

In retrospect, the early history of interpretations of nature separated its meaning from human development. It is believed that pre-Socratic Greek philosophers invented the first singular and abstracted nature with the idea that

“the great variety of phenomena which surround us could all be impounded under a name and talked about as a single object” (Lewis 1964). In addition, William (1972) also believe that “nature has to be thought as separate from man, before any question of intervention of command such industrialization and method or ethics, such as pollution, can arise. Still sustaining her separation, later, nature was increasingly taken to exist on the margins of modern industrial society”. Nature was where the industry was not. The idea of separation of nature from man, however, slowly changed after it was seen as not to cover everything. Gradually the influence of humans and God came on the scene. That is when nature was commonly portrayed as God’s creation and as reflecting a divine sense of belonging.

Szersynski (1993) elaborates two distinctive ways of how nature is conceptualized. First, a notion of nature as threatened. For instance, endangered species, global warming and the degradation of natural resources for future generations (Benton 1993). Also there is the notion of nature as a “healthy body” under threat from pollution. The second, nature is perceived as an “expressive realm of purity and moral power”, to be enjoyed or worshipped in a number of alternative forms such as beauty or the sublime and may be seen as having holy souls (Lovelock 1988). Rogers (1994) in his study on nature and the crisis of modernity, defines nature as:

Nature is not an ecosystem, it does not have goals (“survival of the fittest”), nor can it be said to be driven by any one thing (like a selfish gene). Nature is local, manifold, participatory, and cyclical. In other words, a community (Rogers 1994, p. 16).

His analysis rests on the assumption that nature is a social place and argues that nature is losing its complexity and disappearing from human society because human society is becoming more homogenized by economic considerations. In other words, the more destructive aspects of the expansion of capital and markets have caused positive development in nature to be overlooked over the positive development in modernity.

Barnes and Duncan (1992), however, believe the social and cultural sciences can help to illuminate the socially varied ways in which an environment can be seen, interpreted and evaluated. The reading and production of “nature”, as they prefer to use the term, is something that is learnt. Besides, it is a cultural process and varies greatly between different societies, periods and social groupings within any society. To distinguish the two commonly used terms – environment and nature – there follows below a few definitions cited from dictionaries which have potential value to this research.

Nature is defined as the phenomena of the physical world collectively, including plants, animals, and the landscape, as opposed to humans or human creations (*The Oxford Dictionary of English*, 2003 and *The New Oxford American Dictionary*, 2005). In addition, Ruse (1995) divides nature into three various meanings. First, nature as the universe and its contents; second, the living world (past and present) as opposed to the non-living; and third, that which encompasses everything, especially the organic world, set off against humans and the consequences of their labours. The term nature, then, takes attention away from human impact.

The above definitions see nature to have a bigger perspective as a universe; whereas the environment is that which surrounds human beings. It seems to exclude humans as part of the “environment” but includes the elements that might affect our lives. Based on the above arguments, the term “nature” is not quite applicable to this research as much as the term “environment” as stated as below.

A Dictionary of Psychology (2001) cites the environment as “the external surroundings within which an organism lives or any external factors that affect the organism’s development or behaviour, as distinct from intrinsic genetic factors...” In contrast, *A Dictionary of Geography* (2004) simply defines the environment as “the surroundings”. However, there are many different usages of the term “environment” in Geography such as the natural environment, phenomenal environment, subjective environment, objective environment, built environment and social environment. *A Dictionary of Sociology* (1998)

identifies the environment as “...the (delimited) social context in which the individual (or any living organism) is located, and the emphasis is on issues of adaptation and adjustment to this environment...” The above definitions suggest that the environment is anything what surrounds human beings.

The different ideas of defining the environment as stated by experts, media people and the emergence of a new wave of thinking from various disciplines may lead to confusion and disagreement among environmental experts and researchers. Thus, in this study I have applied Deacon’s (1999, p. 123) approach to distinguish a suitable definition for research by adopting a keyword strategy, that is the environment, as contested above and by identifying certain criteria that could fit into the element that is to be studied.

In some cases, researchers use a few phrases because the nature of the environment is complex and inter-connected with other elements, therefore, it is difficult to interpret its meaning by one single definition. For example, Campbell (1999) in her study of the construction of environmental news in Scotland uses two terms – environmental and science news – as in her research as they cannot be separated. Sessions’s (2003) research into verification and balance of science news in the New Zealand media also included environmental news as part of her sample to examine. Whereas, some books prefer to use “nature” rather than the “environment”, especially in cultural studies (see Young 1999; Rogers 1994; Leff 1995). There is a lack of clarity between the two terms – “environment” and “science” – which can also be seen in the field of journalism. For instance, many environmental journalists find it is hard to either “identify” themselves as environmental or science journalists as the two disciplines are closely inter-related (Dunwoody 1996).

Further, in all the historical, scientific and geographical determinations by which nature is culturally constructed one must not forget to include the definitions constructed by religions and other teachings. This is because many contemporary thinkers and scientists have stated that religion has an important role to play in overcoming environmental problems. This is specifically

relevant to this cross-cultural study. Below are some views taken from the major religions and teachings worldwide.

In the Islamic view, the environment is seen as an inseparable relation to God and humanity (www.islamanswers.net/crossroads/universe.htm). Ozdemir (1997), emphasizes that the environment consists of all the natural surroundings within which humans and all living creatures live. According to Islam, everything in the universe is created by God and everything in nature is a sign of God's existence. Thus, our environment is formed by our houses, gardens, the air we breathe, the water we drink, the town in which we live, and the people we live with, also the seas, lakes, rivers, roads, mountains, forests and animals. Humans are not the owners of nature and the world. However, we are given a trust by God to take care of nature. In the Qur'an, the holy book of Muslims, the word nature or earth is mentioned 485 times and is portrayed as being offered for man's convenience. All these verses specifically emphasize the importance of cleanliness, the preservation of trees, woodlands and green areas, the protection of animals and earth resources. Thus, the religion of Islam attaches the greatest of importance to the conservation of the environment as a whole. The conservation of the environment is therefore not only a human obligation but also a religious obligation to Muslims.

Hinduism, not a religion, but a way of life (<http://www.hinduism.about.com>) believes that all things and beings in the world are various manifestations of the Ultimate Reality (*Brahman*) and human beings cannot separate themselves from nature (Pandit 2001). There are numerous direct and indirect messages contained in the *Veda* book such as the earth is addressed as Mother Earth and personified as the goddess *Bhumi*, or *Prithvi* (Rao 1995). Perhaps this is why Hinduism believes environmental issues require a spiritual response.

Similar to Hinduism, Buddhism also is a way of life, not a religion. It is the theory of Karma and rebirth, the law of cause and effect (Yeshe 1996). According to McRae (2000), Buddhism does not have the kind of stories that religions generally have and is not concerned with how the world began.

Buddhism is concerned about current things and the responsibility is to live a good life now. The core policies to respect the environment and care for all creatures were first formulated by the Tibetan government in the 7th century. In the 17th century, the fifth Dalai Lama issued the *Rilung Tsagtsig*, which consisted of regulations to protect animal life and the environment (Yeshe 1996). Buddhism also believes that demi-gods and hungry ghosts are present in the human realm. Thus, the environmental concept not only consists of humans and animals but also demi-gods and hungry ghosts (<http://www.fwbo.org/articles/buddhism&environment.htm>). Because of this view, Buddhism prohibits the exploitation of natural resources to avoid disruption to the “unseen creatures” who are believed to dwell somewhere on earth. In short, Buddhism’s crucial practice is to live in harmony with nature.

Conversely, the Bible has very little to say about the environment. Based on the only passage mentioning the environment (Genesis 1:28), Christians and Jews see themselves as stewards of the world which God created. They also believe that it is their responsibility to care for it for future generations. Some recent Christian thoughts on the environment emerged after an article written by Lynn White (1967) entitled, *The Historical Roots of our Ecologic Crisis*, which argued that the Bible had fostered the exploitation of nature. For White, Christianity accepted this biblical view of creation, fostering the attitude that human beings transcend nature and may exploit it. She argues that this attitude has shaped the development of modern Western science and technology, which have posed threats to the environment. This view by White has prompted scholars to analyze carefully the biblical view of nature. Although interpretations of particular passages may vary, they indicate that the Bible affirms the goodness and intrinsic value of all living things; it points out commonalities between human beings and other living things; and it contains the mandate that we treat the natural world with care and respect. One recent interpretation (Limburg 1991) discusses Genesis 1:28’s language of “to have dominion” or “to rule”. He concludes that the passage does not advocate exploitation of nature but rather responsible care of it. As the Roman Catholic Church is quoted as saying (1988) “...the earth and all life on it is a gift from God. It is for us to share, develop, enjoy and celebrate as well as consume.

Not to dominate and exploit. It is our responsibility to create a balanced policy between consumption and conservation for future generations”.

Basically, the significant similarities of the religions views of the environment as mentioned above are the relationship between humans and their surroundings and our responsibilities to sustain the environment for its survival. Both Islam and Christianity have close similarity as they view humans as stewards of the environment – God’s creation. As a whole, these views contradict the early interpretation made by the pre-Socratic Greek philosophers who separated the meaning of nature from the human. As some of the above are all ancient religions and teachings, it is not known if either the Greek definition or the religions interpretation emerged first. It can be argued that it is not clear that religions determine, as White sought to argue, cultural constructions of nature and the environment. But there are clearly differences which are likely to emerge between cultures grounded in different religious traditions, though it is not the straightforward effects that should be taken into consideration in conducting this cross-cultural study.

Another view by Barnes and Duncan (1992) suggests that it is necessary to analyze and understand complex social processes first because the processes raise certain issues being taken collectively as “environmental”. The researchers also argue that environmental issues progressively come to light via the extension of scientific understanding of the state of the environment. For them, the most important thing is to identify the social and cultural context out of which environmental understanding is sensed and articulated. I agree with this argument as the definition should be extended beyond environmental issues; which is applied to the environmental definition for this study as discussed in Chapter 1.

Similarly, Rogers (1994) recommends that environmental issues can be better understood beyond economic parameters; which leads to the modern capitalist view that nature is a resource in terms of exploitation of the environment for the purpose of modernization. It is a defining aspect of modernity to treat ideas and values as matters of utmost importance. Within that importance

however, the immanence of nature has lost its significance. Whilst, in capitalism, the structures and processes of capital and markets have become so dominant that humans only know themselves according to this social context. According to Rogers (1994), “capital is an abstracting and extracting process which only runs the gauntlet of materiality so that it can return as more abstraction”. This process is at the heart of modern culture and is also at the heart of environmental problems (p. 15). This is a particularly important argument as Malaysia and New Zealand are both modernizing and are being dominated by these modern instrumental notions of the environment. The study of religion and other cultural forces is important to this cross-cultural study, but a big factor in the definition of the environment that carries weight in society is the economic factor. Hence, Roger’s (1994) argument raises a question for this study as to whether Malaysia and New Zealand share this economic determinant and whether journalism works within, or really extends beyond, economic parameters.

Emphasizing environmental news, Frome (1998) also supports the suggestions made earlier by Barnes and Duncan (1992). According to Frome (1998, p. 18) constructing news about the environment is very challenging because it touches every aspect of life, from science, economics, history, politics, ethics and religion. Hence, a journalist must be able to ask questions and to digest answers. Frome (1998, p. 18) adds that the write up must be clear and understandable, yet reflecting the author’s imagination, deep inner feelings, and desire to advance the cause of a better world.

Frome’s (1998) arguments reflect that the environment is about wider issues, but I think in defining environmental news it also involves the attitude of journalists, the newsroom culture, the intervention of editors and the policies of media organizations. This study intends to explore these elements using the in-depth interview method. Furthermore, there is a tendency for journalists to act as social actors (McNair 1994) in shaping environmental news according to their perceptions and knowledge of reality (Berger & Luckmann 1967) as discussed in Chapter 2. Hence, as media reflect society’s changing ideas, the

study of environmental issues in the media and the development of environmental journalism seem vital.

3.2 Media representations of environmental issues

This section discusses how the media represents environmental issues for audience consumption in order to give input, guidelines and comparison to this thesis. It is important to study media portrayal of the environment because the representation is hardly uniform (Cox 2006, p. 165). One influence on media depictions of environmental problems is when the audience may know or care little about an issue, so journalists are able to construct the news according to their own interpretations. However, the challenge for journalists is that many environmental problems are unobtrusive; that is to say, it is not easy to concretely link their relevance to our lives (*ibid*, p. 169). This makes it difficult to fit these concerns into the media's conventions for reporting.

Kate Sopher (1995) in her book *What Is Nature?* observed that the media project both popular and contradictory images onto nature:

Nature is both machine and organism, passive matter and vitalist agency. It is represented as both savage and noble, polluted and wholesome, lewd and innocent, carnal and pure, chaotic and ordered (p. 71).

Sopher's (1995) argument reflects that the popular media depicts the environment as both "the best of friends and the worst of foes," but it does not mean that the representation trends are always stable. For example, the study by McComas et al. (2001) of television entertainment programs rated 46 percent of episodes from these shows as "neutral," 40 percent "concerned," and 13 percent "unconcerned" about the environment (p. 538).

Meanwhile, Meisner's (2004) survey of images of nature in a comprehensive study of the Canadian media that included newspapers, magazines, and prime-time television shows, reported that the most prominent representations of

nature found in these media could be classified according four major themes: (i) nature as a victim, (ii) nature as a sick patient, (iii) nature as a problem (threat, annoyance, etc.), and (iv) nature as a resource.

Meisner (2004) found that, not unlike Sopher's (2001) account, these themes offered two competing views of nature: "Sometimes there is a strong admiration and desire for nature. At other times there is hatred. Sometimes there is a strong injunction to connect with or care for nature, and other times the injunction is to fight or to exploit it" (p. 17). However, overall he found that most environmental stories are represented in a positive manner.

Meisner (2004) also argues that there is an overarching theme, which he called a "symbolic domestication of nature". He means "the rhetorical construction of nature as something tame and useful but also fragile and in need of human care and protection." The representation also invites a narrow range of possible human relationships with nature that are consistent with symbolic domestication such as Care for Nature, Protect Nature, Control Nature, Manage Nature, Use Nature and Enjoy Nature (p. 431). As a whole, Meisner (2004) concludes, these relationships suggest that a strong technological optimism guides human relations with nature, and this optimism cultivates in us the view of nature as something to protect, control, use or enjoy. These images help to "justify the continued human control and domination" of nature solely as a benefit for humans (pp. 1, 7).

The above arguments concerning media depictions of the environment could help us understand how journalists make sense of the environment as an unobtrusive issue. Cox (2006) contends that unobtrusive events - events which are remote from one's personal experience such as chemical contamination, the loss of biodiversity, climate change, and other threats to human health and ecological systems - are less visible, therefore, often go unnoticed by the media for years or decades (p. 170).

For example, Hays (1987) reported that toxic chemicals are "surrounded by mystery" because their effects are not easily observed (p. 173). We rarely

notice such toxins in our everyday lives as many toxic chemicals are invisible and their effects on us delayed. Such contamination also may not be an issue for government officials and the media because of this invisibility and lack of immediate impact.

The mainstream media always has difficulty covering unobtrusive issues and, therefore, often report or represent issues in sensational ways (Cox 2006, p. 170). For instance, Wilkins and Patterson (1990) found that newspapers frequently cover “slow-onset hazards,” such as ozone depletion or global warming, in the same way as traditional news stories, as specific events rather than as long-term developments. Another example is the coverage of mercury contamination from old, coal-fired power plants of which the effects in the story center on specific people and events rather than on the less visible, less immediate sources of mercury contamination (Weiss 2004, p. 3). Therefore, Wilkins and Patterson (1990) suggest that in order to cover unobtrusive events, news media often must find an event to link to the story, and such event-centered stories usually attribute the problem to one-time actions by individuals or corporations rather than to longer-term social and economic development. This practice and kind of representation, however, raises an important question about the forces that shape the production of news of which this thesis aims to explore.

Friedman (2004) adds that competition for a shrinking news hole and the need to tell longer, complicated and more in-depth stories has increased pressure on journalists to dramatize issues to ensure that a story gets out. As a result, few mainstream media have the space to document less dramatic problems, such as loss of biodiversity or the impacts of new synthetic chemicals. Thus, although the environment may be an important concern, news media are pressured to underreport environment problems or to cover them in highly dramatized ways (p. 176).

The shrinking of the news hole also could possibly be the reason for the change in environmental news patterns and frequency (Sachsman et al., 2002). The representation of environmental issues in the 1960s was mostly focused

more on photographic images of environmental concerns such as that of oil coating the sea birds and shorelines from the wreck of the *Exxon Valdez* (Cox 2006, p. 165). The representation became prominent at that time. However, the trend began to change by the 1990s and the interest of the mainstream media in environmental themes, both newspapers and television networks, interest in environmental themes had decreased (Cox 2006, p. 165; Shabecoff 2000). For example, the study by McComas et al. (2001) on local affiliates of ABC, CBS, NBC, and Fox TV, between 1991 and 1997, found that environmental themes received little attention and had been decreasing since 1993.

Another study by Dunwoody and Griffin (1993) examined how newspapers framed the story of superfund sites (that is the worst toxic waste sites in the USA) specifically in Wisconsin, found that newspapers in more homogenous communities in this case were more likely to downplay the seriousness of hazards at the superfund sites, and confined their reporting to coverage of events and framed the sites as problems that were being handily solved by local authorities. The coverage also reflected efforts, in other words, to keep the controversy contained within the town boundaries and to minimize threats to the prevailing power structure; while in more heterogeneous settings, conversely, they were far more likely to cover superfund sites extensively, to allocate the offending local industries the bad guy status and to regard the risks inherent in the sites as worthy of concern and publicity (p. 48).

These findings are similar to Tichenor, Donohue and Olien's (1980) study which suggests that small-town newspapers are typically more consensus-oriented than are larger metro newspapers. Atwater (1988) also found that two-thirds of Lansing, Michigan residents believed that their newspaper did a "somewhat good job" in covering the environment, although they collectively indicated, nonetheless, that the media consistently gave less importance to environmental problems than was needed. And Riffe's (2006) research examined small-town newspapers that covered waterways pollution and revealed that 72 percent of respondents agreed that newspapers are likely to run a story about a local company or factory damaging the environment as

compared to television. Thus, in my study, it will be important to keep in mind that differences between Malaysian and New Zealand newspaper coverage may be related to the centralization of the Malaysian newspaper industry around Kuala Lumpur and the regional structure of the New Zealand newspaper industry is regional structure.

In addition, the media also gives more attention to scientific uncertainty and is instrumental in raising concerns about particular threats; at times the media also offers reassurance rather than emphasizing tasks (Beck 1992). Research also shows that the selection of risks reported in the media does not reflect either the seriousness of the risk or the incidence figures of those affected by it (Kitzinger & Reilly 1997). The two researchers concluded that the factors that influenced the news media's attention to risks include the knowledge of the journalists. For instance, some journalists shy away from stories where they have difficulty understanding the issues. Other factors are news value and the need for "real events" to serve as news hooks; the human interest factor; the self-referential media momentum, where once a story becomes newsworthy other media outlets start to address it; and the amount of associated activity by pressure groups, professional bodies and politicians.

Environmental issues depicted in the media are frequently presented as "soft" stories which Coote (1981) describes as a human interest story, for example, the Exxon Valdez oil spill in Alaska. The reason for this is because this type of reporting is so different from the hard news such as crime or politics. However, Campbell (1999) argues the environmental issue is complex and technical, pluralistic, multidisciplinary and often composed of "hard" scientific data and quantifiable as well as qualitative facts. Therefore, it should not be treated as soft news or labelled as "not important". The news is often softened with a human interest style format, for example, pictures of seals before and after culling which call up human emotions of anger, pity and sadness but this is not always balanced by an explanation of the environmental rationale behind this action.

Further, the representation of environmental news is often tempered with inaccuracy. Tankard and Ryan's (1974) study of accuracy in science and environmental reporting in 20 random newspapers revealed that a review would have prevented the publication of inaccurate information. Later in 2004, Stolfuz's similar study revealed that US journalists have indeed moved closer to the review approach as suggested earlier by Tankard and Ryan (1974). The two researchers came to the conclusion that inaccuracy in the reporting of environmental news could be reduced if journalists allow the news sources to review the articles before it could be publication.

Finally, much study of environmental representation has looked at general ideas of how the media covers the environment (Hansen 1993) and to subject-based issues such as the Sellafield nuclear power station and its effect on the community (MacGill 1987); Chernobyl (Patterson 1989; Luke 1987; Friedman 1986; Rubin 1987); oil spills like Santa Barbara, Exxon Valdez and Braer (Wills and Warner 1993; Daley and O'Neill 1991; Davidson 1990; Gundlach 1977; Molotch and Lester 1975; Steinhart and Steinhart 1972). However, this study looks at the overall environment issues in order to observe and confirm the types of environmental stories mostly reported; also to examine the trends and patterns of event stories in comparison to long-term environmental stories.

The above discussion illustrates that there are still many aspects to study concerning on media representation of the environment. As a starting point, this thesis aims to first look at the status of environmental issues covered by mainstream newspapers in both countries, before further and detailed study can be conducted later.

3.3 News values and frames

This section discusses how journalists value environmental stories and frame the complex nature of environmental information. The story selection is done through a long complicated news process and journalists use frames for a quick and effective way to make a selection. The news criteria or news value enables journalists to determine what stories can fit the news.

Newsworthiness is the ability of a news story to attract readers or an audience (Cox 2006, p. 175). Yopp and McAdams (2003) suggest reporters and editors are likely to draw on one or more of the following criteria for selecting, framing, and reporting environmental news: (i) prominence, (ii) timeliness, (iii) proximity, (iv) impact, (v) magnitude, (vi) conflict, (vii) oddity, and (viii) emotional impact. As a result, media workers feel they must strive to fit or package environmental problems according to these news values. However, most environmental problems do not naturally fit these requirements for newsworthiness, because they involve slower, more diffuse and drawn-out processes or because they lack visual quality (Anderson 1997, pp. 121-122). Therefore, the “image event” has becoming one important criterion of newsworthiness for environmental news (DeLuca, 1999).

Furthermore, environmental news must meet standards – such as conflict, and emotional impact – because first, there is little or no interest among the public in environmental stories. Second, although over time the public supports environmental protection, short-term development may divert the public’s interest from environmental issues (Vig & Kraft 2003).

Coote (1981) includes a hierarchy of values – ‘soft’ and ‘hard’ news – in her definition of news values.

A “hard” story is generally deemed to be one based on facts...labelled as “important”. A story based on description, individual experience, nuance – a “human interest” story, perhaps; or something which has happened in a sphere not labelled “important” – may be considered “good”, but is nevertheless “soft” or “offbeat” (Coote 1981).

Unlike Coote (1981), Lowe and Goyder (1983) find human interest issues are newsworthy as they note that the media’s fascination with environmental concerns is because these issues are of human interest and are newsworthy for their aesthetic values; whilst Hall (1970, p. 61) stresses that it is the media ideology to value their news based on certain criteria. However, it is not the case for long-term environmental issues such as climate change (Campbell

1999, p. 15). Although this type of story has some human interest element, her research findings reveal that “the environment as a news story tends to appear lower in the news agenda because the issues are generally classed as long term problems which take time to develop”. It is the environmental disaster that takes precedence at the top of the news agenda. In short, the environment is not seen as important news unless there is a disaster involved. In order to examine this statement, I will use content analysis to observe the trends and patterns for this study.

Much research on news values produces similar criteria (Boyd 1993; McQuail 1993; Fowler 1991; Murburger 1991). The lists of news values supplied by Johan Galtung and Marie Holmboe Ruge (1965) is the most referenced and elaborated on by other researchers (see for example, Tuchman 1978; Gans 1979; Fishman 1980; Hartley 1982; Ericson et al. 1987; Bell 1991). The research by Galtung and Ruge (1965) on the structure of foreign news in the Scandinavian press identified the significant factors that helped specify that informal (largely unspoken) codes of newsworthiness such as conflict, relevance, timeliness, simplification, unexpectedness, continuity, composition, reference to elite nations/persons and negativity. The process of measuring the potential items against these criteria is done unconsciously as Gans (1980, p. 41) believes identifying values in the news is “a virtually impossible task” because there are so many of them.

In presenting the news with human interest, and public values, journalists use news framing. In his classic study, *Public Opinion* (1922), Walter Lippmann was perhaps the first to grasp the dilemma of news reporting. He states: “For the environment is altogether too big, too complex, and too fleeting for direct acquaintance....and although we have to act in that environment, we have to reconstruct it on a simpler model before we can manage with it”. As a result, journalists have sought ways to simplify, frame, or make “maps of the world to communicate their stories” (p. 16).

The term “frame” was first used by Bateson in 1955 when he referred to two key aspects of communication as, first, frames as cognitive models that allow

a person to interpret and evaluate a message; second, frames are “metacommunications” or messages about messages. Later in 1980, Gitlin defines “media frames are persistent patterns of cognition, interpretation, and presentation, of selection, emphasis, and exclusion, by which symbol-handlers routinely organize discourse, whether verbal or visual”.

There are a few views on framing which have slight differences to each other as discussed below. The most cited is by Goffman (1974). He sees frames as the cognitive maps or patterns of interpretations that people use to organize their understanding of reality. Media frames are used to select and emphasize few potential events; render them into a series of meaningful events; and present information about what exists (Hall 1970, p. 63; Goffman 1974) in order to allow journalists to work more efficiently in disseminating the information (Tuchman 1978). Journalists rely on media frames to decide what to include in a story and what to leave out, a process maybe conscious, instinctive or culture bound. Inclusion and exclusion of various elements of an issue is the basis of journalistic discretion and framing as frames are embedded within “media packages” that, Gamson and Modigliani (1971) say could be seen to “give meaning to an issue”. The core package is organizing an idea, making sense of it and suggesting what is at issue for an audience who rely on mediated messages for information. In short, news framing is the process by which an issue is portrayed in the news media. As Gitlin (1980) contends,

Frames enable journalists to process large amount of information quickly and routinely: to recognize it as information, to assign it to cognitive categories, and to package it for efficient relay to their audiences. Thus, for organizational reasons alone, frames are unavoidable, and journalism is organized to regulate their production (Gitlin 1980).

Another similar view is by Entman (1991) who states that:

Despite its omnipresence across the social sciences and humanities, nowhere is there a general statement of framing theory that shows exactly how frames become

embedded within and make themselves manifest in a text, or how framing influences thinking (Entman 1991).

Entman (1991) clarifies that framing involves selection and salience. This process selects some aspects of a perceived reality, and makes them more salient in a communicating text to promote problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described. Then, it defines problems; determines what a causal agent is doing with what costs and benefits, usually measured in terms of common cultural values; diagnoses causes; identifies the forces creating the problem; makes moral judgments; evaluates causal agents and their effects; suggests remedies; offers and justifies treatments for the problem and predicts their likely effects.

The above arguments suggest that news is framed based on media assumptions of what should be read by the public, not what the public should know. It means the media feed the public with stories that could raise their anxiety; rather than news that should create awareness for them. The media also have tendency to influence the perception of the public on certain issues. News frames are “principles of selection, emphasis, and presentation composed of little tacit theories about what exists, what happens, and what matters” thus, Gitlin (1980) argues that frames are able to make the world beyond direct experience look natural. This is done, as Bateson (1972) asserts, so that psychological frames include some messages and exclude others and he believes the frame of the message is intended to organize the perceptions of the audience and leave potential audience members with a distorted view of reality. Some of this framing, Gitlin (1980) argues can be attributed to traditional assumptions in news treatment, which are “news concerns the event, not the underlying condition; the person, not the group; conflict, not consensus; the fact that advances the story, not the one that explains it”. Therefore, how the media frames the public is important to study because the media is able to influence people’s belief and also to determine a final resolution of public problems.

Taylor et al., (2000) commented that the framing of environmental controversy is often oversimplified, although environmental “disasters” demand immediate media attention (Lowe and Goyder, 1983, p. 76). Sometimes two similar environmental disasters receive a different scope and framing of coverage from the media. For example, the sea disaster of the Torrey Canyon which spilt 117,000 tons of crude oil on the south west coast of England in 1969 monopolised the media at the time, although there have been far more serious oil spills since then. Daley and O’Neill (1991) claim, in such cases, the media is often not very sure of the nature of the events themselves. Hence, in their analysis of the Exxon Valdez disaster, they concluded that “the widespread use of the word disaster at times early in the situation, when it was unclear as to whether it could be termed as so, was a major factor that indicated themes of confusion”.

It is also important to note that different parties who have a stake in news stories – environmentalists, scientists, citizens, and so forth – compete to influence the framing of a story. Miller and Riechert (2000) argue that these stakeholders try to gain public support for their positions, often “not by offering new facts or by changing evaluations of the facts, but by altering the frames or interpretive dimension for evaluating the facts” (p. 45).

In conclusion, as Fuller (1996, p. 101) is quoted as saying “all news workers are responsible to provide useful information. To fulfil this purpose they have to know some information of values because they are in the business of changing minds, if only from a state of ignorance to a state of knowledge”. Despite the generated list of news values and frames that are already embedded in their routine jobs, still sometimes the news workers construct the events differently from its nature. Perhaps for media advocates that try to conform to their beliefs. This may lead to confusion for readers. Although some contemporary theorists argue that the audience creates their own messages and understanding no matter what the writers try to do (Fuller 1996, p. 102).

3.4 Journalist and news source relationship

This section focuses on journalist and news source interactions; who makes the news and, how sources get their voices into the media, especially with reference to environmental news. According to Ginneken (1998) news is based on a selection of stories that is articulated, not only from the experience of journalists, but also from different sources. There is no doubt that journalists have their own news frames to write, but Ginneken (1998) argues that sources have more power in focusing the journalists' attention on the stories that they want the public to read. The high dependency of journalists on sources, for example government officials, for information enables this process. Why government officials are highly quoted will be explored in this study using in-depth interviews.

Ginneken (1998) contends that the above argument is supported by Dunwoody and Griffin (1993) in their study of journalistic strategies for reporting long-term environmental issues, which reveals that sources are able to exercise substantial control over story frames and are able to drive story themes. The researchers feel that most journalists allow sources to establish their own story frames. In spite of this, the researchers do not further discuss how sources articulately control the news content. But other researchers view news sources as having a profound influence on news production when they act as an "interpretive group" that attempts to shape meanings about public issues and occurrences (Berkowitz 1997; Sigal 1986; Gans 1990). For instance, lobby groups on the environment who are armed with technical information and well-versed on environmental issues. They are able to use their knowledge and agenda to frame the news; especially when dealing with journalists who have fewer facts applicable to environmental information.

Sources can influence the news contents in a variety of ways. Berkowitz (1997) suggests sources may be able to shape interpretation through three kinds of social power. The most basic one is sources attempting to become part of an ongoing social debate. Normally this debate has gained attention from the public and is at a stage of resolving the issue. A second and more

strategic kind of power is when news sources are able to influence interpretation as social debate begins. For both arguments, I give an example of the 1998 water crisis in Kuala Lumpur. The issue gained immediate attention from affected residents and at that moment some special interest groups started to get their voices into the media. When the issue was fading, it was again the same groups that raised the issue again to maintain the public debate. I argue this is done because it is easier to attach their agenda to an existing issue.

Third and even greater is the ability of sources to influence whether an occurrence will even gain any attention in the news media. This kind of influence by sources may succeed because the theory of objectivity largely limits what journalists can consider as “raw data” (Davis 1995). However, in the Malaysian context, except for officials, perhaps other types of sources have no opportunity to frame the news to their needs or beliefs. As pointed out by Gomez (1993) in *Political Business* “the acquisition of a publishing company was not only done for its profitability but also done in order to allow the ruling elite to control the content of the press”. In general, most science and environmental news in Malaysia is rather mediocre (Merican 1998) and is just straightforward news.

As a consequence, among the many facets of journalistic routines, the relationship between the media and their sources captures the most extensive attention in studies of news and frequently has been cast as a power relationship (Frome 2003; Reese 1991). For example, the environmental news tends to focus on “discrete events rather than on the contexts” in which they occur. This can lead to the impression that the public or corporations, rather than institutional politics and business practices, are responsible for those events (Wilkins and Patterson 1990). Hallin (1994) suggests that this kind of coverage pattern can be traced to the relationship between the media and environmental claimsmakers such as the government, industry and environmental movements.

The implication of a close relationship between journalists and sources could affect news content. Friedman (1998) stresses that both journalist and news source sometimes can become over-protective towards each other; especially when the relationship is so close. They are also able to manipulate each other; and may constrain and bias the news. Rouner et al. (1999) relates the definition of bias with eminent sources by saying “bias is a perceived attribute of a news source whereby the individual news source, of the group the new source represents, has a clear, vested interest in a cause or action relative to maintaining or changing the status quo”. This suggests that news content could be influenced by news sources with power.

Gans (1990) categorizes source bias into two groups: first, the source is interpreted as low in bias if they have no authority on social, economic, political and other concerns; second, highly biased sources are those who have authority to alter the status quo in some fashion. Similar to Rouner et al.’s definition, Gans (1990) also suggests that sources with power over the status quo might have a tendency to be biased. However, I also contend that the structural limitations of journalism such as deadline pressures and space limitations also have a tendency to contribute to news bias.

Therefore, it is essential for journalism to produce a fair coverage of opposing views (Friedman et al. 1986; Gans 1990) for the public. As a rule of journalism, using a number of sources of information, including books, periodicals, and people, is one way to be balanced in the construction of news. Often, however, Frome (2003) finds that reporters, particularly general assignment reporters, use only one or two sources when writing about environment-science related topics. Despite many studies done on the journalist-source relationship, not much research has been conducted on the importance of using a variety of sources in an environmental story. One example is a study of the media coverage of the swine flu issue that was completed by two communication researchers, David Rubin and Val Hendy in 1978 (cited in Friedman 1998). Both of them found a strong relationship between the quality of coverage in the news medium and the number of sources consulted during the week for information concerning an inoculation

program (Friedman 1998). Apart from that, the use of a number of sources will make no difference if the same type of source is used again and again. I argue that the variety of sources used is more important than number of sources used. If three sources quoted are all government officials, or official representatives such as scientists or public relations officers, then perhaps the story frames of all these sources will most probably be the same and there is no diversity of news.

Theoretically, journalists have their own criteria in source selection. Much research lists at least three to five criteria regarding source access factors for journalists. Among other factors identified are power, credibility, availability, proximity, and incentives (Ginneken 1998; Dunwoody & Griffin 1993; Robinson & Kohut 1988). Research done by Jung-Hye in 1999 pertaining to constraints on environmental news production in the United States reveals that journalists in principle believe everyone involved in an environmental story are equally important news sources and the environmental news too has developed the same hierarchy of news sources conventionalised in other news areas.

On the other hand, Tidey (2002) suggests that mainstream journalists in New Zealand are likely to go to the same sources each time for information – official records, departmental information officers, union and political leaders – because of a range of reasons from habit and deadline pressures to laziness, limited imagination or poor direction and supervision. This is perhaps based on Tidey's personal experiences as a reporter. He refers to New Zealand's regional evening dailies that have a great similarity in range, depth and subject matter of stories published.

Consequently, the findings when using government officials as news sources have been well researched by many social scientists especially in the US and UK. Both American and British studies come to similar conclusions that the routine activity of news production is heavily dependent upon and directed towards official and accredited sources and their representatives (Manoff & Schudson 1987). Major and Atwood (2004) in their study on environmental

news stories drawn from 69 Pennsylvania daily newspapers focusing on 11 environmental issues found that one third of news story sources are local government. Also, the number of governmental sources increased in conflict-based news stories when compared with routine story sources. While, research done in the 1970s on the *New York Times* and the *Washington Post* found that nearly half to 75 percent of the sources are officials of the United State government (Sigal 1973). Journalists' belief that government sources are less self-serving and therefore, more credible than those of business and industry runs counter to the critical viewpoint that places government firmly in the economic and political arena, particularly in terms of environmental issues (Cracknell 1993; Anderson 1991; Nohrstedt 1991).

Previous research also discussed other voices that could make their way into the media. In environment-science related news, science reporters are claimed to frequently use too few sources or preferred scientists only. Dunwoody (1986) believes this is due to tight deadlines, however Friedman (1986) thinks it is because reporters do not know how to find sources for science-related issues. Johns (2002) feels that it is simply because journalists are very dependent on specific scientists, perhaps because they are too close, and do not want to alienate them by going to dissident scientists. This reflects that scientists are not chosen for their authority, credibility or ability to legitimate news as discussed above. Based on the above reasons, Nelkin (1987) argues that environment-science reporters might fail to provide the public with a diversity of news, since reporters tend to share information and the same sources to cover the same stories.

Some researchers use the term "expert" to describe people who are professional in their fields such as public relations officers, sociologists, economists, or even media experts. Ginneken (1998) describes experts as "other major authoritative voices in the media". Nelkin (1987) argues that the only reason that may cause journalists to rely heavily on experts (especially public relations people) is because of tight deadlines. This might be true as almost 20 years of study of environmental reporting has found a heavy reliance on information subsidies from public relations practitioners: 86

percent of news reported on brochures, pamphlets and other reports, which is seen as “cheapest available source of information” (Griffin & Dunwoody 1995; Sachsman 1976). But most of the time, activists are only used to provide general information rather than details about a disaster (Nelkin 1987).

Not only the government, the industries and corporations are also prone to spin and flooding the media with press releases, briefings, background papers, leaks and staged events (Frome 1998, p. 6). They sometimes become more of a source than the public itself. In fact, many comments in today’s environmental articles are press releases verbatim.

Conversely, the perception that journalists have of the environmental movement groups and activists is not very positive. Many research findings concerning news sources reveals that journalists have a very limited trust of environmentalists because they are perceived as promoting certain interests based on what they believe and perhaps they want other people to have the same belief too (Jung-Hye 1999; Dunwoody & Griffin 1993; Lowe & Morrison 1984). In addition, Jung-Hye (1999) perceives activists as a “low profile” group because, despite being the ones who draw the media attention to various environmental problems, it is to the official sources that the newsmakers turn for validation of their claims.

The other type of source discussed is the public. In practice, journalists seem to try to give priority to people who are the immediate victims of environmental problems because they believe the victims should be the most important sources. In fact, Dunwoody and Griffin (1993) think journalists generally sympathize with the public. But due to the idea that ordinary people do not have the authority to verify facts, journalists rely on government, scientists, and industry as relatively more important news sources because they are “decision makers” or “policy setters”. Gans (1990) comments that the public or so-called “sources with less power” can normally gain access only with an unusually dramatic story, perhaps like an environmental disaster; but as power decreases, so does the ability to access the media.

Gans (1990) stresses that “individuals and groups whose well-being is achieved and maintained by acting for or on behalf of constituencies must become eager sources in the hope of reaching their constituents as members of the audience”. This helps explain why so much news centers on public and other agencies, which serve constituencies. In contrast, this might create conflict with the objective of journalism to disseminate accurate information to the public, as these types of source have aims which are different from the media. Thus, the public may not get the correct information as they are meant to.

The source-journalist relationship is like a tug-of-war (Frome 2003), as though they are making use of each other. Some sources try to make themselves “visible” to the public, journalists concurrently try to shape their reporting to what they believe and to what the newspaper company wants. Why the source is chosen for the news also depends on the journalist’s aim for the news content. Therefore, the question of who makes the news will always be open for discussion and must be determined in each case by empirical analysis.

As a whole, the arguments in this chapter suggest that despite varied definitions of the environment, there is the possibility that journalists define the environment based on social context. Journalists may seek to exclude their opinions and feelings from a story, but they also depend so much on sources, who usually have certain stance or opinion, in developing and presenting the story. Nevertheless, in real life, journalists sometimes or perhaps most of the time depend on organizational policies and editors to decide who makes the news.

Chapter 4

Methodology

This chapter discusses the two methods used for this study: content analysis and in-depth interviews. The first method observed the trends and patterns of environmental news content in order to understand the representation of news concerning environmental issues. The in-depth interviews were then conducted to explore possible reasons for such representation by gathering the real-world perspectives of respondents throughout the environmental reporting process.

4.1 Why content analysis?

Content analysis has been marked by a diversity of purpose, subject matter, and technique and has been widely used by social scientists and humanities scholars (Holsti 1969, p. 2) particularly in mass communication and linguistic studies. The use of content analysis is also likely to be most fruitful in investigating the well-studied phenomenon of agenda setting by the mass media (McCombs Shaw & Weaver 1997; McCombs & Shaw 1972). These studies found that themes and issues disseminated by the print media have a good chance of becoming topics of public conversation. This technique is also extensively applied in studies of environmental coverage in newspapers (Collins & Kephart 1995; Dunwoody & Griffin 1993; Corbett 1992; Dunwoody & Ryan 1987; Sachsman 1976).

Definitions of content analysis proposed by previous researchers reveal “broad agreement on the requirements of objectivity, system and generality” (Holsti 1969). For example, Berelson (1952) defines content analysis as a research technique for the objective, systematic and quantitative description of the manifest content of communication; Cartwright (1953, p. 242) proposed to use the terms “content analysis” and “coding” interchangeably to refer to the objective, systematic and quantitative description of any symbolic behaviour; while Barcus (1959, p. 8) describes content analysis as the scientific analysis

of communication messages that requires the analysis to be rigorous and systematic.

In the early years, content analysis comprised of simplistic studies but did manage to generate significant findings. These studies showed, for example, that religious, scientific, and literary matters in the media were dropped in favor of gossip, sports and scandal; and measures of column inches that newspapers devoted to one particular matter were used to reveal “the truth about newspapers” and to show that the profit motive was the cause of “cheap yellow journalism” (Speed 1893; Wilcox 1900) (cited in Krippendorff 2004, p. 24). The second phase of content analysis research raised questions of representations such as how African-Americans were presented in the Philadelphia press (Simpson 1934); attitude measuring the standard of fairness and balance of journalists; changes as information travels through the news process (Allport & Faden 1940) and the “coefficient of imbalance” (Janis & Fadner 1965) (cited in Krippendorff 2004, p. 25).

In short, content analysis has proven an important study method in the study of newspaper content. Also, as a research technique, content analysis can provide new insights, increase a researcher’s understanding of a particular phenomenon, or inform practical actions (Krippendorff 2004) which are the aims of this study.

4.1.1 Aims

Content analysis was chosen as the prime method of research in this study because of the wide use of the technique in previous research which has some similarities to this current study. The technique allows me to analyze “relatively unstructured data in view of the meaning, symbolic qualities, and expressive content they have and of the communicative roles they play in the lives of the data sources” (Krippendorff 2004).

In more detail, this study intends to examine environmental coverage using three terms; trends, patterns and differences/similarities of the environmental articles. They are analyzed in terms of:

- i. general characteristics – for instance date/day/month/year of publishing; page of coverage; size of article and inclusion of photos,
- ii. content – jargon used, tone and comprehensiveness of story content
- iii. news source – number and type of sources
- iv. topic selection – main topics coverage and topics related to it

These three terms are categorized generally as extrapolation; which is defined by Krippendorff (2004, p. 47) as “inferences of unobserved instances in the intervals between or beyond the observations (data points)”. For this study, it is adapted to describe systematic relations between subject matter categories within newspapers.

I also adapted some of the systems approach in content analysis as proposed by Krippendorff and Berelson (1952) in their list of content analysis applications as discussed below. The systems approach is used because the focus of this comparative research is on similarities and differences between units.

i. Trends

It is my intention to observe changes in the number of subject matter categories over time. Previous research has undertaken numerous similar analyses of trends, analyzing for example, values in inspirational literature, advertising themes and political slogans and how systems behave over time, in various dimensions and across a variety of issues (Miller et. al 1996; Budge et. al 1987).

ii. Patterns

Another kind of content analysis involves the extrapolative use of patterns; which I wish to examine in terms of environmental news. Previous communication research has charted communication channels among members of organizations as senders and receivers and has analyzed those

connections in terms of typical network features that organizations tend to reproduce. Also, research concerning word co-occurrences within sentences or paragraphs has also revealed network-like ‘association’ patterns that can permeate a genre.

iii. Differences/Similarities

Differences are central to all systems approaches. According to Krippendorff (2004) the differences of interest here stems from a “comparison among the variable components of a system and may be extrapolated to differences among similar components elsewhere” (p. 51). Thus, I will examine differences and similarities in the message content generated by two kinds of communicators, or differences within one source in different social situations, when the source is addressing different audiences, or when the source is operating with different expectations or with different information. At the same time, similarities will also be observed in order to describe and conclude trends and patterns of the communication contents (Berelson 1952).

Finally, Krippendorff (2004, p. 53) argues that most content analysis is conducted using simplistic formulations. For example, studies on trends and patterns often focus on just one variable at a time, which denies analysts the opportunity of tracing the interactions among several variables longitudinally. At the same time, content analysis is not a suitable method for examining the detailed meanings of symbols within texts or for indicating the relative impact that the identified content patterns might have on audiences (Hansen et al. 1998). Therefore, this study will formulate four variables – newspaper, source, topic and content - as in Krippendorff’s extrapolation method, to be able to understand and predict the trends and patterns within the system of environmental news (Holsti 1969).

4.1.2 Methods

i. Selection of newspapers

For this study, content analysis was conducted on eight mainstream newspapers. Four were nationally distributed newspapers in Malaysia; two

English papers, namely *The New Straits Times* and *The Star*; and two Malay papers *Berita Harian* and *Utusan Malaysia*. The other four were regionally distributed newspapers in New Zealand: *The Press*, *The Dominion Post*, *The New Zealand Herald* and *The Otago Daily Times*.

These newspapers were selected based on largest circulation figures. The Malaysian papers have a combined circulation of 647,000,⁹ with approximately four million readers (Media Guide 2006). The New Zealand papers have a combined circulation of 410,000, reaching one million readers (ABC 2007d).

The three years of study were 1996, 2000 and 2004 as it was my aim to observe the trends and patterns of news coverage in three phases. The mid 1990s marked the time when the environment started receiving attention in Malaysia. By 2000, the environment had become a topic of discussion in many areas including political debate. For 2004, it is used as point of reference to compare the environment coverage with previous years.

ii. Unit of analysis

The unit of analysis was the environmental news story, measured in column centimeters (Pellechia 1997). The definition of environment news was based on my argument in Chapter 1 in section 1.4. Thus, for purposes of this study, I defined environmental content as that which deals with Mother Nature, volcanic eruptions and tornadoes; and human influences, whether positive or negative, on the environment. This definition would include a variety of topics such as global warming, wildlife, flooding, preservation of heritage buildings, waste management and criticism of environmental destruction. This study will also include science elements (Sessions 2003; Campbell 1999; Ader 1995; Dunwoody & Griffin 1993; Atwater et al. 1985) that have some relation to the environmental discourse (for instance, the effects of excessive deforestation on climate change).

⁹ Personal email correspondence with Matthew, J. of ABC, Kuala Lumpur on 20 February 2007.

iii. Sample

I used a constructed sampling method to select the articles. This method is used to identify types of cases for in-depth investigation and to represent each day of publication (Krippenforff 2004, p. 112; Neumann 2000, p. 198). For example, for the month of January 1996, Monday's copy was examined; February, Tuesday's; March, Wednesday's and so on. As such, 12 copies of each newspaper were selected for each year. Hence, roughly 288 copies of newspapers were analyzed for this study.

All pages of a newspaper, in a microfilm form, were analyzed manually by a single coder (the researcher) using a microfiche machine. The identified pages were then printed out for better coding. Altogether 1,146 articles were collected from the eight identified newspapers.

All the collected articles were coded based on the coding categorization which is discussed in this chapter in section 4.1.3. The coding sheets were then analyzed by using the SPSS software with simple cross tabulations.

iv. Method of Analysis

The pre-pilot test examined 120 samples of environmental articles chosen randomly from the subject newspapers published in 1996, 2000 and 2003. These samples were coded using the primary coding sheet by two coders. The inter-coder reliability test produced .800 coefficients (Cohen 1960). Based on the pre-pilot test, I identified five major groups of sources used in environmental stories. They were government officials, scientists, public relations officers, environmentalists and the public. Also discovered were the major environmental issues reported which included floods, freshwater resources and landslides. These findings were very important as they helped me to complete the variable lists of common environmental issues and news sources for both countries. I was then able to shape the coding categorization accordingly.

The pilot test, based on the amended version of the primary coding categorization, was then conducted again by two coders producing .800

coefficients. The final coding categorization was produced based on this test and is attached as Appendix 1.

Reliability

Both pre-pilot tests and inter-coder reliability tests have shown stability and representative dependability of this study across different time periods. However, these tests were conducted for coding purposes only, not for the actual analysis of newspaper content.

Validity

a. Internal Validity

In order to obtain findings as accurate as possible, this study mainly focused on environmental news as defined earlier, and on four aspects of environmental criteria. These were: characteristics of environmental news, news sources, topic selection and content. The variables were tested twice (as mentioned above) in order to get comparable measurements for both countries. The four elements were examined to observe the trends and patterns of environmental news over time. As a pioneer study on environment-media relations for both countries, the coding variables for this study were carefully designed to help set a framework for future research.

b. External Validity

Mainstream newspapers were the best papers to examine as they have the highest circulations. This suggests these papers are representative of readers thinking and provide a good sample for this study. Therefore, findings from this specific setting and small group are able to be generalized to a broad range of setting and people (Neumann 2000, p. 172).

4.1.3 Coding categorization

The coding categorization was divided into four sections: the characteristics of environmental news, news sources, topic selection and content. The categorization was designed based on the research objectives and was tested twice. The coding was not adapted from any previous research as most

existing environmental-media studies focused on specific environmental topics, while this study aims to observe changes in the representation of environmental issues in general. Thus, the coding categorization used in this study could be one of the pioneer versions for environmental-media studies in both countries.

The coding list was created in a few steps. First, I gathered a list of environmental issues regarded as of most concern by governmental departments. This information was collected from the 2004 annual report of Malaysia's Department of Environment (DoE); the website of New Zealand's Ministry for the Environment (MfE), at <http://www.mfe.govt.nz/issues/> and an interview with Mr. Karl Fergusson of MfE in March 2004. Second, I compared the lists with the 120 articles chosen randomly for the pre-pilot test as mentioned in section 4.1.2 (iv) in this chapter. I found that not all environmental issues provided by the governmental agencies were mentioned by the press. Thus, I selected only issues that were on the lists of the government agencies and were also commonly reported in the papers. Also included were issues regarded as less important by the government agencies but which were regularly reported by the press. This was because this study aims to examine the pattern of environmental stories published in the newspapers. The lists for both countries were compared in order to get comparable measurements and also to ensure reliability when coding. There were a few issues which arose here. Some environmental issues which were frequently reported on in Malaysian papers were less common in New Zealand – landslides were one such example. I included those issues in the list to get as accurate representation as possible. As a result, a long list of environmental issues was created in the coding sheet.

The first section of coding categorization consists of general news characteristics such as the length of articles and attachments measured in column centimeters, front page coverage, author's name and venue of the events. These elements give an indication of the prominence of the article.

The second section, on news sources, observed the types and number of sources. The source list and their “roles” in the stories were designed based on the two pre-tests conducted earlier. This section is important as it could suggest who makes the news and the types of environmental topics that they mostly covered.

The list of topics was compiled after the three steps taken as mentioned above. It seemed a long list to provide the most salient environmental issues (Atwater et al. 1985) applicable to the selected newspapers of both countries. Some topics could also contain more than one subject. For examples the “Food and Farming” topic contains a few sub-topics such as “Pest and Weed Control”, “Farm Effluent and Runoff” and “Genetic Engineering”. The “Others” category includes less reported issues such as government intervention in environmental issues. I also examined secondary issues related to the main ones for two reasons: (i) environmental matters are complex and interconnected; and (ii) this study aims to observe environmental patterns.

The contents section looked at the tone, complexity and comprehensiveness of the articles. The tone of the stories was examined to support the first three sections to determine whether or not environmental stories were reported negatively or positively.

The main limitation in constructing this coding categorization was in getting a comparable measurement for topic listing to match both countries. Further, environmental issues should not be looked upon as one entity; rather, they are interconnected with each other. However, to put all the issues in a list is quite an unrealistic matter to do so. Therefore, it took a longer time to get a reliable coding categorization of content analysis. The final coding categorization is given in Appendix 1, while the content analysis findings are discussed in Chapter 5.

4.1.4 Experimental design

In general, the content analysis was used as a content data approach, which means it does not determine whether each category analyzed meets an absolute standard but does indicate how the newspaper performs relative to other, similar sources (Holsti 1969, p. 31).

This method was used to describe the characteristics of environmental news, without reference to either the intentions (encoding process) of the sender or the effect of the message upon those to whom it was directed (decoding process). In addition, the experimental research was designed using this method to ensure that theory, data gathering, analysis and interpretation were integrated.

Table 4.1.4 (a): Experimental design of content analysis

(Adapted from Krippendorff 2004)

Purpose	Types of comparison*	Questions	Research problem
To describe characteristics of content.	Variable A Variable X, Y and Z across time Variable X and Y Variable X and Z Variable Y and Z	What are similarities and differences in environmental coverage for both countries?	To describe trends and patterns in communication content

*A = Newspaper; X = Source; Y = Topic; Z = Content

The experimental design is methodologically and analytically outlined for the first research question; that is to examine the trends and patterns of environmental news. The other three research questions are explored later in the in-depth interviews.

There were two types of comparison frameworks used based on the experimental design above to help the researcher conduct the comparative analysis systematically. First, a comparison of a single variable over time as shown in Figure 4.1.4 (a) below.

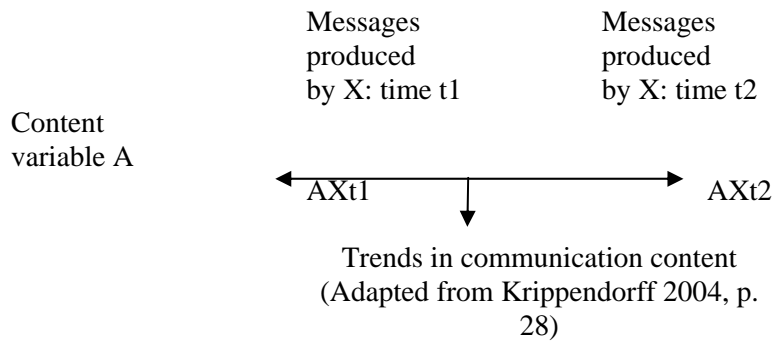


Figure 4.1.4 (a): Framework of comparison of single variable over time

The second framework was designed to compare the messages produced by two or more different sources as shown below in Figure 4.1.4 (b).

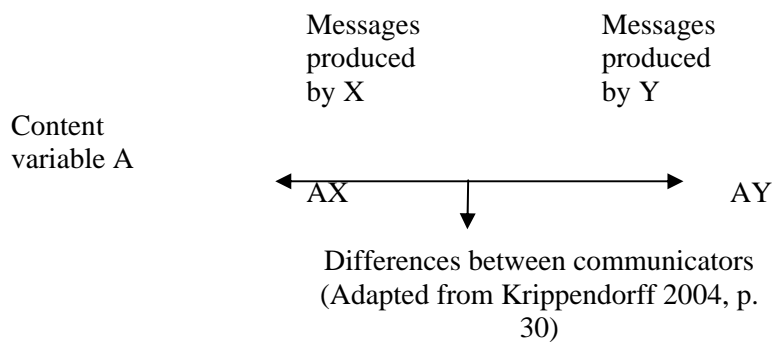


Figure 4.1.4 (b): Framework of comparison of two or more different sources

Holsti (1969, p. 28) also suggests that in order to state meaningful conclusions, all content data must be compared to some other research technique such as interviews.

4.2 The In-depth Interviews

For this study, I used qualitative interviews because they provide a deeper understanding of respondents' experiences and knowledge of the representation of environmental news in the papers. This semi-structured interview approach was also used as an explorative method to understand the patterns and trends of environmental news representation and how it compares to and contrasts with the results found in the content analysis (Rubin & Rubin 1995).

I applied grounded theory to analyze the data, because it enabled me to discover variables and their interrelationships as they emerge from the data, rather than shaping the data according to assumptions and categories (Charmaz 2002; Strauss & Corbin 1998) and to analyze the findings based on Hannigan's (2006) proposal of environmental problem construction as discussed in Chapter 2. However, I still retained control of the themes of the discussion by referring to an interview guide that sets out the issues to be covered during the interview as suggested by Deacon et al. (1999, p. 65).

4.2.1 Aims

The overall aim of this method was to understand the representation of the environmental news from the respondents' point of view, with the assumption that they might be able to influence the shape of environmental news in the mainstream newspapers.

In particular, I intended to verify, from the experiences of the subjects, the various forces that might produce the patterns and trends of the news observed in the content analysis. As discussed in Chapter 3, many of the factors identified that influence how environmental and science news is presented in the USA and the UK are based on traditional journalistic constraints such as time pressures, space limitations and media ownership. Other factors mentioned were close journalist-source relationships and the news process. Hence, I am interested in discovering whether these limitations have an impact on the depiction of news in both Malaysian and New Zealand mainstream newspapers.

The 40 identified respondents for this study were from different backgrounds, yet had one thing in common: they had direct or indirect experience in the reporting or making of environmental news. Another key goal of the interviews was to explore possible ways to improve coverage. As discussed in Chapter 3, respondents had different perspectives on each other's roles in making the environmental news known to the public. Hence, I wanted to

determine similarities and differences in their ideas in order to suggest possible improvement for environmental coverage.

However, the answers obtained may not be purely the respondents' own opinion, as they were mostly shaped by respondents' memory, and also could be based on organizational policies. These factors may have had some impact on the way people respond. In addition, difficulties in speaking with certain people, such as editors, have limited the study to compare their views, as gatekeepers, with journalists and news sources.

4.2.2 Methods

i. Sample

For this study, I used purposive sampling to identify 40 respondents; 20 from each country. The pre-pilot test was conducted earlier with eight New Zealand respondents and six Malaysian respondents who had some similar criteria as mentioned above. However, the first pilot test findings showed that the answers did not quite fit with the objectives, perhaps because (i) the questions were quite vague and; (ii) most respondents were mainly interested in talking about their own field and I had little control over the interview. Thus, I narrowed down the criteria for the respondents in order to only include people with a high level of experience in acting as news sources, or those who have at least have been involved regularly in news reporting; and tailored the questions specifically towards the research objectives as listed in Section 1.3 of Chapter 1. The modified set of questions, which were tested on ten people, was more reliable, although some respondents did need to be guided throughout the interview in order to obtain answers which were as relevant as possible.

However, it was difficult to identify respondents within the strict criteria as set out above. Therefore, I used two methods to identify suitable respondents. These were: (i) gathering information from the journalists; (ii) documenting

the names of “favorite” news sources’ who appeared in newspapers during my data collecting.

The respondents were divided into two groups: the medium and the news sources.

The medium: Journalists make up the first group. The main criterion for this group is that they must be environmental print journalists or have some experience of reporting on environmental issues. In Malaysia, the latter type of journalist is sometime known as the “general desk journalist”. Six of the respondents were feature writers with some experience of writing news stories too, while the other two were news reporters.

The news sources: Government officials, scientists/academics, public relations officers/corporate sectors and environmentalists were all included in the news sources group. Each subject chosen must have been interviewed by the news media more than once on environmental issues.

Table 4.2.2 (a): The breakdown of the respondents for each country

Groups	Subjects	No. of respondents (Malaysia)	No. of respondents (New Zealand)
Medium	Journalist*	8	8
News Sources	Government Official	3	3
	Scientist/Academic	3	3
	Corporate Sector	3	3
	Environmentalism/NGO	3	3
	Total	20	20

* 2 respondents were chosen to represent each newspaper subject

All Malaysian interviews were conducted in person; while interviews with the eight New Zealand respondents were by phone interviews. Average interviews took between 50 minutes to 70 minutes. The interviews were open-ended to give respondents space to discuss their views and experiences further, rather than restricting their ideas. All interviews were taped, transcribed and analyzed using the grounded theory that emphasizes inductive analysis and the building rather than testing of the theory (Strauss & Corbin

1998). The transcripts were then analyzed using the qualitative computer software package NVivo7 to examine the connections between the subjects and themes which emerged.

ii. Time frame

The pre-pilot interviews with 14 respondents were done between November 28 and December 8, 2005. After refining the interview questions, the pilot interviews with another 10 respondents were conducted from 14 to 21 December 2005. The 40 principal interviews were conducted from January 16 to May 24, 2006.

iii. Method of Analysis

The interview questions were designed based on the findings of the content analysis. As mentioned earlier, the purpose of choosing this method was to understand the themes in the real-world lives of the respondents as seen from the perspective of each subject, as suggested by Kvale (1996, p. 27).

a. *Transcribing* There was no standard form or code for transcription of the research interviews. Decisions about the style of transcribing depend on how the transcriptions are to be used (Kvale, 1996, p. 170). As the interviews were intended to seek deeper understanding from the respondents on the selected themes, I transcribed all the interviews, but neither at a paralinguistic level nor to take account of intonational aspects.

b. *Footing* I have retained some Malay words in the Malaysian interview scripts, if respondents included a few Malay words, in order to show another way of how respondents expressed themselves. Wholly Malay interviews were translated into English. Malay words were sometimes used by Malaysian respondents when speaking in English as a way of shifting their footing (Goffman 2001), often to show their disappointment and anger or to stress important facts.

iv. Questionnaires

In order to obtain a deeper understanding of the themes that emerged, the interviews were conducted based on a list of questions as shown in Table 4.2.2

(ii). This list serves as a guideline only as the interviews were conducted in open-ended manner.

This list is designed based on the three research questions discussed in Section 1.3 of Chapter 1; which focus on the factors which influence environmental news reporting. Some of the questions also arose from the findings of the content analysis. For example, the characteristics of the environmental news suggested that there could be serious constraints in environmental reporting. Thus, the limitation aspect was included in the interviews to explore some of the possible effects of these constraints on environmental reporting. I also adapted Labov's evaluation model (1972) to each of the questions as presented in the brief framework given below:

Table 4.2.2 (b): The semi-structured questions adapted from Labov's (1972) evaluation model of narrative

		Question	Structure*
Why is the environmental news represented in such a way?	Limitations	What could limit good environmental reporting?	A
	<i>Could limitations in the reporting process affect news quality?</i>	Who constrains the reporting? When and where are the limitations likely to occur?	O
		How does this affect environmental reporting?	C
		What are the implications for environmental reporting?	E
		How do these implications affect the representation of environmental news?	R
	News sources	What are the criteria for selection of news sources for environmental stories?	A
	<i>Why do government officials often get quoted?</i>	Who is the best source? Where are the best sources found?	O
		How does the news source affect	C

		environmental reporting?	
		What are the implications for environmental reporting?	E
		How does it affect the representation of environmental news in the paper?	R
	News topics	What types of environmental issues are mostly presented in the papers?	A
	<i>Why is environmental news topical?</i>	Who selects/is involved in the issues? When do the issues become news values? Where do the issues take place?	O
		How does the issue affect environmental reporting?	C
		What are the implications for the environmental reporting process?	E
		How does it affect the representation of environmental news in the paper?	R
	News quality	Is environmental news newsworthy?	A
	<i>How well (do you/does the press) cover the environmental story (raised by your organization/public)</i>	What are the criteria of published news? When is environmental news good news? Where can good news be found?	O
		How does the quality affect environmental reporting?	C
		What are the implications for the environmental reporting?	E
		How does it affect the representation of environmental news in the paper?	R
	Possible improvement	What are the possible improvements can be made?	A
	<i>How can it be improved?</i>	Who can improve it? When can it be improved? What can be improved? Where it can be improved?	O
		How do the improvements affect environmental reporting?	C

		What are the implications for the environmental reporting process?	E
		How does it affect the representation of environmental news in the paper?	R

* Abstract = A; Orientation = O; Complication = C; Evaluation = E; and R = Result

4.2.3 Limitations

The main limitation in conducting these interviews was that the number of journalists who specialized in environmental issues was rather small, especially in Malaysia. Some of the so-called environmental reporters were also known as “general desk” reporters. This means that they were also assigned to other news stories. Similarly, in New Zealand such reporters cover not only science stories, but also agricultural stories and others (Sessions 2003, p. 85). As such, for this study I also incorporated the “general desk” and science reporters to be included in the interviews.

Another limitation was that as the time frame for this study was from years 1996 to 2004, some of the journalists interviewed might not represent the news coverage observed in the content analysis. This is because some of them only had a few years of journalism experience. However, it was the best method that could be achieved within the limited time frame of this study.

The reluctance of respondents to be interviewed was another constraint, which affected my research timeline and limited the information available for analysis. All of the eight New Zealand journalists and three environmentalists approached were reluctant to speak with me; while the Malaysian respondents who refused to be interviewed consisted of three public relations officers, two scientists and five journalists. However, I managed to persuade them and overcame the problems by: (i) conducting the interviews in a few sessions as they claimed to be very busy; (ii) conducting phone interviews – despite the location problem, some respondents were adamant to remain anonymous as

information providers; and (iii) agreeing to conduct group interviews because some respondents refused to be interviewed alone.

Chapter 5

A Comparative Analysis of Environmental News between Malaysian and New Zealand Newspapers

This section analyzes the news content in order to observe the similarities and differences between the environmental news patterns and trends between the two countries. The comparison is divided into four sections: (i) news characteristics, (ii) content, (iii) source and (iv) topic.

5.1 General characteristics of the environmental news

A total of 506 environmental news stories were collected from two English and two Malay mainstream newspapers in Malaysia namely: *The New Straits Times* (NST), *The Star* (TS), *Berita Harian* (BH) and *Utusan Malaysia* (UM). In addition, there were 640 news articles collected from the four New Zealand newspapers: *The Christchurch Press* (TP), *The Dominion Post* (DP), *The New Zealand Herald* (NZH) and *Otago Daily Times* (ODT). All the New Zealand samples are in English.

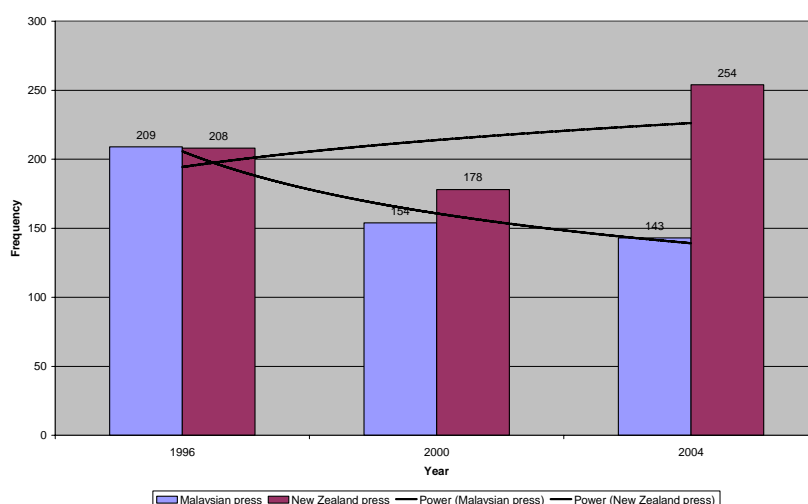


Figure 5.1: Total number of environmental articles for each year

Figure 5.1 shows a significant difference in numbers of printed articles per year and reporting trends throughout the whole of the three-year study. The

decreasing reporting trend by the Malaysian papers resulted in a big gap in coverage numbers between the two countries, especially in 2004. As a whole, the amount of coverage in the New Zealand press is also higher by about 11 percent compared to the Malaysian press.

In detail, the Malaysian trend shows quite a tremendous drop of environment stories at approximately 30 percent from 1996 to 2004. Although, New Zealand has a slight drop in 2000 but the number increased around 16 percent in 2004. The reasons for such trends are unknown but a few correlations will be analyzed to observe the possibilities of external forces causing such patterns.

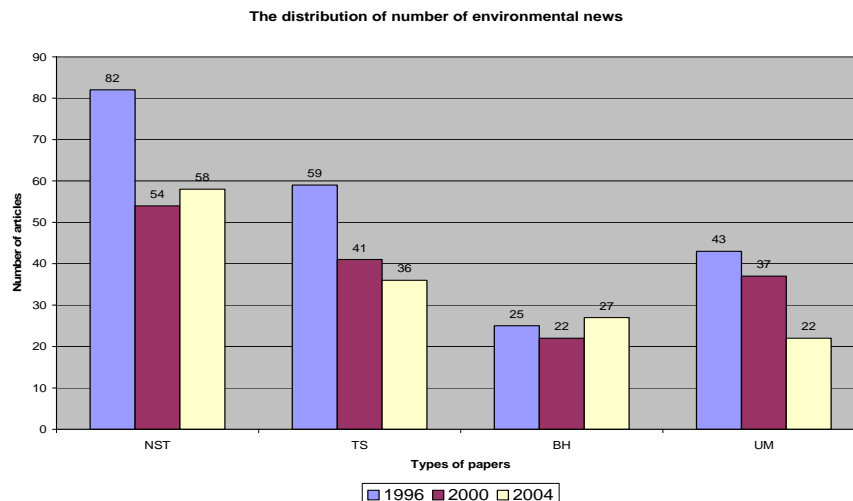


Figure 5.2: Number of environmental articles per year in Malaysia

Among the four Malaysian newspapers, NST published the highest number of environmental news with 194 stories (38 percent) in the three years of the study. However, the number decreases by about nearly 50 percent in 2000 before it slightly rises in 2004. Second highest with 136 articles is TS follows by UM with 102 articles (20 percent) and BH has 74 stories (15 percent). Therefore, the English newspaper coverage of environmental news is nearly double over the Malay at about 63 percent (330 stories), while the Malay newspapers only make up at 37 percent (176 stories).

Although NST and BH are under the same management, the gap between the two in terms of the level of news reported and the amount of environmental news coverage are very big. The higher environmental coverage in NST and TS is perhaps due to their targeted audience who are urban-educated people cut across all races and the Malay newspapers probably have a smaller targeted audience that is made up of rural working-class people who are more interested to know about their immediate surroundings.

This trend is conceivably due to the newspapers partial reporting on certain issues (Wang 2003, p. 115) This partiality, Wang adds, is caused by the fact that the two largest newspaper conglomerates: New Straits Times Press (NSTP)¹⁰ and Utusan Melayu (Malaysia) Berhad¹¹ produce news which are controlled by newspaper owners who are closely linked to the ruling political party. However, it is not known to what extent this situation has an impact on the environmental news, in particular.

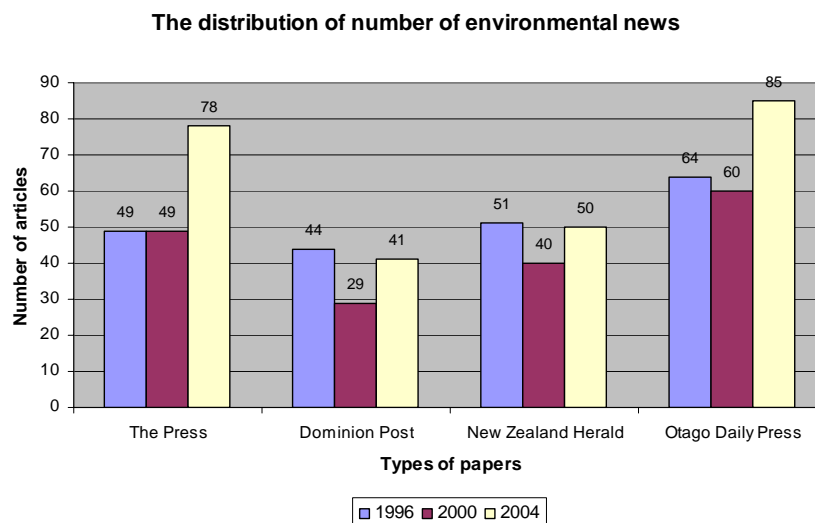


Figure 5.3: Number of environmental news per year in New Zealand

Among the four New Zealand newspapers, the ODT has the biggest coverage, which is almost double the coverage of DP which has the least coverage among all newspapers. It must be noted that each newspaper represents each

¹⁰ The New Straits Times Press (NSTP) publishes the national language and English dailies: *New Straits Times* and *Berita Harian*.

¹¹ The Utusan Melayu (Malaysia) Berhad publishes *Utusan Malaysia*.

region, thus the patterns in TP illustrates that more environmental concerns emerge in the Canterbury area in that year.

5.1.1 Level of news coverage

Figure 5.4 shows that New Zealand papers mostly reported on local environmental issues; whereas the Malaysian papers printed more national issues concerning the environment.

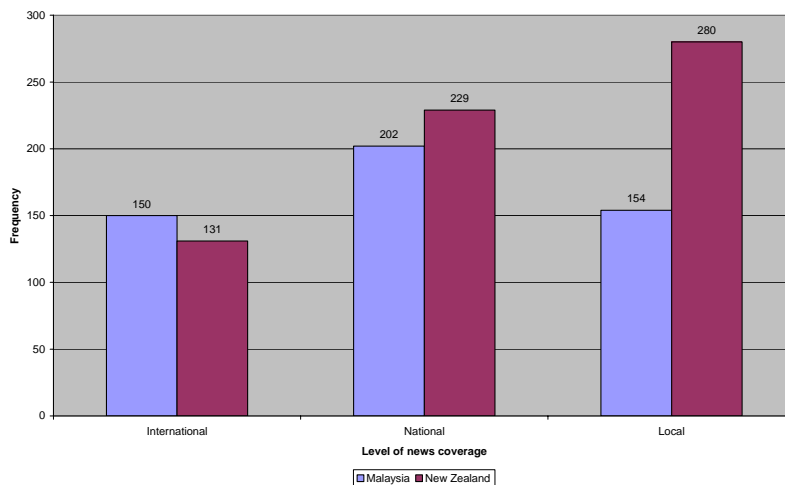


Figure 5.4: Level of the Malaysian and New Zealand news coverage of the environment

The high amount of local news coverage by the New Zealand press is not unusual because the papers in the country serve each region; while the Malaysian press serves the whole nation. Thus, the first focuses more on environmental coverage that happens in the region they represent which tends to makes the amount of coverage in the New Zealand press is higher than in Malaysia.

5.1.2 Three most common topics in the three levels of coverage

Table 5.1 below illustrates that the pattern of environmental topics covered at each level is quite different between the two countries. However, the numbers of international stories reported seems to have some similarities in topic selection.

Table 5.1: Three most common topics in the three levels of coverage

Country Level	Topic 1		Topic 2		Topic 3	
	Malaysia	NZ	Malaysia	NZ	Malaysia	NZ
International	Earthquake	Weather	(Flash)Flood	Flood	Weather	Earthquake
National	Land(slide)	Energy	Freshwater	Forest	(Endangered) animals	Weather
Local	(Flash)flood	(Flash)flood	Landslide	Weather	Waste Mgmt & Recycling	Water (resources & quality)

The newspapers of both countries printed big international environmental issues focusing on Earthquakes, the Weather and (Flash)floods. Earthquakes and the Weather are not major topic in Malaysian but have been covered at large perhaps because the issues gained attention worldwide, therefore, inevitably to be printed by both groups of papers.

On the other hand, story patterns at national and local levels have little similarity. This suggests that the two countries might be facing different types of environmental problems. For example, at the local level both countries could have some comparable environmental problems such as (Flash)floods. The story patterns are not quite the same as reporting is based on the most occurrences of environmental events. This will be confirmed during the interviews with the journalists.

5.1.3 Placement of articles

i. Front page coverage

As a whole, the environment is not seen as a topic of importance as each country only printed about four to five percent of its overall coverage on the front page. Both countries have a similar pattern for the three years of the study as shown in Figures 5.5 (a) and 5.5 (b).

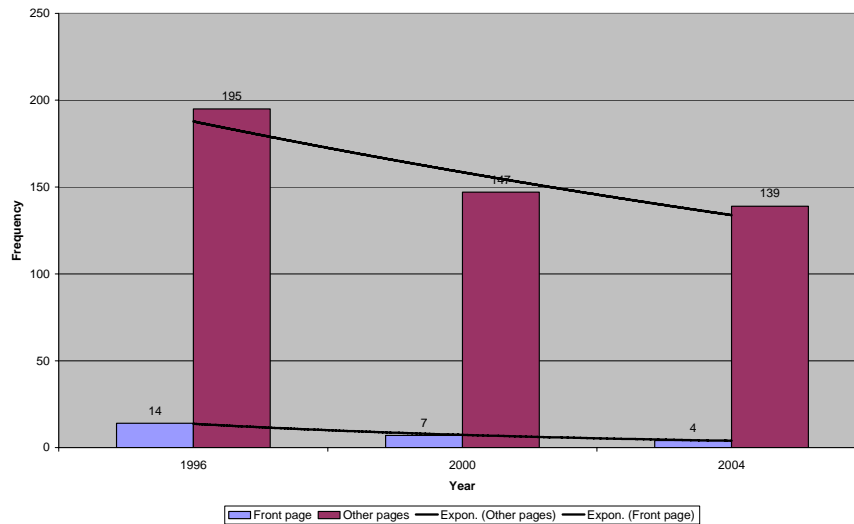


Figure 5.5 (a): The Malaysian environmental news front page coverage

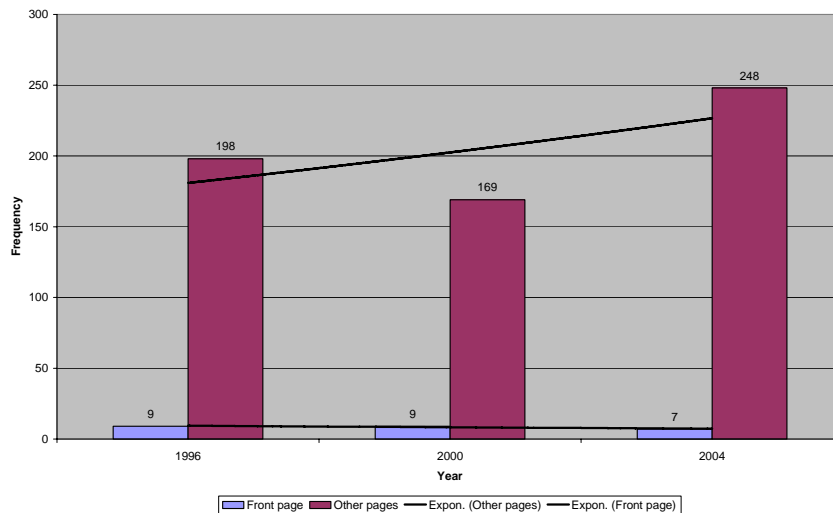


Figure 5.5 (b): The New Zealand environmental news front page coverage

Both figures show decreasing patterns in the number of articles printed on the front page, especially in the Malaysian papers, which dropped almost half of its coverage in 2004. This suggests that the environment is not a prominent topic of discussion for both countries. Also, looking at the trend throughout the years, I argue that the environment might not be a topic of front page coverage for the next few years for both countries. However, it is best to examine the major topics covered on front page to identify what topics that make prominent news.

ii. Topics covered on the front page

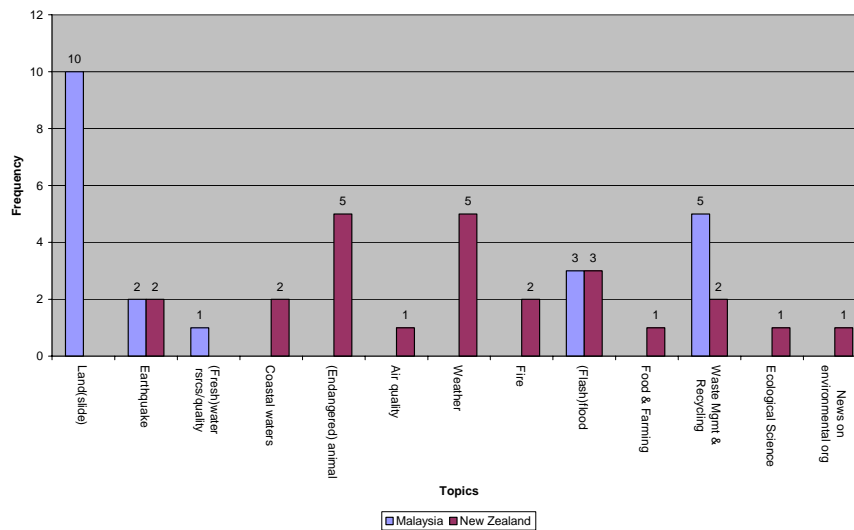


Figure 5.6: Topics reported on the front page in the Malaysian and New Zealand press

There are only 25 articles printed for each country. Figure 5.6 shows that the New Zealand papers cover a range of topics on the front page; which are 11 topics altogether but the amount of coverage for each is rather small that is between one to five articles per topic. The biggest coverage is on Waste Management and Recycling. Meanwhile, Malaysia only has five different topics printed on the first page but with a high focus on Land(slide).

All the three of the most common topics in the Malaysian press – Land(slide), (Flash)flood and (Fresh)water resources/quality – have been covered at least once on the front page; while, only two of New Zealand’s main topics have been similarly covered, namely, (Flash)flood and Weather. Based on each topic percentage, the biggest topic printed on the front page in the New Zealand papers is Coastal Waters with about 14 percent and in Malaysia the biggest percentage is Waste Management and Recycling which is around 38 percent.

The similarity between the two topics is that both are not the main topic for each country. Thus, the biggest reported topics might not be the most prominent ones probably because they do not fit the newsworthiness criteria.

iii. Environmental news on various pages

The 16 listed columns are examined in order to see the story pattern on various pages. The analysis found that the pattern of environmental coverage for both countries is almost the same with biggest amount of printed articles in the local, main and international pages.

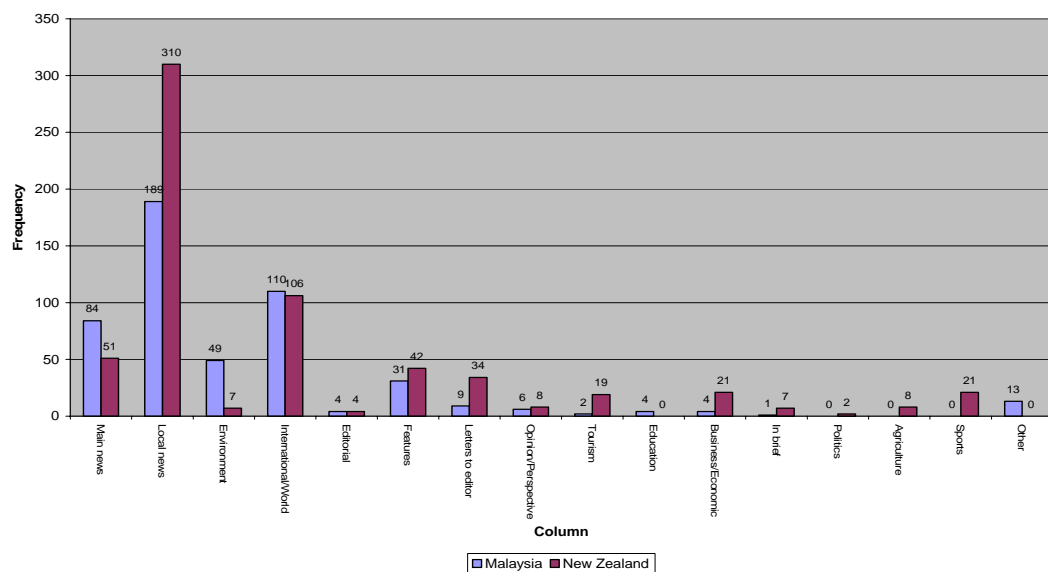


Figure 5.7: Distribution of environmental stories over various pages

The highest amount of news in the New Zealand newspapers shows is Local News, as expected, because each newspaper represents a particular region. It makes up about 48 percent of all the stories. The second highest column that is the International/Word page with 106 articles (17 percent) suggesting that more environmental news is gathered from outside New Zealand. At this stage, this pattern confirms the earlier statement that it is cheaper to get overseas news than local.

As a whole, both groups of newspapers have environmental stories printed in similar numbers of columns as shown above. The analysis found that most environment stories printed on pages like Politics, Sports and Agriculture by the New Zealand press have no direct content on the environment; rather they

have indirect cause and effect in the field. For example, many stories in the Sports section mention bad weather that affects games; while the five different topics written in the Agriculture¹² column only serve as additional information to the agricultural stories. However, the two environmental stories on Energy covered in the Politics page show direct involvement with environmental issues in political discourse.

There are no environmental stories found in the Education and Other columns of New Zealand newspapers. The Education section in the Malaysian press focuses on children's education with specific environment stories written on (Endangered) Animals, (Industrial/Development) Impact and News on Environmental Organizations. Another significant difference is on the Environment page which has small environmental issues reported by the New Zealand press as compared to Malaysia. These patterns suggest that the environment could be related to many other issues.

Both countries also have some similarities such as the amount of environmental news with a slight difference in topics reported in the International/World, Editorial and Opinion/Perspective pages. However, they have different types of stories covered in these columns as shown below.

Table 5.2: Topics printed in the Editorial and Opinion/Perspective columns

	Malaysia	New Zealand
Editorial	(De)forestation, Coastal waters, (Flash)flood	(Endangered) animals, Air quality, (Industry/Development) impact, Other
Opinion/ Perspective	Conservation, Coastal waters, (Fresh)water resources/quality, (Endangered) animals, (Flash)flood, Energy	(De)forestation, (Fresh)water resources/quality, Weather, Energy, Other

Based on Table 5.2, topics that capture the Editorial's attention are very different for both countries. However, topics of public concern have some similarities such as on Energy and (Fresh)water. In the similar columns such

¹² (De)forestation, (National) park, Weather, Food and Farming and News on environmental organizations/environmentalists.

as Letters to the Editor, the Malaysian press reported only nine different stories, suggesting that the public might have little space in the press to express their concerns. In contrast, the New Zealand press has about 34 articles printed in this column.

In summary, the coverage pattern in a variety of columns is more or less similar to each other. However, the contents are slightly different perhaps based on different environmental problem faced by each country. Although, environmental problems are complex and interrelated to many other fields, the association is rather small in terms of the media representation to the public.

5.1.4 Focus of articles

The comparison of the news scope is analyzed in order to observe the environmental news focus outline for both countries.

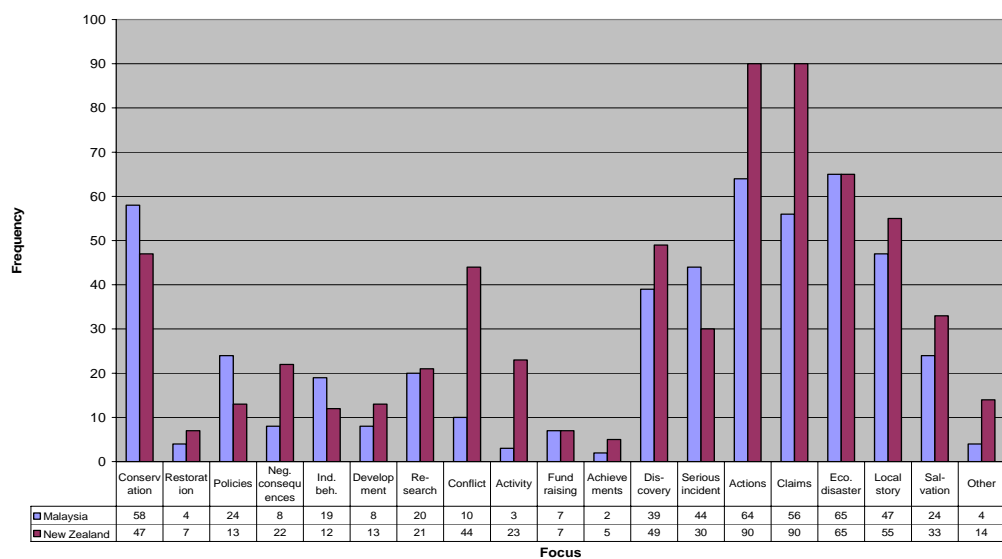


Figure 5.8: Focus of articles

The focus of news has quite similar patterns, with some small differences in the amount of coverage such as on Policies, Negative Consequences, Conflict and Activity. Both countries also share the first two major scopes, which are Ecological Disasters and Actions. However, the Malaysian's third focus is on Conservation; while for New Zealand it is on Claims. A brief correlation on scope and topics is shown in Table 5.3 below also suggests that the two

countries have different topics in their similar scope. Further details on topic focus will be discussed in the next section 5.4.3.

Table 5.3: Frame of topic

Frame Topic	Ecological disaster	Actions
(Malaysia)	Earthquake	(Flash)flood
(New Zealand)	(Flash)flood	Weather

Based on Table 5.3, it can be concluded that both countries might have a bigger scope of environment as uncontrollable natural catastrophes and plans for rescue. This suggests the re-active way journalists are covering the environment in both countries.

5.1.5 Author

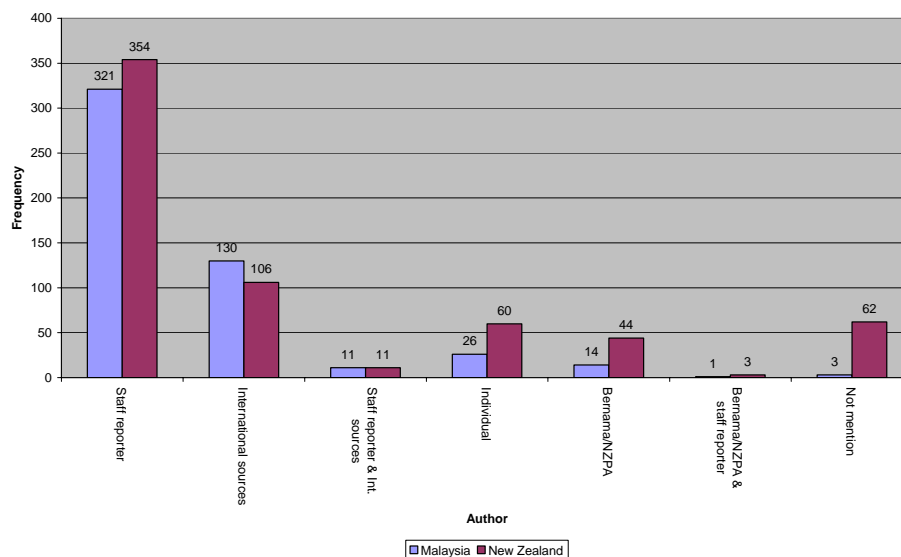


Figure 5.9: Comparison of the Malaysian and New Zealand news authors

The authoring pattern is examined to observe patterns of news producers. Figure 5.9 illustrates that the patterns are almost the same for both countries, except that New Zealand newspapers have quite a big number of articles written with no mention of the author as compared to Malaysia. This suggests that the New Zealand press might have a greater amount of less prominent

environmental coverage compared to Malaysia which has only three articles with no authors mentioned.

Based on the overall percentage of each country, the Malaysian staff reporters create the highest amount of environment coverage at about 63 percent; while the New Zealand reporters have a slightly lower percentage at approximately 55 percent. This means nearly half of the environment coverage in New Zealand is written by other types of sources.

The individual category, on the other hand, suggests that the Malaysian press might not be so interested in printing individual opinions, unlike in New Zealand. This is quite true as compared to the analysis of column patterns in Figure 5.7, whereby Letters to the Editor and Opinion/Perspectives have only 15 stories combined for Malaysia, but 42 stories for the same columns in New Zealand.

The role of *Bernama* in producing more environment stories is not as much as NZPA. The latter is about 68 percent higher than *Bernama* in reporting environmental news. But for the whole of the New Zealand coverage, NZPA only makes up about seven percent. Both categories also make up about one to three articles with a staff reporter in each country. Hence, both *Bernama* and NZPA have quite a small function as environmental sources.

Nevertheless, both newspapers have quite a high use of international source for environmental news. The Malaysian press has approximately 26 percent news taken from international sources and New Zealand makes up about 17 percent. The international sources also combined reporting with the staff reporters with 11 articles for each country. Therefore, the international sources are the second most important sources for environmental information in both countries.

5.1.6 Length of articles

Figure 5.10 below demonstrates that both countries have a similar pattern of length of news coverage.

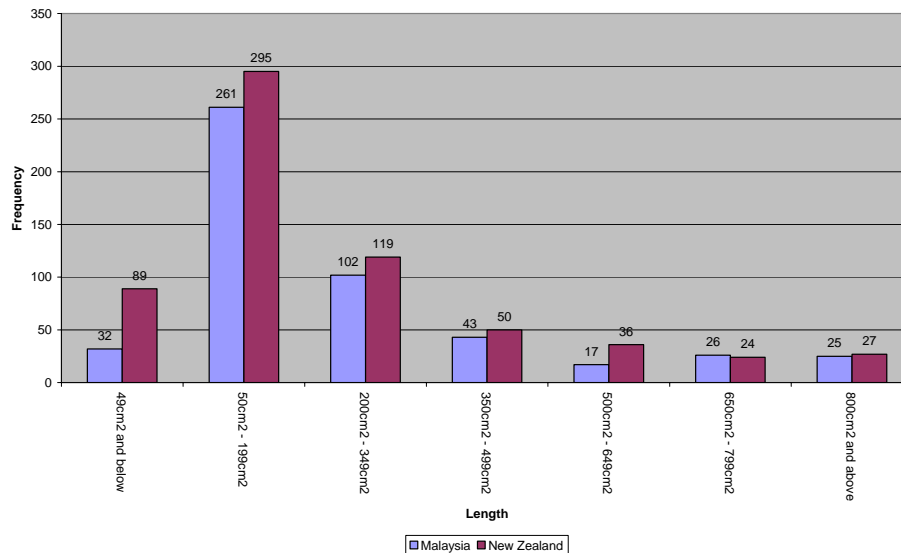


Figure 5.10: Comparison of length of articles

Obviously, both countries have relatively small environment coverage at between 49cm² – 199cm², which is about 58 to 60 percent. Also, the two groups of press have more or less the same amount of coverage in all the categories. For example, at length between 200cm² – 649cm², both countries have the same percentage at 32 percent of the coverage; while they make up about eight to 10 percent for the last two longest length categories. Thus, the small length of coverage suggests more straightforward environment news presented by the newspapers of both countries.

5.1.7 Attachments

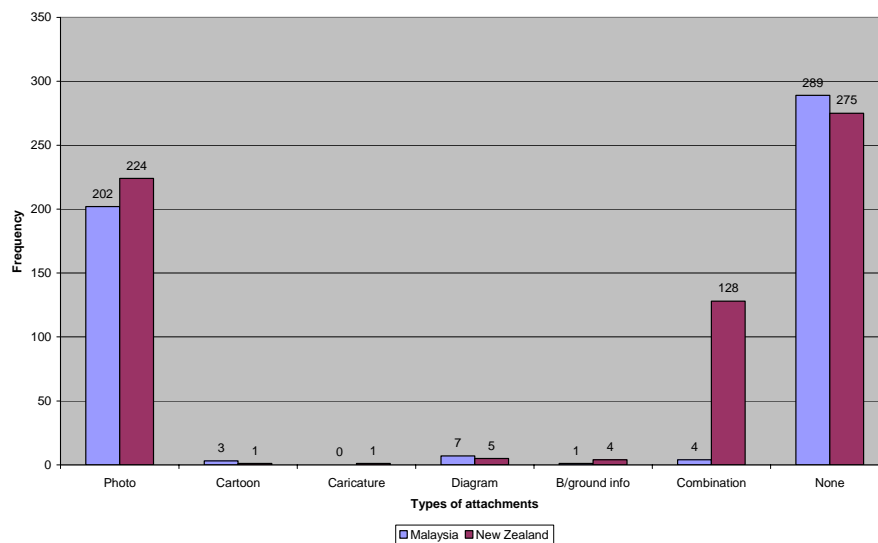


Figure 5.11: Comparison of attachments in the Malaysian and New Zealand press

Figure 5.11 proposes that the press regards photographs as the best extra information attached to environmental articles. Visual images are important for environmental news representation in order to put some “soft” elements into the stories. The Malaysian press produced 202 (40 percent) environment articles with photograph attachments; while the New Zealand papers have 224 articles (35 percent) with photographs. Most photographs help bring the image of the environmental phenomenon to attention as part of the message.

About 70 out of 202 stories with photographs used Government Officials as news sources. The same sources were also used in 72 articles with photograph attachments in the New Zealand newspapers. The sourcing and photograph attachment patterns are very similar for both countries. It suggests that news with Government Officials as the main actors is given priority as compared to other sources. More than half of the articles (57 percent) of the Malaysian coverage were printed without attachment as compared to New Zealand with only 45 percent.

The New Zealand press has a larger number of articles printed with a combination of attachments such as photographs and background information

which make up about 56 percent of the coverage, perhaps to give some extra information for better public understanding.

Figure 5.11 also shows a very small usage of other attachments with environment articles suggesting that those types of inclusions might not be preferred by the press. Another possible reason is because the length of articles is pretty small which suggests simple straight-forward reporting.

5.2 Content

5.2.1 Comprehensiveness of news

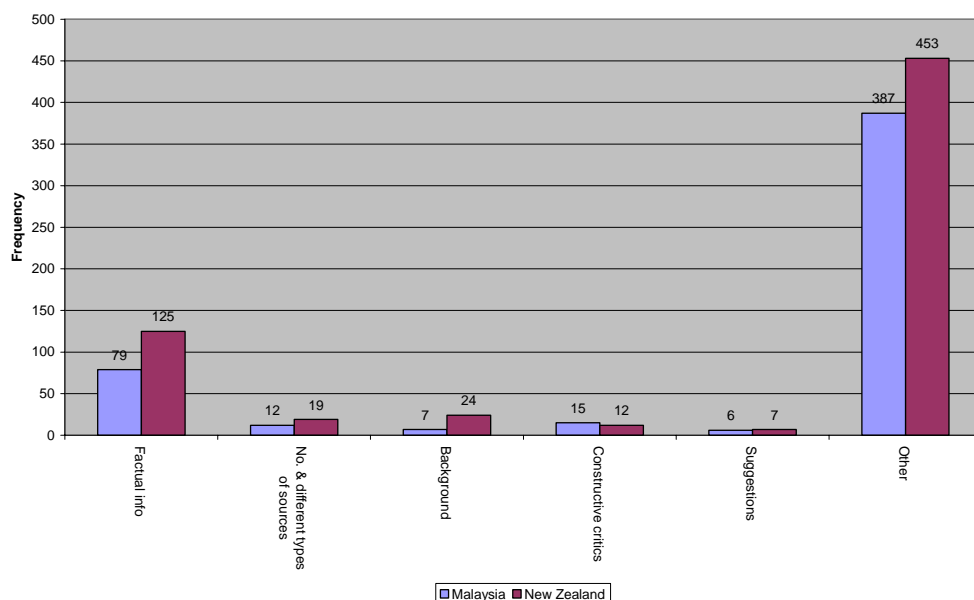


Figure 5.12: News comprehensiveness of the Malaysian and New Zealand press

Figure 5.12 shows that both countries share the same pattern of information type added to the articles in order to make people better understand the issues presented. The largest type used is by putting more factual information into the contents. However, as most of the articles are straightforward news, the “Other” column shows the highest coverage which makes up about 71 percent to 76 percent. It is also evident that other variables only make up a very small coverage. In relating to these figures to the distribution of topics in Section 5.1.2 and focus in Section 5.1.4, it can be proposed that environmental

coverage in both countries is based on “after event” stories. In short, it can be argued that both countries represent the environment with less analytic writing.

5.2.2 Content position

This small section is looking at the stance taken by the articles on the environment news discussed. In general, the both groups of press have the same pattern of positions as shown below.

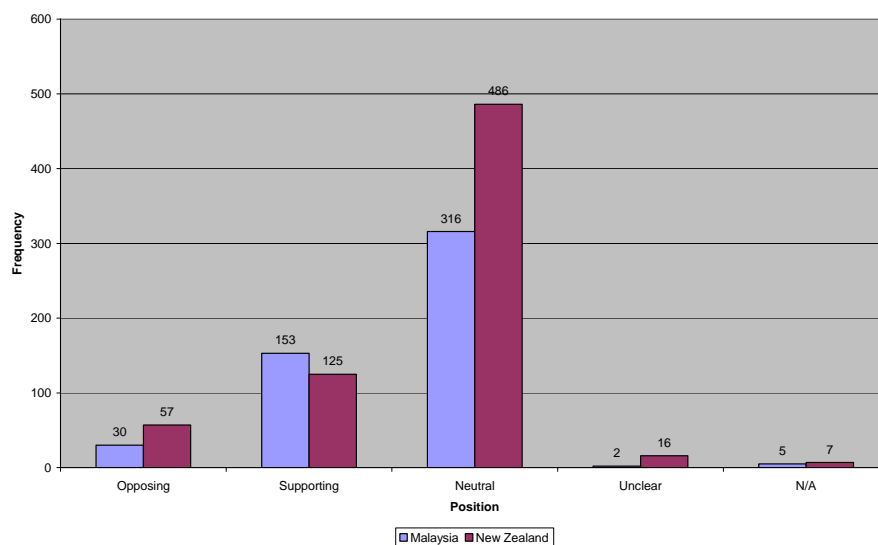


Figure 5.13: Environment content positions

More than half of the Malaysian (63 percent) and New Zealand (72 percent) coverage is neutral. The news also covered in a supporting manner of the issues at about 30 percent for Malaysia and 19 percent (New Zealand) focusing more on ecological disasters. Figure 5.13 suggests that the news content might not argue the issue in such a way for public debate rather it is presented as an informative report for the public.

The opposing stance presented in the contents also shows a relatively small percentage of six percent and nine percent for the Malaysian and New Zealand press respectively. In conclusion, the pattern suggests less public debate can take place and probably that environment stories are presented in a fairly straightforward reporting manner.

5.2.3 News sources in focus contents

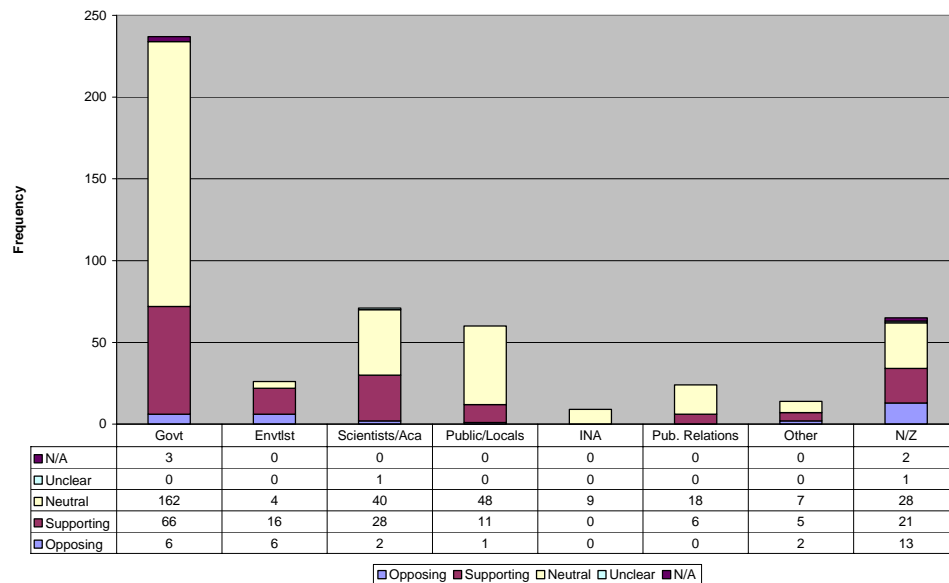


Figure 5.14 (a): The Malaysian news sources in focus contents

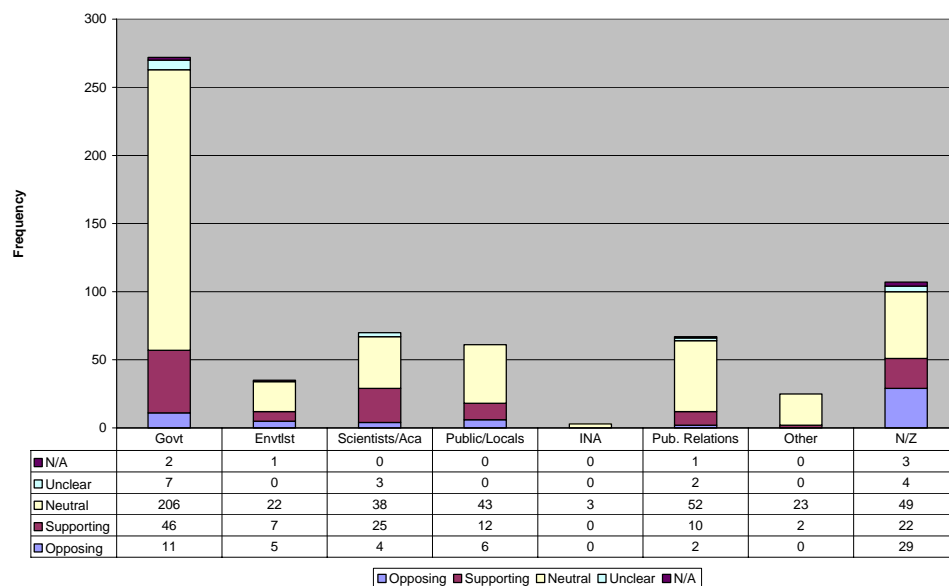


Figure 5.14 (b): The New Zealand new sources in focus contents

Both figures above show slightly different positions of sources between the two groups of papers. It suggests that almost all the sources are framed as to be neutral on the issues presented, except for the Malaysian environmentalists whose seem to have a more supportive stance. The possible reason for this is

that environmental news is covered with a less analytical approach, therefore, sources are used to show some balance in the story representation.

The proportion of positions for each source is quite similar between the two groups of papers. For instance, the International News Agency (INA) which is positioned to be neutral has the same pattern in both groups of papers studied.

The content analysis also found that the Malaysian newspapers identify what needs to be done about the issues (54 percent) in its coverage as compared with the New Zealand articles (45 percent). This proposes that the papers in both countries could be playing a role as development journalism in reporting the environment. Another suggestion could be possibly the involvement of government officials as policy makers in giving ideas on how to overcome the problems which has moulded the articles to be action oriented for the public.

5.3. News Sources

This section compares the news sources used in both countries to observe the similarities and differences of the sourcing patterns and trends. This section is divided into a few small subsections as below

5.3.1 Number of news sources use

In general, the below patterns below are similar to the sourcing pattern with a slight difference of percentage coverage. For example, in stories with one source, the Malaysian press has a bigger percentage of 52 percent as compared to the New Zealand press (45 percent). In other words, the frequencies and percentages reflect different interpretations.

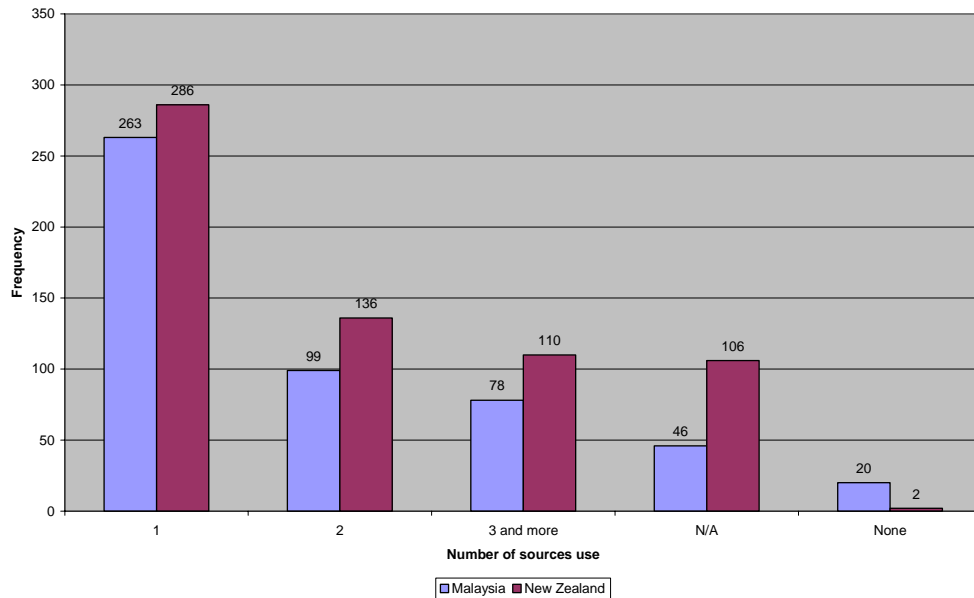


Figure 5.15: Comparison of number of sources used

There is also a big gap in the N/A category whereby the Malaysian papers figure at about nine percent as compared to New Zealand with around 17 percent. This is perhaps because the articles are too short or less important such as in the section of “In Brief”.

The content analysis also found that, in stories with two or more sources, there is no variation of sources used. For example, two or three government officials from different agencies are quoted in the same story. Although they are from different government agencies, their ideas could be the same as they are representing the government. Hence, these figures suggest the quality of environment coverage for both countries could be argued.

For example, in an article entitled *Flood Protection Discussed*, (8th February 2000) published in the *Otago Daily Time*, the three sources quoted are, in fact, representing the same institution, that is, a government agency. There are some minor arguments among the officials on issues discussed; however, I think the quality of the news could have been heightened if the people of the town of Alexandar were also quoted in the article. Thus, I argue the variety of sources is far more important, than the number of sources used, in order to have different views and open debate.

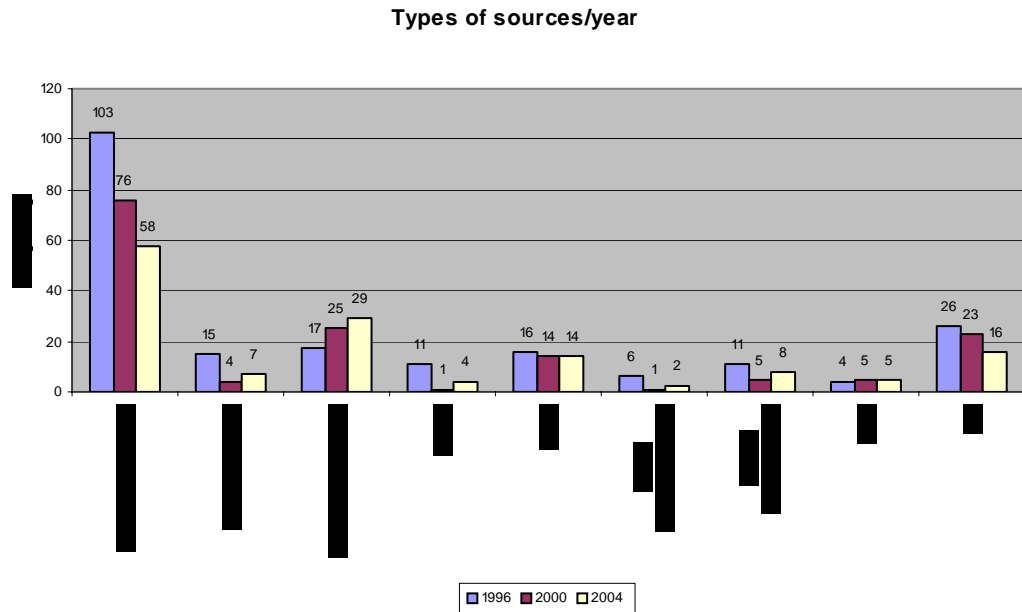


Figure 5.16: The Malaysian types of news sources per year

Figure 5.16 illustrates a significant drop (44 percent) in quotes from Government Officials from 1996 to 2004. The decrease is perhaps due to a drop in environmental coverage at about 30 percent from 1996 to 2004. The use of Environmentalists and Public/Local people also dropped from about 15 to 30 percent. On the other hand, the number of Scientists/Academics quoted increased steadily to approximately 15 percent in 2004.

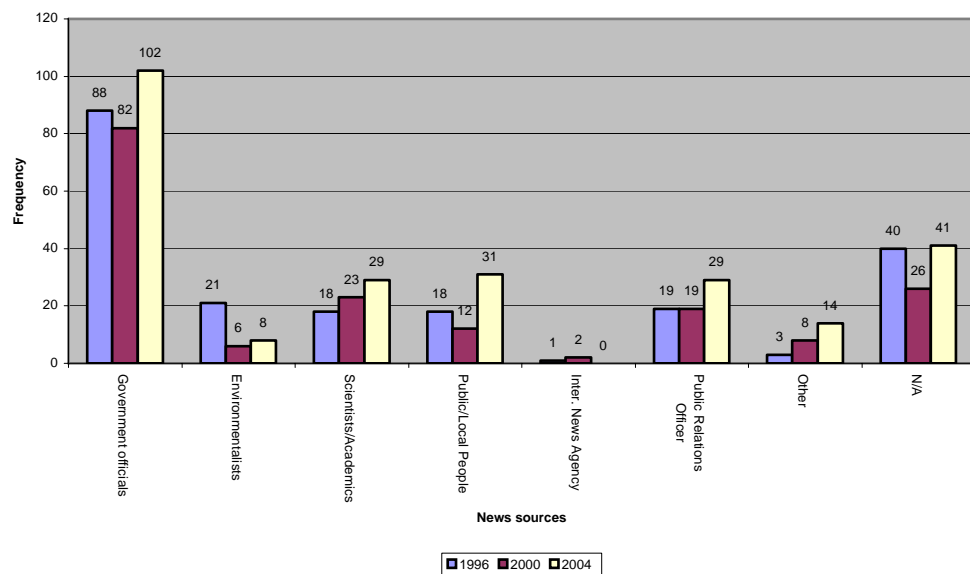


Figure 5.17: The New Zealand types of sources per year

Figure 5.17 illustrates that both Government Officials and Public/Local people have similar sourcing patterns over the years which demonstrates a drop in the number of quotes in 2000 but increases again in 2004. Quotes from Scientists/Academics and Public Relations Officers have steadily increased over the years. Conversely, reference to Environmentalists is decreasing over the years. Taking into consideration the increasing number of single sources used throughout the years, these patterns indicate possibly good signs of making the articles contain more different opinions.

5.3.2 Types of news sources vs. newspapers

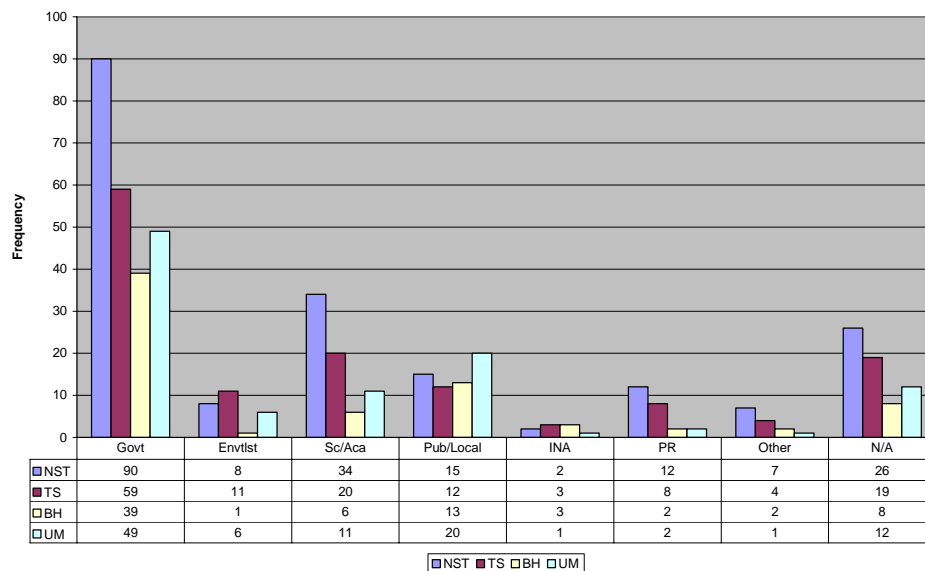


Figure 5.18(a): Types of Malaysian news sources vs. newspapers

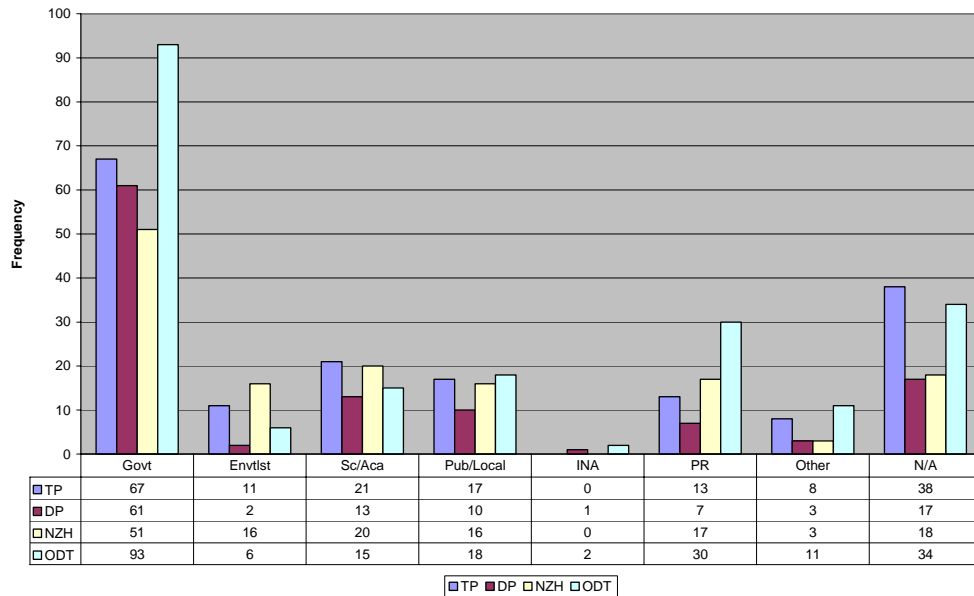


Figure 5.18 (b): Types of New Zealand news sources vs. newspapers

In general, the sourcing patterns for both groups of papers are quite similar with some small differences. For instance, the New Zealand papers prefer to quote Public Relations Officers rather than using the International News Agency (INA) as their environment sources. However, the Malaysian papers have more quotations from the Scientists/Academics and have a slightly higher number of using the INA too. Both groups of papers studied also might see the importance of using the Scientists/Academics and Publics/Local people as sources more than Environmentalists.

Also, the high percentage of “non” sources used in the New Zealand environment articles suggests that more stories based on the experiences and views of journalists are presented in the press as compared to the Malaysian press. Hence, the preference of the papers might be different between the two groups. However, the significant similarity is the high use of government officials as the major sources by all the papers studied.

5.3.3 Number of news sources used and topic correlation

Almost every topic listed with one source has average of about 45 percent to 52 percent of coverage with one source in the Malaysian and New Zealand

press respectively. The correlation between the stories with one source and topic selection for both countries is shown below.

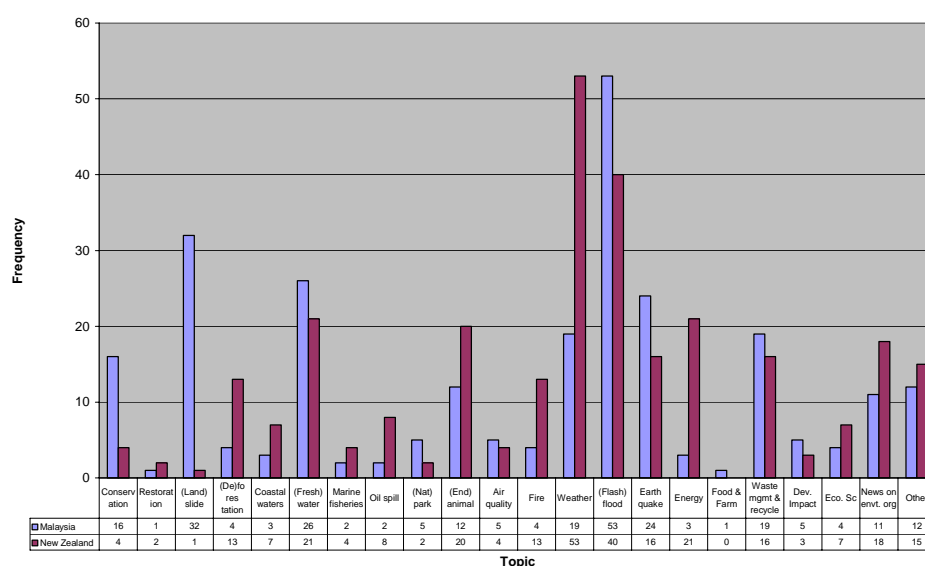


Figure 5.19: Stories printed with one source and topic correlation for both countries

The sourcing patterns are similar in the sense that highest frequency topics have the highest percentage with one news source. The three largest stories¹³ for Malaysia have approximately 55 percent to 57 percent written with one source; while New Zealand¹⁴ has a smaller percentage of 37 percent to 52 percent. Hence, the important environmental topics in the Malaysian press have less support from different views as compared to New Zealand's.

¹³ (Flash)flood with 58 percent, Land(slide) covers at about 55 percent and (Fresh)water make up about 57 percent.

¹⁴ Weather (52 percent), (Flash)flood (40 percent) and (Fresh)water (37 percent).

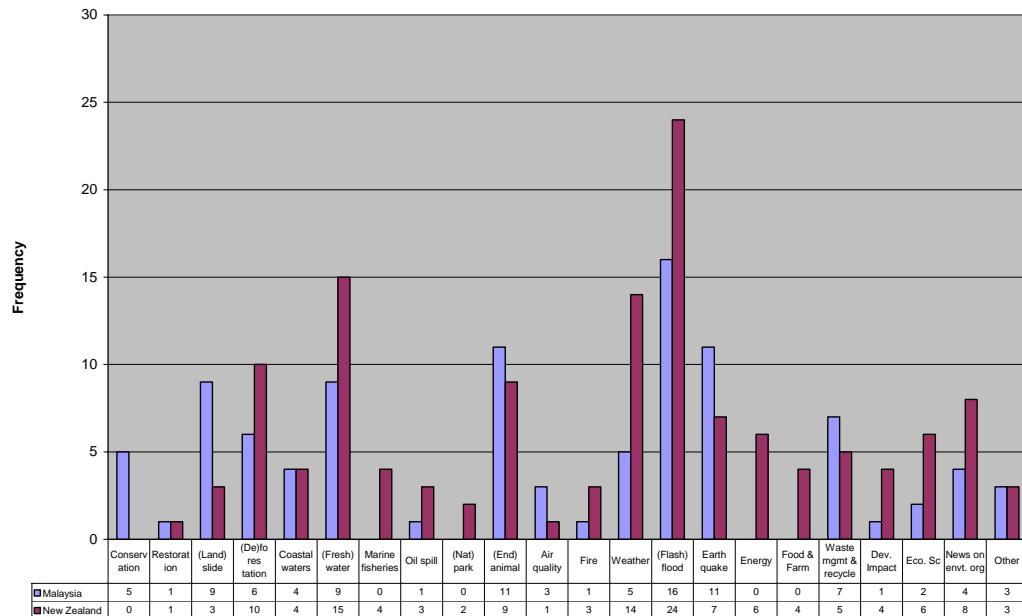


Figure 5.20: Stories printed with two sources and topic correlation for both countries

Figure 5.20 shows different sourcing patterns between the two groups of papers using two sources for the stories. The high percentage of coverage is mostly covered by the smaller number of article topics collected. For example, the percentage of Coastal Waters printed with two sources in the Malaysian press makes up around 44 percent and (Endangered) Animals is about 31 percent. Also, the Malaysian three major topics have percentages between 16 percent and 20 percent only. Similarly, the smaller topics such as (Industrial/Development) Impact and Food and Farming in the New Zealand papers have a bigger percentage of 40 percent and 36 percent respectively.

Although the overall sourcing pattern is slightly different, there are at least three topics with similar patterns namely (De)forestation, (National) Parks, Waste Management and Recycling. These are the biggest topics covered with three and more sources for both countries.

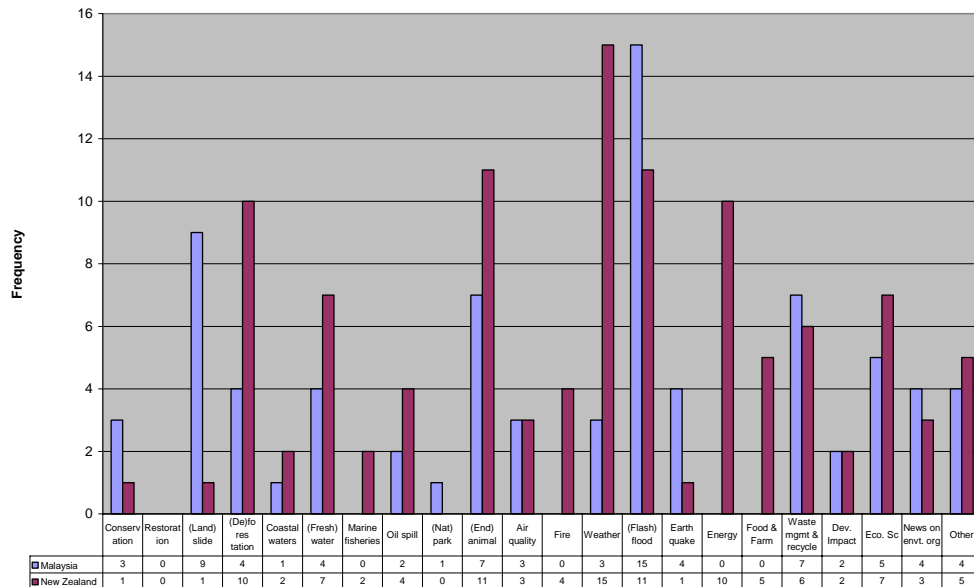


Figure 5.21: Correlation of articles with three and more sources and topics

This correlation is based on article percentages. The New Zealand topics printed account for approximately 43 percent for (National) Parks, (De)forestation (27 percent) and about 13 percent for Waste Management and Recycling. At the same time, both (De)forestation and (National) Parks printed in the Malaysian press have approximately 33 percent and Waste Management and Recycling with 17 percent. Thus, it suggests the three are perhaps important environmental issues in terms of numbers of voices presented.

Table 5.4: The correlation of the three biggest topics and number of sources use for both countries

	Malaysia	NZ	Malaysia	NZ	Malaysia	NZ
	1 st topic		2 nd topic		3 rd topic	
1 source	Flood	Fire	Land(slide)	Weather	(Fresh)water resources & quality	Flood
2 sources	Flood	(Ind/Dev) Impact	(Endangered) animal & Earthquake	Food & Farming	Waste mgmt & recycling	Marine Fisheries
3 & more	Flood	Eco. Sc.	Land(slide)	(Endangered) animals	(Endangered) animals	(De)forestation & Energy

Most of the Malaysian and New Zealand largest topics, such as (Flash)flood, Land(slides) and (Fresh)water and Weather are covered using one source. On the other hand, both sourcing patterns for the use of two sources and more are punctuated between the two countries. Most of the topics with two sources are small topics, except for the Malaysian topic on (Flash)floods. Similarly with Land(slides) in the three sources and more category. Hence, it suggests that the Malaysian and New Zealand major topics might not be that prominent in terms of number of news sources used.

5.3.4 The correlation of number and types of sources

The correlation between the number and type of sources used is examined to identify who dominates what story. In general, all the listed sources have been quoted in stories with one source, except for the use of Public/Locals which also shows a larger number in stories with two and more sources.

Table 5.5: The correlation of number and types of sources

Source	Country	1 source	2 sources	3 & more	N/A
Government Officials	Malaysia	166	42	39	0
	New Zealand	159	58	54	1
Environmentalists	Malaysia	15	6	5	0
	New Zealand	11	13	11	0
Scientist/Academic	Malaysia	38	22	10	1
	New Zealand	39	16	15	0
Public/Local people	Malaysia	21	16	23	0
	New Zealand	21	28	11	1
INA	Malaysia	7	1	1	0
	New Zealand	3	0	0	0
PR	Malaysia	11	7	6	0
	New Zealand	35	16	16	0
Other	Malaysia	5	5	4	0
	New Zealand	17	5	3	0
N/A	Malaysia	0	0	0	65
	New Zealand	1	0	0	106

Table 5.5 shows the dominance of Government Officials in stories with one source in both countries. Similarly, as discussed earlier, the domination of Government Officials is more than half of environment coverage per year for each country. However, it must be noted that this group of sources also make

big coverage in stories with two and more sources. The numbers are similar in both countries.

Another very similar pattern to Government Officials is the use of Scientists/Academics as in the three categories. This group are also the second largest to be quoted in stories with one source for both countries. However, the third largest source for Malaysia is Public/Local people; while for New Zealand it is Scientists/Academics. Hence, the sourcing patterns for both countries are quite similar to each other.

5.3.5 The main news sources

In general, the patterns for both countries have some similarities, for example in the number of sources used. However, the use of Public Relations Officers shows significant difference with a high frequency of use by the New Zealand press.

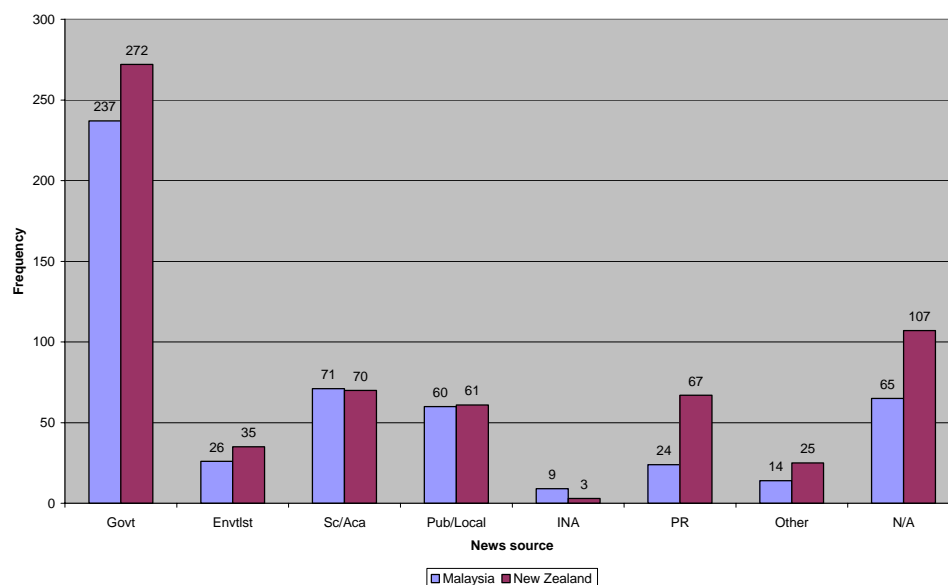


Figure 5.22: A comparison of main news sources

Both countries also have a big gap between the use of Government Officials and other sources suggesting the high dependency on Government Officials by both the Malaysian and New Zealand press. This pattern is perhaps due to the idea that ordinary people do not have the authority to validate facts as sources

representing government bureaucracies and corporations have more impact on what becomes news than ordinary citizens. Many studies on news sources used in environmental issues also conclude that reporters limit their choice of sources and choose governmental sources over any other. Among the explanations for this dependence on official sources are their political and economic prominence, accessibility, credibility and deadline pressure (Nelkin 1987).

Table 5.6: The use of the three main sources per year

	Country	1996	%	2000	%	2004	%
1 st source	Malaysia	Govt. Officials	49.2	Govt. Officials	49.4	Govt. Officials	40.5
	New Zealand	Govt. Officials	42.3	Govt. Officials	46.1	Govt. Officials	40.2
2 nd source	Malaysia	Public/Local people	12.9	Scientists/Academics	16.2	Scientists/Academics	20.3
	New Zealand	Environmentalists	10.1	Scientists/Academics	11.8	PR	11.4
3 rd source	Malaysia	Scientists/Academics	8.3	Publics/ Local people	9.7	Publics/ Local people	19.5
	New Zealand	PR	9.1	PR	10.7	Scientists/Academics	11.4

Table 5.6 demonstrates the control of government officials as the main source for year of study in both countries. Both main source trends are similar with an increase in percentage in 2000 and a drop in 2004. However, a big drop in a percentage use of government officials in 2004 might reflect a good sign of using other voices in the reporting. This can be shown in the increase in the number of Scientists/Academics as the second and third source in 2004 with about 20 percent and 11 percent respectively.

The overall sourcing pattern has a small difference as the Malaysian press has more quotes from the Scientists/Academics and Public/Local people. Although, the New Zealand press has made some use of Scientists/Academics, the Environmentalists and Public Relations Officers are quite in demand as well.

5.3.6 Subsidiary sources

The analysis of subsidiary sources looks at stories with two and more sources only. For this study, two subsidiary sources will be observed to see the pattern of sources used.

Table 5.7: A comparison of subsidiary sources

	Country	1st	%	2nd	%	3rd	%
Sub-source 1	Malaysia	Govt. Officials	12.8	Public/Local people	6.1	Scientists/Academics	5.9
	New Zealand	Govt. Officials	16.6	Public/Local people	5.5	Scientists/Academics	5.1
Sub-source 2	Malaysia	Govt. Officials	5.1	Public/Local people	4.3	Scientists/Academics	2.8
	New Zealand	Govt. Officials	7.3	Scientists/Academics	2.3	Environmentalists	1.9

In general, both countries have a similar pattern of secondary sources used in environment reporting as shown on Table 5.7 above. However, the sourcing pattern for the third source is slightly different with Public/Locals as the choice for the Malaysian press; while the New Zealand press prefers the Environmentalists.

In conclusion, the Government Officials dominate the stories as the main sources and also as the subsidiary sources in both countries. This confirms the findings that there is very small variation in the use of sources in the reporting of the environment.

5.3.7 News sources involvement in the environmental news

Roughly, both countries have similar patterns of source involvement in environment reporting. However, the New Zealand sources acted more as Representatives and Groups of people/individuals as compared to Malaysian sources

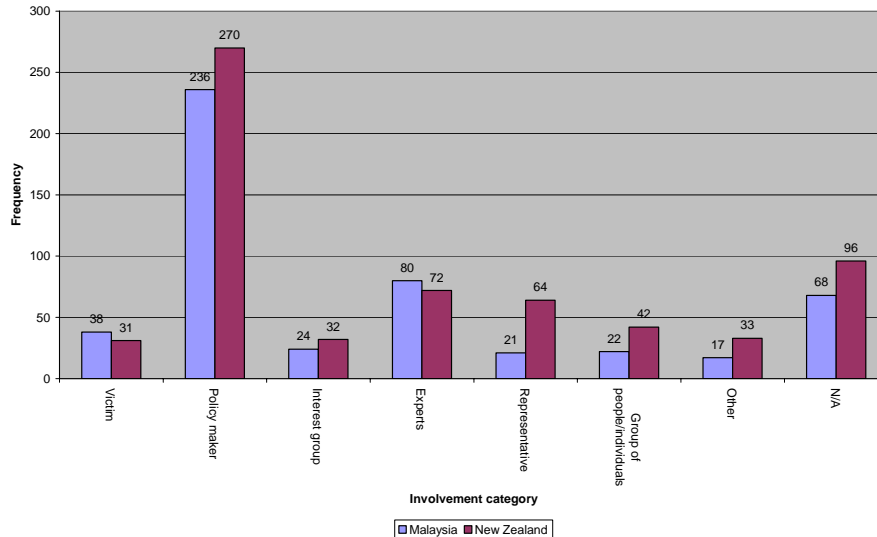


Figure 5.23: Types of involvement among the news sources

In order to observe which sources fall under these categories, I summarize the correlation as in Table 5.8 below.

Table 5.8: News sources roles as informants

		Victim	Policy maker	Interest group	Expert	Reps.	Group of ppl	Other	N/A
Govt	Malaysia		231		5				
	NZ		270		2				
Sc/Aca	Malaysia				71			3	
	NZ				70				
PR	Malaysia		1	1		21			
	NZ					64			
Pub/Loc	Malaysia	38	2				22		
	NZ	31					25		
Env.	Malaysia			23	3				
	NZ			32			3		
INA	Malaysia							9	
	NZ							14	
Other	Malaysia							1	10
	NZ							25	
N/A	Malaysia							7	58
	NZ								96

For this study, I categorize the type of involvement into seven sections: Victim, Policy Maker, Interest Group, Expert, Representative, Group of people/Individual, Other and N/A. The breakdown of the categories is described below.

Basically, the sourcing pattern is pretty much similar between the two countries. Based on Table 5.8, it can be concluded that almost half of the

environment coverage is written based on the stories of policy makers. It also reflects that the government officials act as policy makers when giving information to the press, although they also act as experts in a small number of stories.

The roles of other sources seem to be self-contained, with small numbers acting in different roles in giving information to the press. However, for the public and local people group, they have a different involvement in the environment issues, which are as the victims and also as a group of people commenting on the issues. In short, the environmental news content might be written more on policies or actions towards the issues based on a high amount of quotes from the policy makers.

5.3.8 The three main news sources quoted in a range of topics

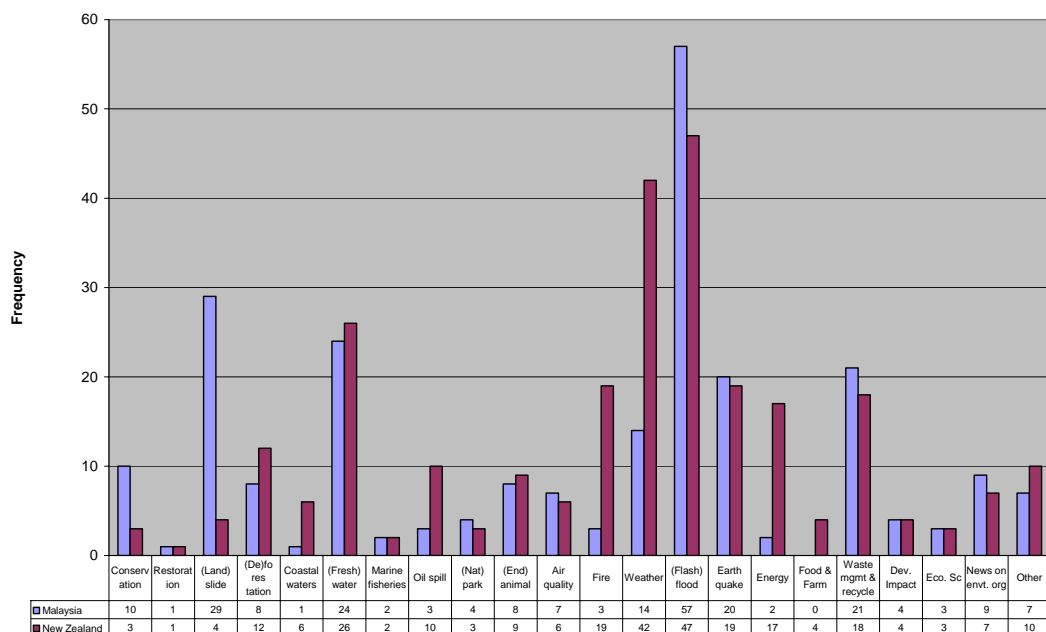


Figure 5.24: Government officials in a range of topics

In general, government officials have, at least, been quoted once in the topics listed. The sourcing pattern by Government Officials reflects the topic selection pattern as shown in Table 5.1. It shows a high amount of quotes from Government Officials in the major topics of coverage. For example, Malaysia

has a large coverage of Land(slide) which also uses a large amount of quotes from Government Officials. The same news sources are also highly used in the news on Fire by the New Zealand press. Based on this correlation, it can be concluded that the dependency on government officials as environment informants is because they are obliged to explain what happened and what actions should be taken to counter the problems. The dependency for both countries is quite overwhelming.

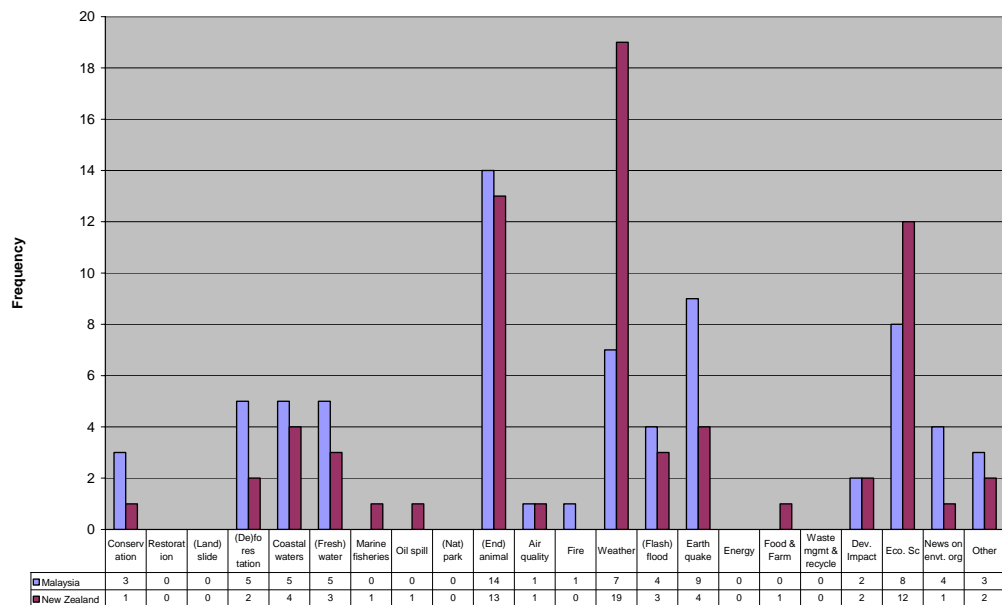


Figure 5.25: Scientists/Academics in a range of topics

The New Zealand press has wider range of topics with a greater amount of quotes from Scientists/Academics than for Malaysia. These sources are the second largest and they are quoted in specific topics only such as (Endangered) Animals, Ecological Science and (De)forestation. These topics, however, are not major topics for both countries. This is, perhaps, due to their expertise in certain scales of particular issues. In short, Scientists/Academics have largest number of quotes but they are not as prominent as government officials. The reasons for this sourcing pattern by this group will be explored further at the interviews stage.

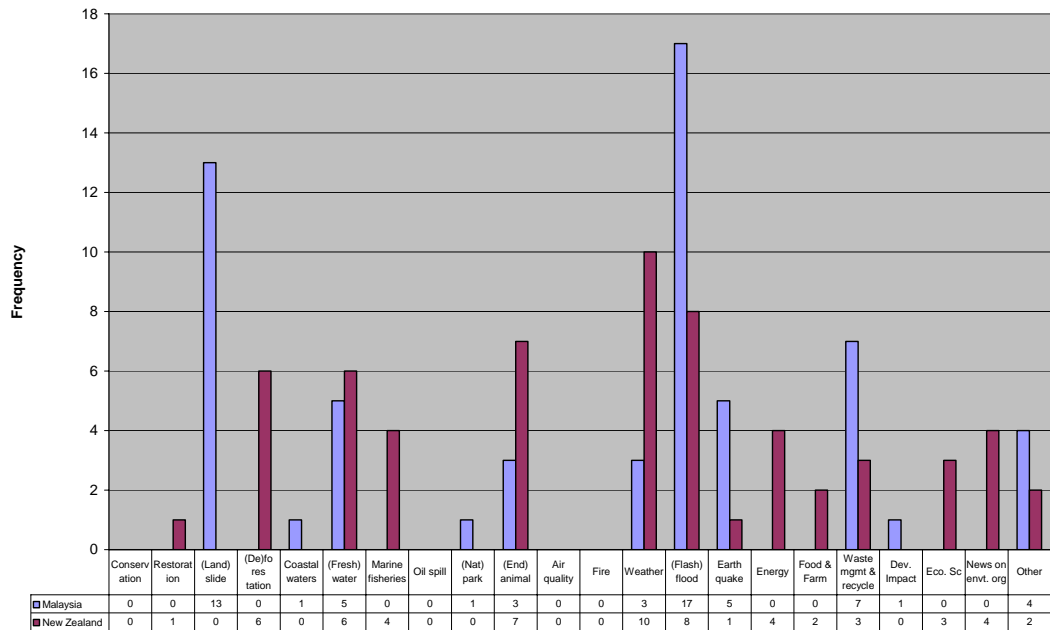


Figure 5.26: Public/Local people in a range of topics

Public/Local people have a high amount of coverage in the Malaysian press and Figure 5.26 shows that the use of Public/Local people focuses on 11 particular topics only such as (Fresh)water and Land(slide). These are mostly event stories. On the other hand, the New Zealand press quotes the Public/Local people in a variety of topics as shown above.

The Public/Local people have a small tendency to frame the news because their information is used as the basis for the foundation of the stories. Thus, they have less power to tell what is to be done about the problems or on what are their future plans.

These patterns suggest the involvement of the public in a variety of environmental issues in New Zealand as compared to Malaysia. Another possible reason is perhaps the Malaysian press might not prefer to quote this group of people in their reports. This will be examined in the in-depth interviews.

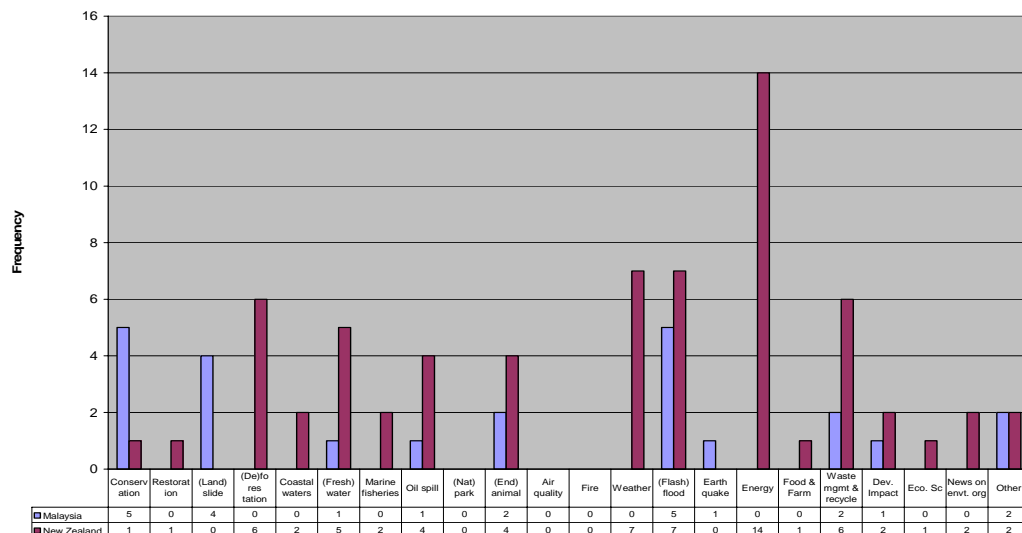


Figure 5.27: Public relations officers in a range of topics

Public Relations Officers are quoted in almost all the topics listed which suggest that they are quite important sources for the New Zealand papers. Figure 5.27 illustrates that the Malaysian papers have this type of source quoted in both event and monitoring stories. For example, in (Flash)flood and Conservation stories. However, in the New Zealand press, they are mostly used in monitoring stories such as Energy, Waste Management and Recycling and (De)forestation, although there is some coverage made for event stories like Weather and (Flash)floods. In summary, the journalists in both countries see the importance of Public Relations Officers in the different way in their reporting.

Based on the three sourcing patterns, it can be concluded that the environmental coverage is mainly presented using one source and there is a small variation of stories which use two or more sources.

5.4 Topic selection

5.4.1 Comparison of the overall distribution of topics

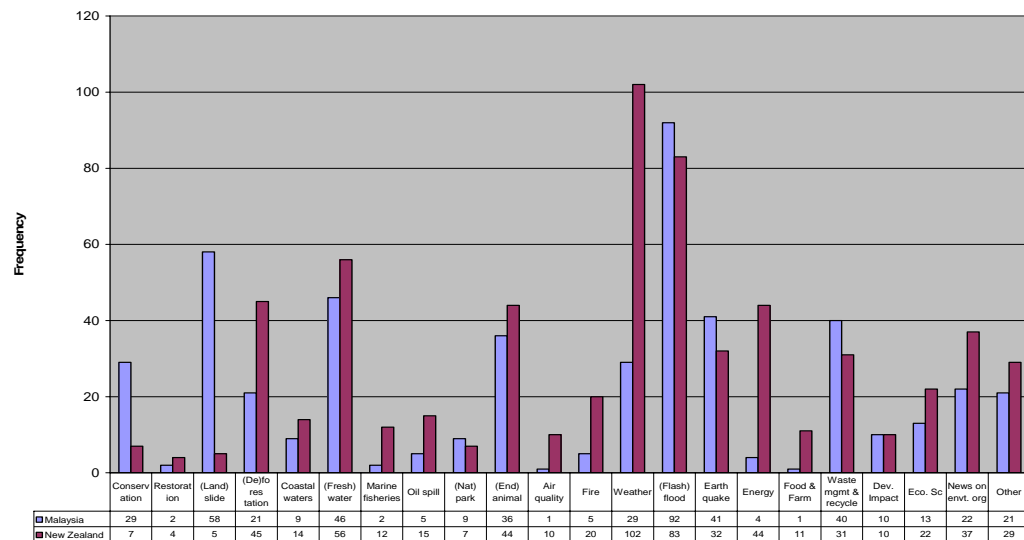


Figure 5.28: The comparison of all distribution of topics

Figure 5.28 clearly shows that both countries have different numbers of articles in the topic distribution. The possible reason is that this pattern is moulded according to public concern. However, those types of stories are not necessarily event stories; for example, stories on Energy have big coverage in New Zealand due to the disagreement over building the Aqua dam. Similarly, the topic on (Endangered) Animals which has been given quite a wide coverage in both the Malaysian and New Zealand press, talks about the possibility of the extinction of animals in both countries. Thus, this pattern suggests that the press views on environmental problems might be different for both countries.

However, there are some similarities in the topic patterns such as in (Fresh)water, (Endangered) Animal, (Flash)flood, Earthquake, (National) Park and Waste Management and Recycling. As the first three topics are mostly national environmental concerns. It can be theorized that perhaps Malaysia and New Zealand might be facing quite similar environmental problems.

On the other hand, although Malaysia is not facing the Earthquake problem, the large number of reports on Earthquakes in the New Zealand press shows that a global environmental disaster also could attract press attention. It could also mean that the environment must have a big impact on people in order to be considered to have news value and to appear in the papers.

Besides the six topics mentioned above, the rest of the topics have different patterns. In order to see the frequency of coverage in more detail, I summarize the distribution of topics as below.

Table 5.9: Summary of topics printed

Frequency of coverage	Malaysian topics	Frequency	%	New Zealand topics	Frequency	%
40 and above	(Flash)flood	92	18.2	Weather	102	15.9
	Land(slide)	58	11.5	(Flash)flood	83	13.0
	(Fresh)water	46	9.1	(Fresh)water resources	56	8.8
	Earthquake	41	8.1	(De)forestation	45	7.0
	Waste mgmt & recycling	40	7.9	(Endangered) animal	44	6.9
				Energy	44	6.9
Between 10 and 39	(Endangered) animals	36	7.1	News on env. org/envtlst	37	5.8
	Weather	29	5.7	Earthquake	32	5.0
	Conservation	29	5.7	Waste mgmt & recycling	31	4.8
	News on envt. org./envt	22	4.3	Other	28	4.4
	(De)forestation	21	4.2	Ecological sc.	22	3.4
	Other	21	4.2	Fire	20	3.1
	Ecological Sc.	13	2.6	Oil Spill	15	2.3
	Air quality	11	2.2	Coastal waters	14	2.2
	(Ind/Dev) impact	10	2.0	Marine fisheries	12	1.9
				Food & farming	11	1.7
				(Ind/Dev) impact	10	1.6
				Air quality	10	1.6
Below 10	Coastal waters	9	1.8	Conservation	7	1.1
	(National) park	9	1.8	(National) park	7	1.1
	Oil spill	5	1.0	(Land)slide	5	0.8
	Fire	5	1.0	Restoration	4	0.6
	Energy	5	0.8			
	Restoration	2	0.4			
	Marine	2	0.4			

	fisheries					
	Food & farming	2	0.4			
Total		506	100.0		640	100.0

Table 5.10: Topics categorization

Category	Topic	Malaysian coverage	New Zealand coverage
Natural disaster	Weather, (Flash)flood, Earthquake, Land(slide) and Fire	225	222
Pollution	Air (quality)	11	10
Water resources management	Energy, (Fresh)water resources	51	100
Human intervention	Oil spill, (Industrial/Development) impact to the environment	15	15
Forestry, wildlife & protected areas	(De)forestation, (National) park and (Endangered) animal	50	96
Marine & coastal areas	Coastal waters, Marine fisheries	11	26
Sanitation & waste management	Waste management and recycling	40	31
Agricultural	Food and farming	2	11
Science-environmental related news	Ecological science	13	22
Preservation/Protection	Conservation and Restoration	31	11
Other	News on environmental organizations/environmentalists	43	65

Based on Table 5.10, it can be concluded that the three main environmental categories reported by the Malaysian and New Zealand press are on Natural Disasters, Water Resources Management and Forestry, Wildlife and Protected Areas.

The least category covered by the Malaysian press is Agricultural; while New Zealand printed only 10 articles on Pollution. In short, both countries might see the same types of environmental issues as important issues to be presented to public. Another possibility is that perhaps both countries are facing similar environmental problems.

In conclusion, the above figures suggest that the topics are not constant because, I suspect, they are covered as event stories. This means the reports are dependant on the occurrences of the events. Therefore, the figures could also give indications that some stories might have happened frequently or perhaps have reduced in frequency. Below is the topic analysis for each year.

5.4.2 The distribution of sub-topics selection

The subsidiary topics are divided into two groups: secondary and tertiary topics – which are an extension to the main topic. As a whole, the New Zealand environment issues might have bigger potential to be linked with other issues as about 86 percent of the stories have a secondary topic extension; with another 22 percent written with three interrelated topics.

A somewhat smaller percentage of approximately 70 percent of the Malaysian environment stories were covered with a second topic extension. For about 16 percent of this figure, the stories have third topics extension. Hence, it suggests that mainly the environmental issues might have only one interrelated issue attached to it. The summary of the analysis of subsidiary topics for the main topics for both countries as discussed earlier is shown below:

Table 5.11: A comparison of subsidiary topics for both countries

	Country	Primary topic	Secondary topic	Frequency	Tertiary topic	Frequency
Primary topic 1	Malaysia	(Flash)flood	(Flash)flood	19	Weather	17
	NZ	Weather	(Flash)flood	28	None	61
Primary topic 2	Malaysia	Land(slide)	(Flash)flood	15	(De)forestation	8
	NZ	(Flash)flood	Weather	21	None	50
Primary topic 3	Malaysia	(Fresh)water	(Fresh)water	10	(Fresh)water	8
	NZ	(Fresh)water	(Fresh)water	15	Other	32

Table 5.11 suggests a few strong connections among the variables. For example, the Malaysian topics show strong connections among the three major topics – (Flash)flood, Land(slide) and (Fresh)water.

The New Zealand press shows strong relations between Weather and (Flash)flood stories. Stories on (Fresh)water resources, however, are covered

with similar issues related to it. The high percentage with small third topic coverage also shows that the New Zealand press might concentrate only closely related issues to the main topics. The above stories are mostly event stories. Therefore, the environment stories web could be said to be linked closely among the cause and effect environmental issues.

5.4.3 Brief analysis of the relationship between topics and other variables

i. Length of topics coverage

The environmental coverage for both countries is relatively small. Most prominent topics covered with big pages are Energy by the New Zealand press and (Endangered) Animals by the Malaysian press. However, both topics have small numbers of coverage, whereby Energy was only printed in about 44 articles and 36 stories were written about (Endangered) Animals.

In general, topics with big coverage such as (Flash)floods and (Fresh)water are written in a smaller space as compared to the coverage of a smaller number of articles coverage. This pattern is similar for both groups of press. The summary of all topics covered and the variation of length are as shown below

Table 5.12: The distribution of topics at variation of length

		49cm2- 199cm2	200cm2- 499cm2	500cm2- 799cm2	Full page coverage
Conservation	Malaysia	13	6	5	5
	NZ	5	1	1	0
Restoration	Malaysia	1	0	0	0
	NZ	2	1	1	0
Land(slide)	Malaysia	31	11	8	8
	NZ	3	2	0	0
(De)forestation	Malaysia	6	13	2	0
	NZ	19	15	7	4
Coastal waters	Malaysia	2	5	2	0
	NZ	5	5	3	1
(Fresh) water resources	Malaysia	29	11	2	4
	NZ	38	10	6	2
Marine fisheries	Malaysia	1	1	0	0
	NZ	8	2	1	1

Oil spill	Malaysia	3	1	1	0
	NZ	11	3	1	0
(National) park	Malaysia	7	1	1	0
	NZ	3	1	2	1
(Endangered) animals	Malaysia	14	16	5	1
	NZ	19	18	4	4
Air quality	Malaysia	6	5	0	0
	NZ	7	2	1	0
Fire	Malaysia				
	NZ	16	3	1	0
Weather	Malaysia				
	NZ	73	25	3	1
(Flash)flood	Malaysia	61	27	4	0
	NZ	57	22	4	0
Earthquake	Malaysia	32	6	2	1
	NZ	29	3	0	0
Energy	Malaysia	4	0	0	0
	NZ	18	15	8	8
Food & farming	Malaysia	1	0	0	0
	NZ	5	2	2	0
Waste mgmt & recycling	Malaysia	21	14	3	2
	NZ	23	6	1	1
(Ind/Dev) impact	Malaysia	6	3	0	1
	NZ	7	3	0	0
Ecological science	Malaysia	3	4	5	1
	NZ	7	9	5	1
News on env. org/envtlist	Malaysia	13	8	0	1
	NZ	17	10	5	6
Other	Malaysia	12	6	2	0
	NZ	12	9	4	0

ii. Focus of topics

There are 16 types of focus used for this study and in order to provide the readers with a better understanding for the readers; all the types are placed into six categories namely Environmental Protection, Action, Accomplishment, Human involvement, Controversial and General (see Table 5.13). The summary of the topic frames for both countries are as shown below:

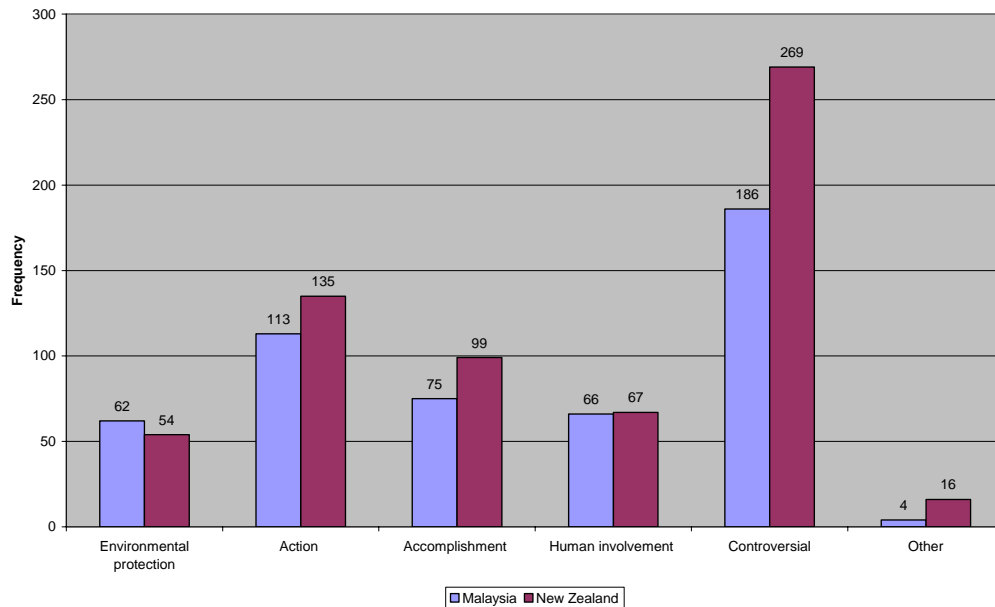


Figure 5.29: A comparison of topics focus

Figure 5.29 shows that both countries have similar focus patterns with the largest environmental frame being controversial stories. The gap among the variables is also similar to the research done in the US that the environment is similarly framed as controversial.

As the second biggest frame is on Action, it can be said that the connection between the two could possibly be action taken after the controversial events. In the meantime, the Malaysian press has another three areas of focus of coverage, which are Accomplishment, Human Involvement and Environmental Protection, at about similar amounts. In contrast, the New Zealand press focuses more on Accomplishment than the other two variables.

The analysis below is extracted from the analysis done on the Malaysian articles and New Zealand articles. This analysis is summarized to observe the similarities and differences in the topics categorized in those frames.

Table 5.13: Focus categorization between the Malaysian press and New Zealand press

		Malaysia (Frequency)	New Zealand (Frequency)
Environmental protection	Conservation	58	47
	Restoration	4	7
Action	Policies	24	13
	Actions	64	90
	Salvation attempts	24	33
Accomplishment	Discovery	39	49
	Achievements	2	4
	Fundraising	7	5
	Activities	3	7
	Research	20	21
	Development	8	13
Human involvement	Individual behaviour	19	12
	Local story	47	55
Controversial	Ecological disaster	65	86
	(Counter)claim	56	64
	Serious incidents	44	30
	Conflict	10	44
	Negative impact	8	22
	Controversy	0	23
General	Other	4	15

Based on Table 5.13, it is clearly shown that both countries present almost similar patterns with a high focus on Actions and Controversial modes. In fact, both countries also have a similar amount of coverage in some of the focus topics, such as Individual Behavior and Local Story. Therefore, the environment is possibly preferred to be presented in certain moulds for public consumption.

iii. Topics appearing on the front page

Looking at news prominence in terms of front page coverage, it is proposed that the environment news for both countries is not considered prominent as only four percent of the coverage for each country is printed on the first page. There are only five topics printed on the front page in the Malaysian press.

The number is doubled in the New Zealand press. Those stories are summarized as below.

Table 5.14: A comparison of stories printed on the front page

	Malaysia	%	New Zealand	%
Coastal waters	0	0	2	25.0
(Endangered) animals	1	2.7	5	33.3
Air quality	0	0	1	25.0
Fire	0	0	1	14.3
Weather	0	0	5	17.9
(Flash)flood	2	2.2	3	10.00
Earthquake	2	4.9	2	18.2
Waste mgmt & recycling	5	12.5	2	33.3
Ecological science	0	0	1	11.1
News on envrnmt org/envtlst	0	0	1	6.7
(Fresh)water	1	2.2	0	0
Land(slide)	10	17.2	0	0

The percentage is calculated based on each topic percentage. Both countries have similarity in printing Waste Management and Recycling as the largest topic on the front page, which is about 13 percent for Malaysia and around 33 percent for New Zealand. With the same percentage, the New Zealand press also has a high coverage of (Endangered) Animals. Most stories listed in Table 5.14 have small overall coverage except for (Flash)flood and (Fresh)water, however, the frequencies printed on the front page are relatively small.

As a whole, I conclude that both countries have more or less similar patterns and trends of environmental reporting. The analysis also suggests that the environment is not seen as a prominent topic in both countries and is mostly reported as conflict.

Chapter 6

A Comparative Analysis of Malaysian and New Zealand In-depth Interviews

This chapter discusses the interview findings for both countries. The interviews aimed to explore the perspectives of the respondents and to examine similarities and differences between the two countries in terms of the possible forces affecting environmental news reporting such as the influence of journalistic norms, news sources and newsroom culture. All interviews were based on semi-structured questions illustrated in Chapter 4. It is important to observe the emerged pattern of answers from the interviews in order to help me to nail down the most likely forces affecting the environmental news representation of both countries. This chapter will be discussed in three parts: (i) introduction, (ii) forces affecting environmental news and; (iii) conclusion.

6.1 Introduction

This small section talks about the respondents' background, their relationships, ways to communicate information about the environment and their views on environmental coverage in order to give ideas to their readers on how the respondents could possibly draw their answers based on their backgrounds. As a whole, there were 40 respondents interviewed as detailed in Chapter 4. There were eight journalists interviewed for each country. The difference in the representation of journalist respondents is that Malaysia is represented by four environmental journalists; while only two New Zealand journalists specialized on the environment. The other three Malaysian journalists were specialized in science writing and one was a general desk journalist. Meanwhile, three of the New Zealand journalists were science/health reporters with some experiences of writing on science and environmental related issues; and the rest were general desk journalists. However, this is not a major problem as some of New Zealand's non-environmental journalists also write on science–environmental related issues from time to time. As the number of environmental journalists was quite small for

this study, I had to guide the respondents to focus only on their environmental writing experiences, in order to get accurate findings.

Another difference is the amount of working experience each of the journalists had. All the Malaysian journalists have ten or more years of experience, except for one person who had just practiced journalism for six months. On average, most New Zealand journalists have been working for six years. In particular, one respondent had 35 years of journalism experience and has been writing on environmental issues extensively for nearly two decades; whereas the others have six months to nine years experience writing on the environment. With reference to their educational background, half of the Malaysian respondents are science graduates and three have mass communication degrees. Conversely, only one New Zealand journalist has a science degree, another five are mass communication graduates and two are without any paper qualifications.

In this study, the responses of the New Zealand journalists towards the possible factors influential on news reporting were far different from that of the Malaysians. New Zealand journalists stated that they had not faced many serious constraints in reporting environmental news, just a few minor problems that they believed they could overcome. The limitations were also discussed in brief, reflecting that they were not pressured so much by the constraints. Most respondents also believed some constraints could be overcome if they knew how to handle the situation. On the other hand, the Malaysian respondents informed of their many unpleasant experiences – such as the lack of cooperation from news sources and also editorial pressures – in getting their work done.

The Government Officials

Altogether, I interviewed six government officials from the environmental government agencies. All of them have substantial years of more than 15 years experience in dealing with environmental issues. Both groups of respondents communicate on environmental issues with media people through press releases and sometimes by conducting press conferences. In general, the New Zealand officials believed they have a good relationship with the media people; and the newspaper coverage of environmental news is “ok”. They also thought that the

New Zealand journalists have done “an average” job so far. Some could be very good, they confirmed, depending upon their knowledge, working experience and interest to write the stories. However, they trusted there was still room for improvement and the practices of the journalists could be the most likely possible reason to limit their own writing.

In order to be transparent, the New Zealand government officials also initiated discussion from time to time with media people with the aim of building good contacts and trust; to stimulate media interest; and to brief the media on general and specific matters to do with environmental issues. In addition, the senior government officers have also had media training so all were able to interact with the media people. Similarly, the media people also have the chance to express their suggestions on environmental reporting. They believe this two-way communication has been successful throughout the years.

Malaysian officials also meet up with the media people but not on a regular basis. However, they did not mention if the meetings were held only when environmental tragedies happened. They also described their relationship with the media people as “professional”, a view also shared by the Malaysian journalists.

The Scientists/Academics

The scientist/academic respondents chosen from both countries are academic researchers in the environment-science related field. Most of them have more than 15 years of experience in the field and have some experience in dealing with media people for their research projects or on environment/science issues. The New Zealand scientists/academics who participated in the interviews were experts in environmental law, bio-physics and environmental sciences and one of them was also a former environmental judge in Hamilton. The three Malaysian scientists/academics were a botanist, a biotechnologist and an environmental ethicist, all from the public universities and they were familiar faces among the journalists.

In general, all respondents argued the environmental coverage was “less than average”; no follow up stories covered and mostly presented in a negative manner; while journalists were not interested in the issues and were said to be lazy to investigate the issues for public debate. In particular, the New Zealand respondents were in agreement that newspaper coverage on environmental issues was “reasonable” but occasionally can be unpleasant because many times the newspapers focused too much on the negative environmental stories. They expressed their dissatisfaction with the news pattern as the environment was not only about tragedy. However, the Malaysian respondents agreed that environmental coverage has been improving in terms of number and variation of issues published, and the press has been quite balanced in their reports so far. They argued that the quality is better now than before.

Although the New Zealand scientist/academic respondents believed environmental coverage was a bit poor, they claimed their relationship with journalists and editors was good. From time to time, they would communicate with the press on their research findings, through the university public relations personnel. The university’s public relations personnel will re-write their research findings to suit the newspaper contents; also producing press releases for the scientists/academics. However, not very much of their research findings have been printed and in most cases the media people would rewrite again to suit the press requirements. Sometimes the contents were misleading, but most of the time the stories were over-simplified. However, there were no very serious cases, they confirmed.

Similarly, Malaysian scientists/academics also communicate to the media people via press releases and sometimes through press conferences. They confirmed that so far the press made note of their opinions, although they found sometimes the content of the subsequent reports was misleading. Despite all this, some Malaysian respondents claimed they have built some good contacts with the journalists over the years.

The Environmentalists

Altogether there were six environmentalists interviewed who were attached with local or international based non-governmental organizations. The three New Zealand respondents were working with local based non-governmental organizations (NGOs), which in general were looking after the New Zealand environmental protection. Their working experiences ranged from six months to three years. Nevertheless, they have quite a number of experiences talking to media people for news. The three Malaysian environmentalists have at least 10 to 35 years of conservation experience in Malaysia.

As a whole, both groups of respondents thought environmental coverage was just “fair but not good”. At times they also sensed that journalists would try to avoid them, perhaps because journalists were not well-versed about their roles. However, they were quite happy working with the media people. Although they could not confirm whether they have a good relationship with the journalists, they believed journalists were “quite supportive” of environmental movements. The only thing they suggested was journalists should work harder to “search” for news because as one person said “there are so many environmental issues that should be highlighted, not only the current ones”.

They also shared the same method of communication, such as press releases and press conferences, to reach the media people. Most of them communicate their projects with the media by press releases. However, not many of the press releases have been published and most of the time the releases would have angles rewritten by the media for printing. In other words, they found it quite hard to make contact with and to get their statements out to the press.

Most respondents disclosed some difficulties in getting their stories printed, although they have known some media people for quite some time. This confirms the result of the literature reviewed in Chapter 3 that journalists do not favour to quote environmentalists as they are believed to be only promoting their own interests (Jung-Hye, 1999; Dunwoody & Griffin 1993; McDonald 1993; Greenberg eds., 1989; Lowe & Morrison 1984). Both groups also refused to clarify their relationship with the media; the New Zealand respondents just

described the journalists as “quite supportive”; while seeing the environmental reporting as “fair but not good”. The Malaysian respondents think their relationship is, as I summarize, “average” and the environmental coverage is “less than mediocre”. Above all, environmentalists commented on the small amount of coverage of environmental news in the mainstream newspapers which is probably due to the inconsiderate attitudes of media people towards environmental reporting and the thinking that environmentalists want to project their so-called hidden agenda.

The public relations officers

The six public relations officers interviewed were from local and international corporations. The Malaysian respondents were represented by three corporate sectors: an international oil company based in Malaysia, a company involving in building of a hydroelectric dam and the last group of persons were from a water management company. The latter two organizations are local companies. There were three public relations officers representing three New Zealand major corporate sectors in energy and transportation fields who participated in the interviews. They have been serving their organizations for an average of seven years; however, two respondents have more than 20 years working experience as journalists before they took up jobs as spokespersons for the companies.

Between the two, the New Zealand public relations officers were more eager to participate in and very cooperative during the interviews. On the other hand, the Malaysian respondents had turned down my requests a few times before finally they agreed to have group interviews because some of them were reluctant to have one to one interviews. They were also too careful with their answers perhaps to protect the image of their companies.

Both groups communicate their company and project development information to the media through two similar methods: (i) press releases and (ii) press conferences. In much previous research, it was found that the media printed 60 to 85 percent of press releases from public relations departments over other news sources’ (Ginneken 1998), probably due to tight deadlines. However, my findings were otherwise. Public relations persons claimed it was hard to get press releases

printed and normally they would use a press conference as a tool to reach the media. Therefore, the New Zealand respondents explained some comprehensive approaches such as ongoing programmes, media briefings and casual meetings in order to make sure the media people are fully aware of their operation. In addition, if any serious matters arose they have similar techniques to communicate with media people, again such as by sending press releases, conducting ongoing programmes, media briefings and sometimes organizing press conferences.

They considered their relationship with journalists as “good” because, as one person claimed, “they need each other”. The only concern they have was that journalists should have a better understanding in two aspects: business and environment, before they should write on environmental aspects arising from project development. They strongly believed this was important as misleading content could have a great impact in public debate on their companies. The New Zealand public relations staff perceived the environmental coverage as just “middling”, while the Malaysian respondents think “there is still room for improvement”. The two groups also stressed one similar point, that is, newspapers should not always cover controversial stories because it might not be fair for the companies.

6.2 Forces affecting Environmental Reporting

6.2.1 Journalists’ lack of knowledge and command of language

In general, journalists are short of knowledge on environmental issues. This is probably due to perhaps they are not interested in the topic, usually do not do their homework or maybe they are simply general desk journalists who have to know a little bit of everything. As a result, they became experts in nothing and consequently they frame environmental news as to what they understand which sometimes could misdirect the content. Hence, knowledge is important for journalists to recognize and to understand the issues. One Malaysian governmental official responded:

I think the biggest constraint is ... the lack of knowledge. If you don't really know what is an environmental issue, it doesn't get reported in the first place. That takes a long learning process to realize that...recognizing environmental issues is important...

Unable to identify the issue would lead journalists to other constraints such as finding the right sources and writing the stories. Generally, environmental stories were written as “news” not as an issue to educate the public, she thought. As a result, stories were not written in an investigative manner, which is reflected in the content analysis findings as discussed in Chapter 5.

The Malaysian environmentalists also speculated that the lack of knowledge and interest in the issues by journalists were major problems to such a coverage pattern. However, other Malaysian respondents thought it was just the lack of ability to write good articles as they believed writing was a problem with most employees, not only for journalists. One respondent explained that “...it is not easy to write, to persuade people, to educate people. I don't mean for journalists alone, this is for everybody. People just can't write...”.

On the educational background of the journalists, respondents gave mixed reactions if it could increase the knowledge of journalists on environmental issues. None of the Malaysian environmentalists agreed that lack of knowledge of journalists could be due to their educational background. They felt that the journalists must be interested in the issues in order to be able to produce good articles. They also believed that basic environmental knowledge was important just to give a better understanding, but it would not guarantee good writing. One environmentalist said:

I think the best reporters to have are those who are very interested to find the truth. They must have an interest. Those with science also I find not very good. Well if they have come from biological sciences, they have no clue of air and chemical pollution. We find them clueless. Sometimes they have got a degree in ecology but they know nothing about it. If I ask them about brownish¹⁵ they

¹⁵ Polluted environment

can't tell me what is that contamination. But it would help...of course.

Science or environmental science fields have a big scope and a person could not know the whole knowledge to enable him or her to be a good writer. As such, it was not quite right to claim that only those who have such a background could write better articles as interest and passion could also be part of this ability.

However, education in environmental related subjects could help journalists to understand and to better write up the issues, some Malaysian journalists agreed. They also think that some journalists without paper qualifications could write better stories. Experience and passion are the most important elements that could encourage journalists to be better in writing about environmental issues.

The Malaysian scientists/academics also agreed with it and one clarified that:

It does not matter, you graduate in what field, if you can write and you can adapt, you will be able to write. I doubt those people that I meet are scientists, but some of them write good environmental science stories...But I believe if you mix around with people in this field for quite some time, you might be able to write. I believe in that kind of adaptability and adaptation and experience make you able to write.

Education could help journalists gain knowledge of the environment to understand the issues more clearly, but it could not ensure the quality of news. Knowledge of the environment is vital, as one Malaysian government official thought, that the lack of knowledge among journalists could lead them to understand the issues differently. He stated:

...I have long served the government. I must admit, sometimes we say something; they understand it differently and write it totally differently from what was supposed to be reported. We can't blame them. That is what they understand about the issues because they are not knowledgeable on the issues...

The Malaysian government officials argued the level of environmental knowledge affects the news reporting of journalists in two ways. First, the news is often

misquoted, and second, many times when they did not understand the issues, journalists would come out with their own stories. One government official explained:

Just a few days ago, a journalist wrote a very good story, good approach, very effective but she should have checked the facts because it is scientific. You must never go wrong. *Jangan salah* (get it right). But she (the journalist) was confused on greenhouse gasses and the ozone layer....usually they confuse that. One after another...we talked about greenhouse gasses...it is about global warming. But when we said global warming and you relate with the depletion of the ozone layer, it is totally different. That is the knowledge of science...journalists don't understand...I wish the journalists could have asked the authorities first before writing...I can explain.

The respondent regretted the reluctance of the journalists to admit their limited knowledge but the journalists are daring enough to write their own version of a story. He claimed this was a normal situation he faced with reporters, which resulted in incomplete environmental news stories written for public consumption. One person added “to make it more interesting, they would also sensationalize it a bit”. The consequences of this could leave the public with anxiety and might cause panic, she said. She gave an example how the stories was sensationalized by the journalists:

...news on the environment is factual. In 1997, 1998...sometimes haze was reported so badly. Some wrote that you cannot go out, cannot do your normal activities...but from our actual measurement, the situation is still considered ok, where you still can go out. You can go to work, you can still do your normal things. Except for visibility, you know, it's blurry. But from our instrument readings it showed that the reading is at a permissible level where you can go out. But it was reported as such with pictures...highly dramatized!

This was a worrying situation as journalists were unable to understand simple information as in the haze issue, thus, the capability of journalists to write other critical environmental issues could be argued.

Another view proposed is that journalists must be smart and creative when conveying environmental news because it is not an easy task. One Malaysian respondent gave an example of a few artists who expressed the misery and the pain that the earth suffered through the beauty of poetry and photographs. So, she thought it was also important that the journalists be passionate and interested about their work. However, the Malaysian scientists/academics gave mixed reactions on this matter. One said:

...frankly, yes, because journalists with no background...they could not write better and have to spend some time to do more reading. For example, when a journalist interviews me, I don't have time to go in depth, to explain. If she has a science background, she will catch up, they can put everything together. During the interview, they can't jot down everything. But if I say something wrong, they will know, and they will correct it.

As a whole, journalists were expected to do more than just writing the news. Respondents believed that journalists must be passionate and interested in the issues before they could write good articles on environmental news. Educational background was just an addition to it.

Another point made by the Malaysian journalists was on the language barrier. One Malaysian journalist respondent admitted he found it difficult to understand environmental issues because most technical terms were in English. The language barrier somehow has limited his knowledge about environmental issues, even though he was a science trained student. As the majority of environmental issues are discussed in English, this may be able to answer the content analysis findings that English newspapers produce a larger amount of environmental articles than Malay newspapers. This is agreed by the Malaysian government officials who linked this problem with misquotes made by journalists. One respondent said:

I think command of language is more important. And it really helps...also skills and interest in listening and learning are more important than just having the information. Because we provide the information...more

than that I think language and articulation are more important.

It is very important to have a good command of English because most of the complex environmental information is in English. One Malaysian scientist referred to this limitation of Malay speaking journalists and stated:

... especially Malay reporters, they are not well versed in English and they are not versed in the subject matter....they are rather unscientific...one...they are not educated in science...

The respondents believed the main limitation of Malay journalists was due to their lack of knowledge of environmental issues and their poor command of the English language. He believed the first limitation was due to a lack of a scientific educational background; however, this was untrue because all the Malay journalists were science graduates. As such, the assumption of a science/environmental background would help journalists write better environmental articles could be debated.

However, another respondent trusted that a good command of English and a scientific background were vital because at interviews, as a scientist, he could not tone down his language for the journalists to understand basic information. The journalists have to have knowledge in the subject to get the message across. He said:

...we don't know how to explain a technical subject in a non-technical way. So we tend to be technical because that is something with which we are accustomed...I give lectures to university students. If you ask me to lecture on similar subject at schools, I can't. I can't go down. If I can't, what about others?

In the above statement, the respondent expected the journalists should be able to understand the scientific terms in order to produce good articles. He also refused to believe that scientists could also play vital role to help journalists understand the issues better by using simpler words when giving information to media

people. Again, this is another clash of views between the scientists/academics and the journalists.

Similarly, the Malaysian environmentalists stressed that understanding an issue in English and having to write it in Malay is not an easy task. Knowledge of English is very important to write environmental stories because most of the information and issues were also discussed in English. One person shared his experience of being interviewed by a journalist who struggled to converse in English. Although he knew the journalist was interested in the issue being discussed, he found that the next day the story was completely different from what was discussed. As such, he felt that it would always be difficult to get the right message across to the public if this kind of situation kept on going.

Writing on environmental issues is not easy as the issues are complex. In the interviews, the Malaysian scientists/academics found that the environmental stories were frequently covered at a surface level, in a reactive way and were sometimes not complete. The content analysis shows the same pattern of coverage. The respondents felt that the ability to write technical material in a non-technical way was very important in order to get the correct message across. But not many people were able to do that, they argued. One person explained:

I think writing is an art by itself. Your style fluidity, it is your style; you must be able to make people understand what you write. Not many have that capability...

Similar to the Malaysian scientists/academic notion on the above, the Malaysian environmentalists also thought that the skill of writing was very important to increase public understanding of environmental issues. However, many stories, especially feature articles were not very well-written, they argued.

The New Zealand respondents believed a lack of knowledge among journalists could affect their understanding and writing on environmental issues because the discourse is complex and full of technical jargon. Some environmental news could be straightforward, but most of the time it could be pretty confusing. One respondent believed journalists would try to simplify many environmental stories

so that the readers could understand. However, she strongly believed most of the time the factual aspects were wrong. Another respondent with a similar view stressed:

...we would like them to cover more of our point of view, then they are always going to be balancing that with what the readership will want and usually it is on the lighter side of things because conservation issues can be quite scientific it is quite difficult sometimes to get your full message across.

In the first place, he was not sure if journalists would be able to write technical information in a non-technical language because journalists did not fully comprehend the basic facts of an issue. Thus if journalists re-angle a story which they did not fully understand, the respondent confirmed the facts would definitely be misrepresented. He understood that journalists wanted to sell the story to targeted readers but it was better to present it in the environmentalists' way because firstly, environmentalists have written most of the stories in layman's terms based on their own understanding and secondly, he claimed "we are experts in our fields, so leave it to us". Besides, another believed that the environment is not of interest to journalists.

Nevertheless, the New Zealand journalists argued that environmental discourse was complex and it was not easy to put together all the important elements of environmental issues in layman's terms and in a few words within a timeframe. One of them stated:

...it is not an easy task to understand and to write a complex story. It takes time to think, to write...sometimes you have to turn around a complex environmental issue in about two hours...again you have to think what to write...also it is a matter of getting the right people too and that sort of thing...

She added that it was not so much of a problem with other subjects, but as environmental stories were complex, it could sometimes make her frustrated to write. In spite of everything, as another journalist said "... a lot of the issues are quite complex but the stories are never really like front page news or

anything...the environment does not get to be front page news.” This is found in the findings of the content analysis.

In other words, they found that environmental discourse was difficult to understand and to write but environmental stories hardly attract the editor’s attention. Unless it was written in the way editors wanted it to be as argued as discussed earlier. Hence, many respondents felt it could sometimes be a very discouraging situation. Especially for general desk reporters as they have to write on many different issues thus it was not an easy task for them to write about a complex environmental issue.

Another assumption was that not only the complexity of the issue has made it difficult for journalists to write; some technical terms also could contribute to it. Some New Zealand journalists admitted it was hard to explain technical issues in language that readers could understand. As one of them informed:

...when I first started writing and covering environmental issues...sources...I mean scientists use some jargon that I had never heard before...and I can’t write, I rang them and asked what was it...they gave me the layman word....and I said to him “why didn’t you just say the word?” You meet those expressions all the time, after a few years you can work out what they are...

In summary, the nature of environmental content is not easy to be written about by journalists as they also have to take into consideration other factors such as time and space limitations, writing skills and technical terms in the writing process. Thus, sometimes the contents could not be produced as it was supposed to be.

However, the New Zealand government officials disagreed with the above statements made by journalists. They argued that the limitation of journalists in understanding and writing complex issues could affect the story content tremendously. As a result some stories could not be delivered correctly and sometimes reports on certain issues were not consistent with the understanding of

the government officials of the issues. In short, the contents were deceptive for the public to read. For instance, one person shared his experience by stating:

...one would be air quality monitoring, they (journalists) had quite a critical article about our approach to air quality monitoring and we were sufficiently concerned because in terms of air quality monitoring, we are probably the most sophisticated in New Zealand and certainly working at the cutting edge of what is happening internationally. The confusion arose over changes that we were making to upgrade our equipment and this was interpreted that we had not got our monitoring right, whereas we were trying to continually upgrade to be at international best practice...

He believed the story on air quality was not as complex as other environmental issues, as such it should not have been wrongly reported. Hence, he speculated this was just the journalist's lack of capability to comprehend the issue. Another respondent agreed some news items were wrongly reported but he thought it was not done intentionally. He said:

...my experience would be that most times the story is not consistent. For example, a water crisis story...sometimes the facts are right, sometimes it is wrong. I don't think it is deliberate...maybe they (journalists) just write, but don't understand...

As none of the respondents could gauge what exactly were the elements that made the journalists' incapable of writing correctly, I suggested a few points that could have led to this limitation such as lack of environmental knowledge, writing skills, educational background and perhaps the journalists just being lazy as many Malaysian respondents claimed. However, none of them agreed to the points made and speculated it was perhaps a situation created by the hostile attitudes many journalists have towards them or their agencies. As another person stated "sometimes they are not warm...with us, you know, we don't expect them to be necessarily warm, we just expect them to be neutral". Another person told:

...no, I don't think there is a problem with age or experience, or knowledge, gender or whatever for that matter. My experience would be most times...I think some

journalists may well have a hostile attitude towards what we do...that's all...

Some journalists might have a clash of views - in terms of their right for information - with news sources. That was normal because everybody has bias in themselves, respondents thought. However, journalists should try to be professional in their work because their writing could affect the news sources and the public tremendously.

Another argued that journalists have a problem in writing skills. Journalist's lack of skills to write environmental stories could be derived from many factors such as the attitude of journalists, their lack of environmental knowledge and poor writing skills. Perhaps the respondents are unaware of the fact that these elements are interrelated and result in the inability of journalists to write good articles.

Alternatively, one respondent suspected that the inability was because of the high turn over of environmental journalists in many newspapers. He said:

...one of the issues that we certainly have with some papers is the high turn over of their environmental reporters because of the complexity of the issues. It does take sometime to become familiar with the nature of the issue and if there are new people coming in that frequently it means they have to come up to speed with those issues and that can certainly take time.

The high turnover is confirmed by the National Survey of Journalists 2006 conducted by the New Zealand Journalists Training Organisation which found that nearly half of respondents have been journalists for less than 10 years.

Meanwhile, all New Zealand public relations officers believed if journalists could comprehend the environmental aspects in-depth, they should be able to write the environmental aspects of the various project developments better. One person said:

...we are involved with construction and roading...if it is a contentious issue that the public are concerned about then

they (journalists) may not represent our case very fairly because they don't understand the issues...firstly they don't understand, they don't understand business, secondly they don't understand environmental issues that well...

Journalists tend to raise more controversy based stories rather than trying to create debate in their writing. However, respondents also suspected that young inexperienced journalists could be the cause of this drawback as one said "I think the level of experience and knowledge of most journalists, especially juniors, in the media today is pretty poor". He felt it was a hard work for junior journalists to cover quite complex stories such as on the environment. On the other hand, another person determined that this situation could encourage the young journalists to, as he described, "spice up" the stories to be printed. He said:

Most journalists today tend to be very young and inexperienced. Basically they are trying to create controversy, they are not really interested in examining and analyzing the issues in any depth, but maybe they haven't got the capability to do it.

This is perhaps an inevitable situation as it is a norm for people to be in and out of one organization. However, another assumption of a lack of knowledge among journalists was because there were too many general desk reporters covering the environment. One public relations officer claimed:

...I think news organizations are constantly cutting back resources. Journalists these days have to do the same job with fewer of them in the news room. They are under resourced; they just don't have the experience to cover the issues in a way that they need to and so you get a very one dimensional and very shallow reporting of some very complex issues.

This view is similar to the statements by the scientists/academics discussed earlier. I am convinced that less recognition of environmental news by the media people could lead to the loss of environmental specialist writers. Respondents were also in agreement that the limited knowledge of journalists would encourage them to create their own storyline when covering environmental issues. Thus, the story would be what they wanted it to be. One public relations officer said:

...they (journalists) come to a story with preconceived ideas about how it should play out and they are not prepared to actually listen to both sides of the story before decide you know how the issue needs to be conveyed to the public.

However, this is probably a matter of attitude. Perhaps the lack of knowledge on the part of journalists might be partly caused by their attitude, as perceived by many Malaysian respondents as being lazy. In summary, there could be many reasons for this limitation such as the inexperience of journalists in writing on complex issues such as the environment.

6.2.2 Journalists' attitudes

The Malaysian government officials disclosed that many of the clashes they had with journalists were partly because of the refusal of the journalists to understand the role of the officials. There were boundaries that the officials could not cross as they work based on tight regulations. For example, one respondent listed three problems that illustrate how journalists did not appreciate their roles. He stated that:

I always tell the journalists...there are things that I can't say out, and I just can't, not because I don't want to release, but you have to understand. If you ask me about new issues, new policy, that the government have not decided or might be the minister even not talked about it, I definitely cannot answer the question. But you ask me about the implementation of the policy, I can answer. And I don't think I will get into trouble for that...it is not that I don't want to answer but I am not on the ground. So the journalist should ask, who was on the ground? Secondly, there's regulations that you cannot talk about politics, of course you cannot answer. Of course *masuk court lah* (You can end up in court). Thirdly, when journalists approach technical officers...they are scared, they don't want to give a statement...sometimes there is unwritten law only *KSU* (secretary general) can give statements. Lower rank is not allowed. You will get trouble with your boss. Sometimes the minister 'likes' to give a statement. Let only him do the talking. You can't say a word. Or *KSU* (secretary general) only can talk. Only few....

The respondent perceived journalists as stubborn because they did not go to the right person to answer their questions. There was a level of information that could only be released by certain officers according to their ranking positions. Not everybody could talk about anything and journalists should understand that. Second, he was concerned about journalists' misconceptions that government officers could answer all political-environmental issues. He argued the two were separate issues and there are certain things that could not be discussed by anyone in the department as they "could end up in court". Despite trying to make journalists understand his situation, his statements indirectly prove the level of transparency of the government on politics-environment related issues with tight restrictions on the distribution of information by the staff.

Third, the respondent confirmed information that there was "sometimes an unwritten law" to allow only high ranking officers to talk to the press. That was what happened to the former Director of the Department of the Environment who was transferred 24 hours after giving statements to the press, a Malaysian journalist confessed. Another government official explained an example of details concerning environmental information which was held up to protect national interests. He said:

...the journalists must understand our position. It is not that we don't want to reveal things but we just can't. I can focus on this issue of API¹⁶. The first very bad incidence of haze occurred in 1997, 1998. Very high index in certain locations. At the same time, politically our country *pun* was so hot *lah*... (He described the significant Malaysian political issue that arose in 1998, but asked me to keep it off the record). At that time, various media, international media especially [named the media] showed our haze, again and again and again. But I want to explain to you that these are things researchers do know and we know. It is not just an environmental issue, this is a political issue. Incidents like this are so complicated *lah*, critical...So when you release the API we were afraid the [media] will

¹⁶ An air pollutant index (API) system normally includes the major air pollutants which could cause potential harm to human health should they reach unsafe levels. The API uses a set of easily understood values instead of using the actual concentrations of air pollutants, and it is measured at 61 places all over Malaysia. According to the Department of Environment, Malaysia website www.doe.gov.my, this index system plays an important role in conveying to both decision-makers and the general public the status of the ambient air quality, ranging from good to hazardous.

quote it everyday. We don't want that. Because we have bad experience with the [media]. We have our national interest. If you and I understand this, will you ask...will you put your priority along with what we have been doing rather than to keep to the request of the NGOs? These are issues that government is facing. Environmental issues are not very plain environmental issues. They are connected to other issues and the media play their role either way. They can portray the stories positively or not, that is what we want to take care ofwe can't explain this to the public, because the media will pick up...

In his statement, the respondent believes the media sometimes uses environmental issues to highlight the political issues indirectly. This could affect Malaysian political stability and national integrity, he thought. Thus, this delicate situation should be handled in subtle manner and that was by not revealing the API index for that particular time frame until the Malaysian political issue was resolved. When I asked if the government was willing to disclose the API index if the situation was stable, he said:

...definitely. When we are politically stable like now, of course we can declare ourselves. What's wrong with that? We did release the reading to the public a few months ago when we got the haze. In a way you see the government is very sincere but of course the government has some things to look for and to take care of.

The Malaysian government officials have confirmed the following: (i) there were restrictions for the government officials to give certain statements; (ii) some environmental issues were not told to the press and public, and; (iii) the government officials have a strong belief that sometimes certain information should not be released in order to protect national interests.

Some Malaysian respondents also thought that the journalists were believed to look for sensational news in order to boost up newspaper circulation. However, respondents felt that most journalists' attitudes were inappropriate and not ethical; journalists took advantage in a few situations as described below. Two Malaysian scientists/academics and government officials gave similar examples based on their experiences. They disclosed that journalists normally would use press

conferences as a platform to reach ministers for sensational stories. A Malaysian scientist/academic told:

During press conferences, normally we will invite a Minister to officiate ...the journalists crowd themselves during the press conference because they want sensational news from the politicians, *kita sambil je la* (we were just nobody)...and they want to hear about politics. Till the Minister said...we do this press conference for this event, so you should ask the professor. To me these people (journalists) don't make news, they just *sambil menyelim sambil minum air* (taking advantage of the event).

Journalists attend press conferences for the Minister not the event. The respondent added that at his many press conferences held so far, his projects would always only be of secondary interest of the day. Even, sometimes, entirely eliminated from the scene because the journalists would only ask the Minister on "current or melodramatic stories" that they believed could attract their readers. Another Malaysian scientist/academic respondent added her experience at the press conference by saying:

...what I really don't like about the Malaysian press... especially after a meeting or press conference, I can tell you that, now I am savvy about this. It depends on which Minister you invite. ...they (journalists) follow the Ministers, not the conference...even when we conduct a press conference for something, they always go for the issues first. Very distressing but we learn to live with it. Say now if you invite Minister of Health, and my conference is about medicine...probably I get one line in their coverage. If I am lucky, I will get one question during the press conference.

The above statements suggest journalists' inappropriate actions in searching for stories. The high use of Ministers as news sources is also reflected in the content analysis and the journalists act re-actively towards the environmental issues. As a result, environmental news does not serve as an educational ground for readers. One Malaysian scientists/academics respondent said:

It is about time people talk about environmental education for the masses especially through the media...but they

(press) cover when it is already flooded, collapsed...the press is reactive...what you give in the press makes no different. This that happened at Shah Alam¹⁷....it doesn't show in mainstream TV, not even a bit, why? Newspapers cover it a bit.

This is partly true as the content analysis shows that event stories are highly reported. On being re-active, the journalists were also criticised for not searching for good environmental issues. As another academic added:

...don't expect the academics to call the press and say...hey, I would like to give a statement. We don't do such a thing. If you take a pro active step by contacting them (journalists) and then go through an interview to improve their (governmental officials or Ministers) expertise like on water, air, insects, erosion, rivers and plenty more...geology, solid waste disposal, toxic waste, they are many people (other sources such as environmentalists) around that you can contact, do an interview and make it balanced. Give your readers enough information to make up their own minds. Be pro-active. Check and let the readers make their own conclusions.

In his statement, he also stressed that as an academic, he would not think it was his responsibility to try getting his story printed; rather it was journalists' job to find the news. On the other hand, journalists thought that scientists/academic were incapable to make their research findings known to people. Journalists felt that new sources should make contact with them because journalists could not afford to spend so much time looking for and covering all stories. This is a clash of view of each others' responsibilities.

Another attitude encountered was journalists who were also sluggish and this attitude could misdirect the news contents. One respondent explained:

...I am not trained to speak the way it should be printed. In complete sentences, in complete figures, complete everything, so we say things, and they (journalists) write or record....sometimes I did tell them, if you want the actual data, then you call me. But they never do, so they put in whatever they have, but once it got

¹⁷The worst flash flood in years occurred on February 2006 at Shah Alam residential areas, affected 3,500 households but had minimal coverage in the media.

printed *mulalah kita mengeluh* (we could get frustrated). It is all wrong.

On a more specific matter, the same respondent expressed his dissatisfaction with the Malay journalists' attitudes and newspapers and claimed that:

...the Malay journalists and editors don't make news...it is like '*ada, ada, takde, takde*' (if there's news, they will report, if there's none, they won't search for it).

A lack of interest on the part of the Malay newspapers in environmental issues is probably because of a language barrier as discussed earlier. The content analysis also shows decreasing trends of environmental news in the two Malay newspapers studied.

Similarly, another scientist described some journalists as "not working hard enough" to produce good environmental news. There were simple things that journalists could do such as re-check the scientific information and data they have with the news sources before releasing the news; there are many cases of misquotes or wrong information given in the stories. The respondent said:

...when I call about the misquotes, they (journalists) said... "prof, tell them (readers) that you are misquoted by the press. It is not your fault. Tell them (readers), it's their (journalists) fault". The journalists just take it very lightly, you know...

In short, the Malaysian scientists and academics sensed that the behaviour of the journalists restricts their ability for good reporting of environmental news. The environmental stories are produced with no intention of educating the readers; rather just a report as to what is happening around them. Hence, most environmental coverage studied is event-based and framed as revealed by the content analysis.

The Malaysian environmentalists also shared the same views. One person said journalists expected too much from the news sources; they wanted news sources to provide them with all the information but refused to examine environmental

issues themselves. He said "...some journalists don't do their homework and expect things to be handed to them on a plate. We just don't have good investigative journalism here". He believed that investigative journalism was important to write good environmental stories.

Another Malaysian environmentalist agreed and argued that there were so many ways to investigate an issue. If it was hard to get information from the sources, journalists should find other ways to obtain the information. Journalists have to be resourceful too, he argued. I quoted him as saying:

...the other problem about them (journalists) is that they are a bit lazy. They don't do their homework. There's the internet, but many of them don't seem to use it. But no, they come here and ask me...tell me about solar energy. Then I tell him, you should do more reading before you come and ask me. You should ask specific, question, then I can answer.

Environmentalists are specialists in their own fields; hence journalists must be ready to ask very precise questions which are at their level expertise. The respondents also expressed their feelings that very often they have a limit as to how long they could spend time on general topics and tell the whole story to the journalists. They expected the journalists to nail down the questions for them. It seemed to them that not only the journalists did not know what to ask but also did not understand the basic information on the issues. This would definitely limit their reporting. However, they reasoned this is one of the disadvantages of using general desk journalists to cover environment stories. One respondent said:

I think we still get many journalists coming in who are general journalists who cover a lot of stories. So you have to spend a long time explaining to them, because most of the time they don't understand about the environment. And if you don't explain, things get distorted. I am a bit impatient about it, but I also understand their limitations. Because they don't specialize. Today they cover crime, tomorrow they are sent here, and the next day they have to write on entertainment.

Specialization could help journalists to write better articles, as in politics and sports. One journalist admitted having problems understanding so many different issues in a week, resulting in most write-ups being just at a surface level.

In addition, the Malaysian environmentalists also expressed their concern about some journalists who refused to acknowledge the specialization and roles of non-governmental organisations (NGOs). As one respondent said:

...they (journalists) even thought we cover about Bigfoot¹⁸. But this is not our focus. They don't even know we deal only with wildlife. They don't understand what we do...

This kind of mind-set also led to the high use of the same news sources repeatedly, one person thought. He noticed that most of the time the same people were used for the same issue again and again. This pattern also could be found in the content analysis findings. As a result the same kind of stance or ideology was given continually to the masses. The journalists just did not try harder to find other alternative views. However, journalists argued that the numbers of specialists are too small to be interviewed; hence they used the same sources again and again.

As compared with other respondents, the Malaysian public relations persons did not have that much of a say on journalists' attitude although they observed some influential factors in environmental reporting. While other groups of respondents see journalists as lazy; public relations persons just felt that the journalists were not interested in environmental news and some of them might have personal feelings are which against the companies of the respondents. However, the respondents did not clarify why journalists developed such attitudes. They claimed this type of journalist has a tendency to advocate a particular point of view and thus bias the stories. One person who had many experiences of this situation explained:

¹⁸ Bigfoot has general overview similar to the biology of the North American sasquatch. Although it looks like an ape it has more human features. In the late 2006, this creature was seen in many places in Johor, in the southern part of Malaysia. It was a hoax but no evidence was found to back up the creature's existence (www.nstp.com.my, www.bigfootencounters.com)

This is a case by case basis. I mean you always have media or journalists who are very...who have not let an issue go or they are full of agenda that is against you. You will never know. Sometimes the story...the environmental story turns out to be the other way around...sometimes it becomes so controversial...but the real facts are so simple...

Some pro-environment journalists are maybe against the policies of some companies, so therefore they have the inclination not to advocate the public relations stories because of their beliefs. Furthermore, this could also lead to miscommunication between both parties. After all, a reporter's personality traits and mind set could influence story advocacy (Stone 1987, p. 26).

Unlike other respondents, the Malaysian public relations persons also argued that some journalists might have a conflict of interests when reporting environmental news. They suspected that some journalists were also acting as environmentalists, hence they might confuse their roles as journalists. I quoted one respondent as saying:

...because sometimes those who write on environmental issues...they are called environmentalists, that's why sometimes when I recruit them, I will ask...are you an environmentalist, because they tend to be too concerned and they forget about their professionalism. So this is the problem.

Often times, this type of journalist would be very emotional in their writing. Also the respondents felt that this was not supposed to happen as the public deserved to know both sides of the stories; and such a journalist would never be able to be critical in her or his writing. Therefore, the stories could be one sided and very unpleasant.

It is not clear whether the public relations people were trying to place their own politics into the situation. As referred to in the literature, some researchers found evidence advocacy in environmental stories and they speculated it was partly because pro-environmental journalists wrote them. Therefore, I gauge that

perhaps further research on the conflict of interest of journalists could be conducted to see if it could affect environmental reporting.

The issue of the attitudes of journalists was also discussed by the New Zealand scientists/academics. Similarly, they thought journalists were lazy to search for news, and would rather only report news that they could easily reach. This might be true as claimed by one respondent that only after a freelance journalist had come across the issue of the Clyde Dam by accident, the issue was covered by media. As a result, stories like Clyde Dam and Lake Taupo would not be printed so much. The consequences of this behaviour would cause readers to be unaware of these issues.

The same person emphasized that after these two important issues were left undiscovered, journalists should realize their mistake and start looking for critical environmental issues such as Lake Ellesmere¹⁹ pollution to be presented to readers. He emphasized:

...lake Ellesmere is a dying lake...it is the fifth largest lake in New Zealand and it is dying because of all the rubbish. Now...when you talk to people generally in conversation they sort of know that but nobody makes a big deal about it. These people at the hearing are making a big deal about it and they have got some pretty dire predictions of what will happen if we don't do something, that should be in the newspapers but it is not. They are far too interested in current issues...

In this context, the respondent confirmed that the public briefly knew about the issue. However, the ones who are most concerned about this matter – the people living nearby the lake, who care about the environment in Christchurch, or who are into fishing – should be given full information on the lake progress. Thus, the respondent believed journalists could do their part to investigate and publish this issue in order to make others aware of the importance of the lake too.

¹⁹ The Lake Ellesmere issue is similar to Lake Taupo's. Some arguments made by locals that there is a high concentration of plant nutrients that is damaging the lake, but this claim is denied by Environment Canterbury and NIWA who are currently working on the current water quality condition of Lake Ellesmere (www.niwasience.co.nz, www.ecangovt.nz)

Unfortunately, journalists were “too lazy and busy with current issues and completely not interested”, he stated.

Journalists’ attitudes were perhaps influenced by the work practice of the journalists which is based on timeframes. Also, maybe journalists would be more interested in the result of an issue, because they believed people want to know the ending of the story not the whole lot as one person claimed “journalists just print what you tell them, they don’t ask searching questions. Sometimes I feel that the journalists don’t do enough homework”. For example, another person confirmed that:

...journalists just do a reasonable job...but there could be more searching and do their own fact finding and then use that as a basis for interviewing people like me...

Journalists’ refusal to do some reading before interviewing the scientist ended up in him explaining the whole thing about one particular issue because the journalist was not sure what to ask. Another point added by respondents was the use of the same news sources repeatedly, especially government officials. They were confident that this was the journalists “custom”, as they called it, for being lazy and not finding other voices and opinions.

6.2.3 Journalists’ agenda

The third possible force was the journalists’ agenda in reporting on environmental news, which could be observed, again, at the press conferences; through their writing such as the story angle they choose; and in some misquotes which were done on purpose, the respondents argued. One Malaysian government official described the attitude of journalists at press conferences as selfish. Most of the time the government tried to keep close contact with the press by inviting them to the press conferences but the journalists appeared as not interested unless:

... the Minister is around. This is a fact. If not, the number is very small. Secondly, we do a campaign on something, they write on something else. For example, [a governmental agency] is planning an awareness programme campaign, but the journalists do not ask about the

campaign, but they ask about toxic waste, haze etc. But they are the press, sensational what? So how do you educate the press? I also don't know.

Another person added another similar situation as below.

...sometimes they write about the campaign, but very little. Like, the honourable minister has launched a green run. But after that, they write different stories. Not about the green run, but something else. Can't blame them because the sensational aspect is not there...they think...unless if the Minister wants to make press statement on Labis issues²⁰, illegal importation of [endangered animals]²¹, then they might ask a lot of questions. Because they are interested. But if theme events...well they will come because we invite them...but they have their own focus...

In most cases journalists did not have any interest in awareness campaigns but attended the press conference for more current or sensational news as described by previous respondents. As a result, the coverage might end up that all current environmental news has maybe less stories that could educate the readers. This is partly true compared to the content analysis findings in Chapter 5 from which it is evident that environmental news is topically represented in the Malaysian newspapers. For example, more stories on water crises were reported in early 2000 due to the building of the controversial Selangor Dam, but slowly the stories faded towards mid 2000. It is fair to describe this situation as a method how journalists find their way to reach the Ministers or to obtain controversial information by taking advantage of press conferences.

Nevertheless, journalists' "informal practice" at press conferences creates some great concerns amongst government officials because they know the journalists' motive is to reach the Minister, and they do not have any interest in the event that is being organised. One respondent said:

²⁰ About 5,000 tonnes of aluminum dross were dumped at Kampung Sungai Gatom in Labis, Johor, in January 2006. And it has cost the Government some RM5 million to clean up the mess left behind in Labis by the toxic trade criminals (www.nst.com.my)

²¹ Early this year, Sumatran *orang-utans* were found at a theme park and the question is how these endangered animals which could only found in Sumatra were brought into Malaysia. This question was raised by one of the journalist respondents (Face to face interview with the respondent on 16 Feb. 2006)

...when Minister is there, minister will respond. He will not keep quiet. He has to answer and you can ask anything. The problem is that whether the minister answers correctly or not. I am very concerned on that. The journalists will ask a lot of questions...sometimes not related to the event. And he might not know all the answers. But when the minister is around, he cannot say he cannot reveal the information or say I don't know the answer. He will have to answer...his wrong answers could be used as controversial issues by the press.

The Malaysian government officers' roles are very important not only acting as news sources on behalf of the government but also to make sure the news is presented correctly to the public. Hence, as journalists were perceived as having agendas, the officials feared the ministers' answers could give an opportunity for journalists to sensationalize the stories. This suggests that the government official-journalist relationship is soured, although the content analysis clearly shows that they are by far the most dominant source.

On top of this, the Malaysian governmental officials said they could sense the journalists' agenda from their reports. This was not only based on the angle of the stories but also the way journalists misquoted their news sources. One respondent shared his story by saying:

...I told [an English newspaper journalist] that I was not in-charge of [one of governmental projects] but I did say that the [relevant government agencies] should be more thorough on their work. However, she wrote that I was dissatisfied with the way it was done. It gives a wrong message. I complained that she should write that the relevant agencies should be more thorough...but she sensationalized the story and highlighted [the governmental agency] and what is more she wrote that I was disappointed with the situation...that's not true.

When the statement was misquoted it would give a different message to readers. That was why the other respondents also argued this was done intentionally because journalists were trying to send different messages to the public. One person described the situation as:

...I don't know whether this is done either intentionally or not. Difficult to gauge that...may be they are ignorant or maybe it is all done by the editors. For example, just a few

weeks ago, our Minister said to me that he gives a statement and the journalists reported it differently. Their reports reflect as if the minister is blaming the state government. But the minister didn't say that. And he said...that's why I don't want to talk to the reporters.

By giving an example of one of his own experiences, he was confident it was done intentionally. He continued:

...after one press conference on one controversial issue on [one of the environmental departments], my Deputy Minister was talking with me and he was putting his hands on his forehead (as if he's having headache). The journalists captured his photo and showed it as if he's having difficulties to answer the questions during the press conference. But the picture was taken after the press conference. The picture was so negative as if my Deputy Minister is cracking his head to answer the questions during press conference. But we did have a photo shoot at the conference. Why don't they use those pictures? So is this intentional or not?

The same respondent said he was positive that his argument was correct because some misquotes occurred on simple environmental issues. There was no way journalists could not understand on such issues as flooding. Thus, he was sure there was something the journalists were aiming for, not because of their ignorance of the issues.

Respondents explained that normally they confronted the journalists if they were misquoted badly, however, they were not very convinced with the journalists explanation that most misquotes was made by their editors to make the stories more interesting. If this was the case, journalist should aware that misquotes could affect the news sources a great deal. One Malaysian governmental official said, in one incident where she was badly misquoted by the press, she was forced to step down by many parties such as environmental lobby groups and some governmental agencies. She stressed:

...it was very frustrating. I said it is ok to have a certain amount of toxic waste in storage but it was reported that I am ok with the amount of toxic waste stored by this

company which has dumped toxic waste at [one rural area]. I was totally misquoted and the press never thought that it could cost me my job...

Another who was also affected by being misquoted added:

It (misquotes) happened so many times. I said something and they write something else. *Kita pun gelabah* (We are very distressed)...because we are the one who give that statement. *Orang atas* (the top management) will look for me...

The above two statements clearly show that a small misunderstanding and misquotes could affect the good name and career of the news sources. In this context, the quality of journalism should be re-examined in order to avoid such a situation. This is because it is not easy to clear up such mess as the respondent below described:

...after being misquoted, I have cleared the matter with the [newspaper] editor but still a few officers from the [governmental agency] bombarded me for giving such statement. I told them I gave correct info but it was interpreted differently by the journalists. I don't like to have this unpleasant experience with my own friends...

Both groups of respondents - the journalists and government officials - seem disappointed with each other and there is a clash and lack of trust between the two groups. Journalists are blamed for their ignorance, wilful distortion, and misquotes, but the journalists cannot please everyone. I hypothesize the negative journalist-government officials perceptions towards each other could be the biggest limitation in reporting good environmental news in the Malaysian press. The New Zealand respondents, however, do not see this as a constraint in constructing environmental news.

6.2.4 Circulation

All Malaysian scientists/academics interviewed believed the root cause for all the constraints was because newspapers were just interested in making profits. However, environmental stories do not sell because they were not a fascinating topic of discussion as one Malaysian respondent admitted it as “dead boring, the narrative of environment and science is boring”. Hence, she suspected it would not be of interest to the newspapers to get it printed. Another person who has the same view said:

...being academic, my perspectives, and my content have always been based on scientific findings. Numbers, dates, history, events, circumstances...the validity of the matters is all based on scientific data. Sometimes, things like numbers...are not favoured by press.

As the press was looking for interesting news, most of the time he was asked to come out with interesting terms not on a specific basis such as numbers, data or history. He said:

They want something like... “bad”, “worse”, “will be extinct in two years time”, “four dead”...They want sensation because that create anxiety among the readers.

In other words, he believed journalists were not only trying to simplify the science facts but also trying to sensationalize the stories to make it interesting to read. Unless, it was a disaster environmental story, other environmental issues were hard to get printed. One respondent explained:

...for example, what is the situation of the country? What people want to hear? Sensationalized in what terms? Like...now people want to know about toxic waste, so there's a lot of coverage on that topic.

This argument reflects in the content analysis which shows a pattern of topics in a particular time frame which could be a matter of public debate at that time. Another respondent believed Malaysians were also too obsessed with gossip and

scandalous stories which have indirectly driven the newspapers to cover more of such news. He added:

...now [the most popular singer in Malaysia] is being exposed so much about her romance because people like to read such thing. When election comes, god knows...it is full of promises because people like to read such things. Environment? Sorry, only educated people want to know about the environment.

The environmental information is not preferred by journalists because they are hunting for sensational and current issues to boost readership. This could limit the environmental reporting in two ways. First, other important stories but less sensational, like environmental issues, would be left behind and; second, the newspapers are not educating the public about what they are supposed to know, but feeding them with things to satisfy the demand for what they do want to know.

Nevertheless, journalists would have to write on environmental news from time to time. Therefore, in order to achieve a high circulation, journalists have their ways to make environmental stories interesting to read, respondents argued. First, they agreed journalists would normally use a different angle of story to write on environmental news to make it attention-grabbing. One said

...they will just write what they think the public want to know. They choose the angle of the story. They just write what they want to highlight, so the paper can sell...

As journalists would write what they think readers' would like to know; this has caught another respondent in a mess. The Malaysian scientist/academic explained:

...during one press conference...what I want to say was not quoted, but really my one statement, well my one anecdote...my anecdotes are often for sale...it was quoted all over the world when I said bananas help prevent strokes. I got covered on a front page in [one of the mainstream papers] then [an international news agency] saw it and it was picked up by the international bodies. But we were talking about the whole bananas conference. I had so many

calls after that, wanted to get more information. It was not focused on the conference at all. It taught me a lesson you know. If you want to attract the public and media, put a catch phrase in a headline.

In short, a “headline” is important to get the stories out. However, the journalists’ decision to write stories with a different angle could lead to distortion of news content and meaning. In the content analysis, I found very few environmental stories with “by-lines”, a line giving the writer’s name, which suggests that the environment is less important news. Perhaps this encourages journalists to create sensational stories in order to get “headlines” and “bylines”.

Similar to the government officials’ argument, the Malaysian scientists/academics stated another way to sell environmental stories was by what most journalists claimed as accidental misquotes. One respondent said misquoting sources was a norm, but he also reckoned that sometimes the press intentionally did it to boost up their sales. He said:

Sometimes I feel that the press intentionally did that you know. Because they have their own agenda, every press wants to sell their papers. If the press cannot sell the papers, then it is a lousy business. They got to sell their papers so they misquote. Not all...but sometimes they purposely make it big.

The Malaysian scientists/academics believed journalists intentionally misquoted them to sensationalize the stories, because their agenda was to increase their readership. The government officials also thought misquotes were done intentionally but they did not speculate what kind of agenda the journalists may have. In addition, another similar experience both groups shared was the involvement of the editors in the misquoting and news angling matters. One person said:

...they (journalists) simply say because first they (journalists) were not well versed in science and environment so his editor rewrites the story to suit the context or to suit his language, but the facts get distorted.

The Malaysian scientists/academics interviewed were a bit sceptic about the statement made by the journalists as they thought it was just a reason for journalists to avoid being blamed. But they also did not deny the editors' power in editing and selecting the news as he or she wished, as one person said:

...the editors are hammers, if they don't like they don't publish. Every time when I ask the journalists, when is the article coming out? They said it is all up to the editor. If the editor has no other stories, he will take that. If he has other stories, I have to wait for a week, maybe two.

Newspapers represent stories for their targeted readers. This suggests that the publishing of environmental news especially in the Malay newspapers is small due to the Malay newspaper readers being mostly rural people. Environmental news would not be the right event to discuss in that type of paper because, as a respondent told: "the rural people do not want to hear or read about science...they do not understand"

Aiming to increase readership might prevent journalists from writing more on the environment. Throughout the one-hour interview, the same respondent also seemed to be very frustrated and expressed his anger towards the whole thing about Malay journalism and the press. He felt that the Malay newspapers should think about intellectual groups who would want to read their papers, thus, they should print more academic articles. He expressed his feelings once again at the end of the interview by saying:

I don't read Malay newspapers anymore, I must confess. I hate the writing, I hate the news reporting, and I hate the spelling. I don't subscribe to the Malay newspapers at all and I will never read them.

The respondent also felt the Malay newspapers were of a lesser quality than English newspapers. This might be true because one of the government officials, who is also in a panel of judges for the environmental journalism awards stated

that the Malay articles were very sketchy and normally would get 70 – 80 as the highest marks, compared to English which would be given 80 - 90 marks²².

Also based on my content analysis findings there is a great difference between the English and Malay newspapers when reporting environmental news. For instance, the number of environmental stories published in the English newspapers is double that of the Malay papers and there are more feature articles and longer news stories in the English papers compared to Malay papers.

This situation happens partly because the editors are unable to see how environmental news could increase their circulation. Hence, it can be summed up that editors could also be included as one of the constraints on journalists preventing them from reporting on environmental news as the editors have the power to choose which news to print, with whatever story angle the editor likes. In a similar manner, both governmental officials and scientists/academics shared a few comparable experiences, which could be their strong arguments to conclude the editors are the main constraint in reporting environmental news.

The New Zealand respondents also believed newspaper practice was all about getting a higher circulation, as one person said “good news stories don’t necessarily sell newspapers”, therefore, journalists tended to write more on tragedy or conflict news.

One scientist suggested in order to explore the reasons for newspapers concentrating on such dramatic environmental news, an exploration of the newspapers’ point of view would be worth investigating. He said:

...they (newspaper companies) want to sell newspapers and make profit. So they report things that are current but you know what we have to be careful about is for them not to ride on the bandwagon. For them also to report on things that are perhaps not as high a profile but are still important issues.

²² Interview with one panel judge on 3 March 2006.

In his argument, the respondent stressed that the media should also be reminded to include some unremarkable issues but which are important for public information. Another person emphasized that newspapers' should not always only focus on their ratings but should first understand their responsibilities and also their capability to alert the public with significant environmental issues. He stated:

...it is a terribly powerful medium, newspapers should know that, they could if they want to, alert the country to many environmental issues...climate change, the use of water...a lot...but these stories can't increase their sales...

At the time of the interview, the respondent was still in doubt if some journalists knew about the Lake Taupo issue, as mentioned in Section 6.2.11, because he has not come across any write up on it in any newspapers which suggests that circulation has some effect on the pattern of environmental news reporting.

The New Zealand government officials argued that journalists would produce attention grabbing stories only; with less concentration on quality of the news. As one respondent said:

...the media and news is about selling and they are there to sell a product and if you can write a story two ways and one way is going to have more selling power than another that may be what they chose to do...

This was all about choices and media people have power to choose the stories they want. And as a rule of thumb, a conflict story would be the preferred one, they argued. However, one respondent disagreed that environmental stories should be written that way. He said:

Well, I think what the New Zealand news media are looking for is the news story. Their job is to sell newspapers I suppose, get ratings up so they will look for things that make a story interesting to their readers so that means they focus on conflict, or personalities...but environmental stories don't fit neatly into that model...

Environmental stories are not always about conflict, thus such stories could be written with some informative facts for the public. Nevertheless, respondents felt

conflict stories sometimes could be good because it could alert them on their responsibilities as one person described as:

...if you take water allocation for example, the newspapers will be interested in where there is conflict, so if water is running out and the farmers are screaming that (the body) 'Farming Canterbury isn't doing a good job as they promised us water', or anglers, the Fish and Game councillor screaming out (the body) 'Environment Canterbury can't protect our rivers'...yes, they will report it but they won't go much further than that, they won't sort of look at why the water is running out or things like that...

A journalist, however, argued this style of reporting fits the environment because he wanted to make environmental stories fun to read so that it could boost their sales. However, too much of conflict stories could give the wrong interpretation of the environment to the public. As such, the true facts of environmental issues should be delivered to the readers.

The New Zealand environmentalists stressed that their aim to educate the public on the environment could hardly be achieved because the media people were more interested in other subjects such as business and politics. For example, one respondent confirmed that only a few newspapers would cover his work, as to educate people on waste management, because their targeted readers were somehow affected by it. Other papers would not show interest because it was not of their readers' interest. He said:

...our business is encouraging the community at all levels to reduce their waste...and in a big city they are looked after but in the smaller communities rubbish disposal and solid waste tips, landfills are a big issue...and our work does not get a lot of press attention except in smaller places...so certain newspapers won't cover our stories...only newspapers that serve the people who have a problem with waste...but we are supposed to serve at national level...

Newspapers published more stories which they believe relate to their readers and this view was also shared by many Malaysian respondents. This resulted in increased knowledge among people who were affected by the issues only, which

was not fair, respondents argued. The public should be given the information equally.

In short, the New Zealand environmentalists hypothesized the newspapers pattern of having only current issues would be driven by their aim to provide more news for their targeted readers. Consequently, they claimed some journalists would be avoiding them when a certain issue was raised because the media perceived that issue as not important to their readers. One respondent told:

It might be that their newspapers have decided that this is not an issue in which they are interested to present to their readers or that they have taken a view which is different from ours so they actually choose not to run stories because they are promoting a different point of view, it has happened.

Based on this statement, newspapers are clearly looking for two types of stories: first, issues that are related to their readers and; second, the frame that they want readers to believe. Only stories with these elements would be printed and this was all done for their readers, respondents argued.

However, I would like to link this argument to one discussed by Malaysian respondents that the underlying issue was more on the newspaper agenda to obtain more profits, rather than doing it for the sake of their readers. In this sense, the Malaysian respondents seemed to be able to gauge the real issues in depth compared to New Zealand who only see some limitations at the surface level. However, it can also be argued that this is because the New Zealand journalists–news source relationship is much more relaxed compared to that in Malaysia, thus in New Zealand the news sources found there is not so much of pressure.

6.2.5 Newspapers' agenda

The newspaper companies have an agenda of their own and most respondents believed this was the main constraint to restrict environmental news reporting. There were a few types of agenda and one possible agenda was to pursue a

political plan, they argued. One Malaysian environmentalist gave an explicit example by saying:

...it is interesting that suddenly [newspaper] called me more often than [another newspaper]. They have an agenda of their own. Suddenly Bukit Cerakah²³. They are pushing the story too much. But this is the [newspaper's] agenda. To get rid of [one influential politician in] Selangor. That's why sometimes you got to watch out why they are playing the angle so hard, sort of thing.

The above statement reflected some political involvement in the media agenda. In order to find some confirmation of this statement, I checked on the number of articles published between January – June 2005 on this issue and found the other three newspapers printed about 2 – 12 articles compared over 42 articles by the newspaper²⁴ mentioned in the quote. When I emailed one journalist on 13th January 2007 to confirm this matter she wrote back “we don't bother to publish that story; that is not our issue”.

This clearly shows that the news contents are strongly shaped by political forces. When there is conflict, environmental issues could suddenly be a part of the game. This could be understood as stated in the literature review that media people choose to select from the mass the potential news which they constitute as ‘news’ for the day (Hall 1970).

However, in a more subtle way, respondents also believe that the journalists have an agenda in looking for sensational and current issues that could create anxiety among the readers. In this way, maybe they could get their names and stories printed on the front page. Stories such as a Memorandum of Understanding (MoU) signing or annual events are hard to get published. A Malaysian environmentalist explained:

²³ Bukit Cerakah or Taman Pertanian Malaysia (Malaysia Agriculture Park), the agro-forestry park set within a luscious tropical rain forest in a scenic 1,290-hectare site in Shah Alam, Selangor. It was initiated by the Malaysian Ministry of Agriculture in 1986. In early 2005, there were widespread reports of uncontrolled development around the park which resulted in serious ecological damage to the Selangor-owned green lung (www.pmo.gov.my)

²⁴ From archive at www.thestar.com.my; www.nst.com.my; email correspondence with Puan Fouziah Rahim, Head of Resource Centre, Utusan Malaysia on January 4, 2007 and a journalist on January 13, 2007.

...when you organise an event, they will not turn up if it is not very interesting to them. Maybe because of the issue. Or maybe the topic itself. For example, when we did MoU signing with some oil based companies, we had good turn up. Usually nobody will turn up for such events. It is a dull event. But because there is an issue there...with the oil company, they all came...

With references to government officials and scientists/academics' arguments on journalists attitudes at press conferences, I gauge that the news sources and the issues involved are two elements that could attract media attention. This also reflects that journalists have set their minds as to what kind of stories they want to write, hence, no ordinary stories could easily catch media attention; especially an annual event that has been running for several years as commented by one environmentalist. He said every year his organization has to think hard how to make their "bird watching" event interesting for journalists. One strategy he used was to relate the event with current issues so that it could attract media attention.

...previously it was not a struggle for us because the press has been very supportive, but now going on to the seventh year...the editors say...it is the same thing, it is the same thing. So we are not going for another year with the same story. So every year we have to think how to attract the press. It is very difficult.

In order ensure the story of the annual bird watching event is printed every year, he has to create a theme for each year relating to current issues. For instance, as the bird flu was spread widely in 2006, he used the theme to educate the public and journalists by explaining how the flu spread. As a result, the event received wide coverage from the media.

On top of that, another Malaysian environmentalist believes that each newspaper has a different agenda based on their targeted readers. He also suggested looking at different types of newspaper languages for comparison because he trusted that the targeted readers were the reason behind how the news contents were shaped. He stated:

...you take the Papan²⁵ and Bukit Merah²⁶ issues which was very interesting because it showed even among the English media also has a difference in coverage. But there was a big contrast from the Malay press and Chinese press. You see, it is a Chinese issue. Because most of the people affected were Chinese. Chinese press went to town but of course that created some sensationalism also. Malay press took very pro government position. [The Malay newspapers] actually quoted [former Prime Minister]...everything he said. But then when you compare the coverage between the Star and NST, you find that the Star had much more stronger coverage which was not exactly favourable to the government. The NST did cover, but toned it down. Some of our (NGO's) statements never appeared. That shows how the press, depending on the type of media that you read, you may have totally different messages. And for a long time the Tamil press never even covered the story. It covers only now, even now it is very poor coverage.

This was partly true when I compared the content analysis findings on the 2004 coverage of the flooding in Kelantan. Both the two Malay newspapers had double the coverage (23 and 19 articles) over the English papers. As two-thirds of the Kelantan population is Malay, the coverage was extensive in order to serve the readers with their stories. Hence, it is important to understand that journalists must be interested in the same issues that their readers are interested in.

In addition to the above, the agenda issue was believed to have led to some kind of news reporting pattern for different types of newspapers. One public relations officer gave an example of environmental news coverage in a variety of newspapers based on different languages.

²⁵ Papan is a former mining town in Perak, east coast of Malaysia. In the early 1980's the people of Papan demonstrated in a protest over the proposal to dump radioactive waste there. However, the result of this demonstration is unknown. But in 1991, Papan was in the news again. This time it was chosen as the site for a permanent non-toxic industrial waste and rubbish dump as well as a temporary industrial toxic waste dump. However, the proposal was called off in 1994 because of mounting public protest.

²⁶ In 1982, the Bukit Merah village, Perak, became the site for the first radioactive plant in Malaysia – the only one of its kind in Southeast Asia. It emerged as the scene of 'Malaysia's most famous environmental battle.' In 1985, eight Bukit Merah residents filed an application against Asian Rare Earth (ARE), the operator of the plant, to stop a Japanese multinational from doing in Bukit Merah what it could do in Japan, against the interests of public health and clean environment and it became one of the longest civil cases in Malaysian legal history. In 1987, the Ipoh High Courts decided to suspend the ARE operation, but in August 1992, the Supreme Court overturned the Ipoh High Court decision stating that ARE's closure would cause harm to the company and hardship to its workers. Not one word was mentioned about the harm to the health and lives of the 10,000 residents of Bukit Merah (www.surfover.com,)

...tamil newspapers I think almost nil. Very limited. National interest cut across all the media. But I find generally the English media is more interested in business. The Chinese media also on business...share price public listed companies, and the Malay media is more keen on topical, news type of coverage.

Another point concerns the Malay newspapers reluctance to print environmental stories. One person who has good contact with many Malay journalists and editors admitted difficulties to get her stories published in Malay newspapers. She said:

They (Malay newspapers) have already planned out what to write, what is the issue, so the environment is like what they want. For example, they (Malay press) actually want people to read about [her organization] in the East Coast (Sabah and Sarawak) because we have a few projects there...but it is hard because Malays over there like to read [the most sensational Malay tabloid] more. It is very hard.

As a result, the environmental stories will be published in a relatively small area of the mainstream Malay newspapers; but in few small areas on the East Coast the environment receives a bigger coverage. The respondent also believed the awareness probably was higher than in urban areas; but I argue this is partly because small-town newspapers are typically more consensus-oriented (Tichenor et al. 1989) and cover environmental issues more extensively (Dunwoody & Griffin 1993) than urban newspapers.

Another repeated point was the obvious agenda of journalists at the press conferences. Not only government officials and scientists/academics have agreed with this idea as discussed on the previous pages, environmentalists also felt that this was not a good practice for journalists. One respondent said:

I think the problem is, depending on what are the issues or what kind of press conference is going on. It is all depends on the issues, but one of the things to learn is that it is no use having science or publicizing environmental issues by inviting a VIP to do the opening and that sort of thing. Very often the press will ask questions about something

else. Only that will appear and nothing about the event will appear.

For instance, he added, when he invited the Minister of Energy to officiate the “energy efficient house”, there were 30 to 40 press turned up. But the next day, there was hardly a mention about the house, rather the coverage was about other things such as the electricity tariff, energy and on political parties. Only one press carried the story but had the facts wrong. It showed that journalists had already planned what stories they wanted to write.

Another point was on controversial reporting. For example, one person believed journalists normally asked controversial issues of him because journalists knew he was as he described as “the most outspoken environmentalist in Malaysia”. Although he admitted he was always careful with his words, there was one time the headline to his story on open burning was very misleading compared to the actual content of the story. As a result, he got into trouble with government people. He said:

...I said I don't think the [government agency] will be able to handle the situation themselves because they are not mobilized all over the country and we need to get all the people mobilized. But the headline stated that ‘I criticize’ the [government agency]...but the inside story is ok but the sub-headline destroys the story. Is this my fault? It is the journalist's, but I got scolded.

The respondent believed the journalists purposely sensationalized the headline to attract public attention although the message of the story was totally different. Conversely, another Malaysian environmentalist suspected that this situation was derived from the public expectations of the media. He argued that it was hard to change peoples' attitudes because he believed the problem was that many people do not read important issues in newspapers. They bought the newspaper but only looked at a few bits that interested them. He explained:

I bet a lot of people just read the front page...and the thing that it relates to...I don't know...like this morning, the headline is on the increase on a litre of petrol. They will read and take notice. Or murder scandals, or political, sex

scandals, things like that...which is written in a very, very subtle way, and people are very good at reading between the lines. It is a constraint how you report...

Similarly, the Malaysian public relations officers believed the newspapers have their own interest when providing information to the public. Although they could not gauge specifically what agenda the newspapers have, they felt the papers are interested only on current issues; and the issues must be based on their readers' topic of interest. For instance, if the targeted readers are interested in political discourse, the paper would provide more current political stories for the readers. Hence, they argued that different types of newspapers have different agendas.

The newspapers' agenda could be observed at the press conferences, they confirmed. One respondent explained that sometimes she has to "package" her press conference event with the current issues and invited a VIP to officiate the event in order to attract media attention. For example, just recently she linked her event with the rise in the petrol price; as a result she received a high turn out of journalists at the press conference. She believed media people were only engrossed with current issues and she referred this to the press conference scenario. She said:

...it depends very much who you invite...and if you have current stories, they will come. Environmental activities...I have to relate my event with the petrol price issue. Another media pool is that if there's a VIP or minister or somebody controversial or a celebrity that is attending your event. That is another media pool. And they want to talk about that person and maybe your event is relegated to...a one line mention or a single paragraph mention or just a photo caption.

The respondent seemed satisfied even to have only one line mentioned about her event. This showed that respondents did not expect much from the media because they realized that environmental activities would not be of interest to the media. Thus, a one line mention was a victory for them.

Another public relations officer told that in many of her press conferences to promote environmental activities the company was working on, she found

sometimes it was not only attended by environmental journalists but also business and political journalists. However, they were there to interview the Minister or VIP invited, not for the event. She stated:

...if we have an event and only invite certain desks, we will find that people from other desks will come, business desk will come because they have their own agenda. Their own targeted and news search. So it is *isu agenda lah* (agenda issue) that they decide what to cover.

Thus, she was confident it was the newspapers' agenda to get the Minister or VIP's to comment on current issues. All respondents also believed they have to know when was the right time to get their news published as they were sure the newspapers preferred only current issues to be covered in their edition. As another person said:

No matter how good your organization of your environmental events...if the flavour of the month is about something else and you start to organize, they (journalists) will not write anything about what you say. If a feature article, maybe your story will come out two, or three weeks later. Good enough. But no point organizing the event...

The same view shared by another respondent who said:

...the timing must be right. Don't try to publish your stories when PM is announcing our annual budget. Timing is not right. Timing must be right.

It reflected that it was so competitive to penetrate the newspapers. In a very limited space only current stories could fit in. As such, it can be argued if newspapers should only provide current stories for the readers, because newspapers should also perform a variety of non-news functions such as printing an education column for students (Barnhurst and Wartella 1991, p. 200).

Based on the interviews conducted, I found that many of the public relations officers were very well-versed on how journalists work and have their own way to get their stories printed. For example, all respondents realized that they never had to compete for environmental coverage at weekends because they believed the

press normally did not have enough stories at the end of the week. One person said:

...the media lacks politics and current affairs during weekends and they will look for news or anything that you do on the site, they will find stories.

There were two types of stories that journalists were searching for: any news on current affairs, and secondly, politics. As environmental news was not so much in demand, the respondents took the opportunity at weekends either to organize their environmental events or send press releases to the press. I notice that as all the respondents were very experienced in this line, they were able to recognize the limitations of their news. It also gave me the impression that they knew how to work things out with the media.

In more detail, another person believed the Malay papers have very average environmental reporting as he quoted as saying:

Like Malay newspapers, not so much. They only come to your site, ask you to tell them about construction, tell them about environment. They don't share the story. They copy only. But I think it is how the paper...their edition. The content... they always have their contents.

The environmental coverage in Malay newspapers was not covered in depth. Most of the journalists would duplicate whatever had been told to them, thus sometimes the contents were not understood because the journalists themselves did not comprehend the issues.

Additionally, referring to the type of media used, the respondents thought the print media gave more coverage on environmental news compared to broadcast media. Furthermore, print journalists were more familiar with the environmental issues than broadcast journalists as they thought. One Malaysian public relations officer stated:

...I find that basically [newspapers]...their journalists seemed to understand the environmental issues. So they

could write what we hope them to write. And they know what they are talking about.

This gives strong evidence that the newspapers provide news based on the demands of their readers; on what type of issues they are interested in. To sum up, each newspaper has their own agenda basically to increase their sales and to serve their stakeholders and owners. Respondents also trusted the English papers to give more coverage than other languages. However, the real reasons could not be determined at this stage. Furthermore, the New Zealand respondents did not find this as a limitation to the environmental news construction. But this is an important factor for future study; especially on what type of agenda do newspapers have, why do they choose that agenda and how does the agenda affect the environmental coverage in their newspapers.

6.2.6 The editors and newsroom culture

The Malaysian journalists disclosed that the editors could be the most likely force in blocking environmental reporting because they were not interested in environmental news and refused to publish the news. One commented:

...most of it is lack of interest from the editors...you are writing a report, really in depth, but the editor will ask you...what's the purpose of you writing it? What's the news? Sometimes it is hard for me to explain. It is not so much about the news. But that it is leading to something.

The editors are not supportive due to their lack of knowledge of environmental issues. This reflects the general public lack of interest in the state of the environment as newspapers fail to act as environmental information providers to public. The editors should first understand the importance of environmental news; then only they would have empathy towards the issues. If they do not value the environmental issues, it would be hard to get the message across to the public. One Malaysian environmentalist commented:

... I think the editors don't understand the issues. We don't blame them because the environmental issues are very

complicated, very complex. But many reporters told me...it is hard to 'sell' the stories to the editors...

The Editors' lack of knowledge could also lead to shortening of a story because of space constraints. This leaves readers with, sometimes, incomplete coverage which causes confusion among the readers. Furthermore, the Malaysian newspapers hardly do a follow-up on critical issues and most of the time the important stories died before people could understand what it was about.

The public could also be confused with some distorted stories produced from edited press releases, the Malaysian environmentalists told. One person expressed his concern as many editors were not well versed in the environmental issues; the modified press releases could make the stories distorted. He said:

If you give a page or a page and a half (press release), and they will give you two sentences and certainly you have no control over what the emphasis was. That is up to the press. We have to understand their business, to be in practice. But sometimes the stories were distorted or incomplete...

This statement contrasts with the literature reviewed that revealed most press releases were printed verbatim. However, another Malaysian environmentalist did not think distortion of a story was caused by misunderstanding the issue; but rather he described this as the personal prejudice of the editors. He said:

Sometimes some journalists would tell me this particular editor doesn't write environmental issues, that's why he kills all environmental stories. And this is one of the headaches...

Some editors simply axe the environmental stories because they have never written such stories. The respondent perceived editors were simply being biased against environmental stories. However, another environmentalist linked this scenario to what was called "self-censorship". He believed the editors were only mindful of the fact that the news contents were monitored by the authorities. I quote him as saying:

...the problem that we have in Malaysia, and this is a debate that is going on for a long time, is self-censorship. I think that is the weakness in many of the papers here regardless of environment or any other issues. They sometimes self censor themselves in such a way. They have the impression that it is all about the authorities. It is not the authority, but they are afraid that the authorities may get angry.

As media control has been practised for decades, the media were too conscious of their contents. In fact some environmental stories did not affect government, the corporate sector or politicians, but the editors were too fearful to release such stories to the public.

The same respondent also mentioned that he had tried to approach some chief editors to set up environmental desks. However, the answer was the “environmental beat was not important enough”. As a result, the environment news slips into the science section, which publishes almost everyday in certain papers and he argued that this trend has made the environmental coverage decline in the newspapers. As such, he described editors as “faking their ignorance” towards the importance of environmental news. This is particularly true in the Malay newspapers as the content analysis shows a decreasing number of environmental news coverage, but it is not the case in the English newspapers which produced an increasing number of environmental articles in 2004.

On the issue of misinterpretation, a Malaysian government official claimed that the editors would re-angle the environmental stories to make it interesting for readers. She said:

When I called the journalists, they said it was changed by the editor *untuk sedapkan cerita* (to make the story interesting), quote *lah nama saya* (so they quote my name). Luckily I was not called by anybody *lah*. That’s the thing. That’s the dilemma of being a government servant in providing information to the press.

The Malaysian public relations officers also presumed that the agenda of the newspapers could be motivated by the editors. One respondent described:

...they (journalists) come to the press conference because their news editors will say...ok, [the company] is having an event, you go and ask them about political issues, about water problems, get their comments and all that. So, we become the platform for the press to ask other things related to...like current issues you know.

The editors play a vital role to make sure more environmental news is printed in the papers, they argued. They have the power to insert an environmental column in their papers; to choose journalists to specialize in environmental issues and which stories to be printed. As another public relations officer stated:

...especially their edition, the content...because [two of the subject newspapers] have their environmental related issues, so they can focus on this (environmental issue) and they have right people as well. The coverage is good. It is all up to the editors...

The editor has control of the newspaper content and it has some impact on the reporting of environmental news in two ways. First, environmental news would be placed onto the general pages, which means it has to compete for space with other news. As a result, second, it would not be covered in-depth because of limited space and because it was reported by general desk reporters and not specialist writers.

The Malaysian environmentalists argued that the newsroom culture that required all journalists to know a bit of all areas might lead to unskilled writers for specific areas such as the environment. They believe Malaysian journalists only specialize in sports, politics and economics. Not on other subject areas. He explained:

...I think the problem is nobody is really specialized. So there is no investigative journalism...everything is across the board, no investigative journalism in this country, because once you start doing that, people don't like it. People don't like it if you dig up their dirt...

As a result of the newsroom culture, no journalists would write articles in depth. They believed the general desk journalists were unable to gauge the complex issues of the environment. One respondent said:

I think we still get many journalists coming in who are general journalists who cover a lot of stories. So they might not understand the issues, we have to spend a longer time with them...to explain...but even then the stories sometimes were misrepresented.

The environmentalists also added that the need to have specialist environmental writers was very important to educate the public, as the awareness of Malaysians was still low. They strongly believed the media could be the best medium to alert the public on environmental issues. Another environmentalist stated:

Our public awareness of the environment is still low. So in a way, the media is affecting the awareness too. Because people are not aware. But media say...oh! People are not interested and so on...but how can you make the people know if the media do not cover? And we are caught in that situation now. And who's job is it? Is it NGO's job to make the public aware? If the media do not cover, so how to make them aware? How many people can we invite to a seminar?

The argument here was whether the media should do coverage according to their readers' needs or should they tell the public what to read and what is important. It is difficult to change the newsroom culture, as it has been a norm for years. In fact, media people might not be able to identify this as a limitation because they are used to such an environment.

The Malaysian journalists gave some interesting inputs as to their attitudes towards the whole process of writing on environmental news. They are not motivated to search for environmental issues because the issues are not of interest to the newspaper companies; it is difficult to understand the complex environment information and too hard to find the right persons to comment. As such, some articles are written at a surface level or perhaps oversimplified.

Collective attitudes in the newsroom also appeared to play some role. One senior Malaysian journalist told that many (young) journalists were reluctant to investigate or search for good environmental stories because their hard work was not appreciated by editors. The respondent who has 19 years experience in writing environmental news said:

I did some survey on river pollution and met locals and saw how they use the polluted water...but some journalists thought...why do we have to spend a lot of time and energy because we would not know whether it will be printed or not. Not worth it...

Journalists work based on deadlines. There is some evidence suggesting that some journalists just did not want to risk their time on uncertainties. Thus, they reported whatever comes to hand. In short, interest and positive attitudes are also important in producing environmental stories.

A New Zealand scientist believed editors give less prominence to the environmental news as compared with other news areas such as business and sports. This could be evident in their news selection and newspaper contents, respondents argued. One person gave an example by stating:

...it is a matter of content that is when you look at (a New Zealand paper such as) The Press, for example, you will find the usual topics such as world news, local news, sports, advertising, entertainment and business sections and so on but there is no standard environmental section...sometimes they do include inserts on special occasions but in my view the state of the environment is so fundamental that we have to ask why there is emphasis being given to other sectors but not the environment factor in New Zealand...

This is partly true as editors have less recognition of environmental stories resulting in a small coverage of the Lake Taupo issue as discussed in Section 6.2.11. Also, as many of the respondents are general desk reporters whom also write environmental news, it can be argued that the importance of having specialized environmental writers is not regarded as important as the other subject reporters. Therefore, as newspaper recognition of the importance of

environmental news was nearly invisible, it could limit the interests and creativity of journalists to write on this subject.

Most of New Zealand respondents are well aware of editorial control in environmental news production. However, the pressure was not visible, thus the responsibility was put on the shoulders of journalists, respondents hypothesized. As a New Zealand public relations officer described:

Often the way the story is presented in the newspaper it is not what the journalist writes, the journalist writes the story and then the editor edits it and takes pieces out and often there will be changes in context but it is not the actual journalists fault as somebody (else made the changes) ...

The public relations officer also believed that some of the controversial stories as discussed above were rewritten by the editors. This was because only one journalist would be assigned to one particular project conducted by the company the officer represented. Thus, the respondent and the assigned journalist have built up a good relationship over many encounters. But sometimes the respondent found that some articles actually printed were unlikely be written by the journalist because the content seemed misleading. In that sense the respondent suspected the stories were re-angled by the editor. He explained:

...where a reporter has written a story and the reporter will be well informed because it is somebody that you are interacting with on a regular basis, but then the subeditors will get hold of it and they will change things around and the resulting story is really a very long way away from a) what the reporter wrote and submitted to the subeditors and b) what the realities of the situation are and I have had several examples of that sort of thing happening and particularly during project Aqua. Again I took those issues up with Editors and action was taken to prevent it happening again. One of the actions was that sub-editors were not allowed to alter copy from this journalist without referring back to the journalist.

In other words, the misrepresentation of many of his environmental stories might not be the fault of the journalist at all. In addition, another respondent commented that both journalists and editors were only interested to search for conflict stories.

He described some of his experiences as “bad” because some editors were not interested in factual stories. He stated:

...they (the editors) tended to report conflict issues rather than factually report things like electricity price increases, they tended highlight on the social aspects of it rather than the reasons why the price has gone up and that sort of thing. It tends to be sensationalist negative reporting and we have had a number of discussions with the particular editor about that but unfortunately it is his style...

That is the approach many newspapers have to highlight human interest stories in order to attract the attention of readers. Based on the above statement, perhaps editors are confident to be able to draw public attention by emphasizing the social aspects of the rise in the electricity price. The emphasis of the social aspect is the result of a US trend called “news you can use” which many news consultants have applied to New Zealand.

There are two aspects that New Zealand journalists thought could influence the decision of editors when selecting articles. First, editors were not interested in the environmental topic, and second, they have a conflict of interest. Some journalists believed editors were not interested in the environmental topic because of their lack of understanding of the context. One person clarified:

...it is not that like they (editors) don't think it is a good story for readers but sometimes they feel that it is not as interesting from their point of views in terms of how significant something is or how important readers may view the topic matter and so sometimes in that instance I am called off to do other stories.

Based on this statement, the respondent saw editors were simply not interested in the topic, although the editors realized some environmental stories could be useful information for public knowledge. In short, editors selected the stories based on their own assumptions. Hence, sometimes the respondents were asked not to write on the environment subject when they felt the issue was not important.

Another journalist informed that sometimes editors would ask him to frame some environmental stories so that it would be interesting to readers. He trusted this was because the editors found that his environmental articles were not interesting enough to read. He stated:

...your editor sometimes asks you to write from certain angles...frame it...ask you to write in a particular way, that's fine, they are your boss. But sometimes that is not the story you want to tell...but he says 'we can't write like this, I suggest you change your story around'...I mean, if your editor does not like your story, your writing simply won't be in the paper. That's how it goes. There's no way to get the work published...

He also suspected some editors might have a conflict of interest in the process of news selection. He added:

...sometimes there's conflict of interest too. You get asked to write a story because some companies or government people were involved...and the editor want you to frame the story as he wants...he has a connection with the company or the government people...may be...

Most of the time, he confessed, the true picture of the story could not be conveyed to the readers because it was framed in a different way. Hence, the public might perceive the environmental issues differently. His statement clearly showed that the editors have the power to frame the story contents. As another person commented "...it is hard to get news editors excited about environmental stories because they (environmental stories) are not seen as a priority, so the stories don't run". Thus, some comments on incomplete or misleading environmental contents could be caused by the editors' practice at the production stage of the news. Perhaps the decreasing number of environmental stories in New Zealand papers in 2000, as shown in the content analysis findings, could be caused by the same situation. Therefore, the editors' role would be worth studying in terms of, not only the selection, but also on the construction of environmental news.

6.2.7 Ownership and political will

The Malaysian government censorship of media content has long been debated. However, few studies have been done on the influence on environmental stories.

One Malaysian journalist explained that it was not easy to get stories printed on certain issues that related to government projects because the newspaper companies were owned by the ruling party. She commented:

The [newspaper] is indirectly owned by [one of the parties in the Barisan Nasional²⁷]. So any stories that...affect the [party] members or their ministerial jurisdictions then you cannot talk about it. In the case of the incinerator issue you know...under the local government ministry...it is under the [party] president so I ...censorship definitely cannot write anything about the issue. Well...not just from the newspapers owners, but of course right from the top to the end. Because last time when the former PM he had some kind of pet project like Bakun Dam²⁸ and of course again there was censorship problems with that. And also the highland highway issue. So again there is a censorship on that.

In her story above, it clearly shows that the editor realizes the political influence and seemingly encourages the situation. As a senior journalist, the respondent was quite frustrated with the situation but has to live with it. In addition, another person gave more specific details of her experience as below.

Well politically we are a [the ruling party] company...fair enough but if I have to do environment stories and the director of the company *yang buat pollution tu* (who is the culprit) is a [party] member...do you think the article is going to come out? Obviously it won't come out. Frustrated. Ok but that's part of the job. I have to live with it...once I wrote a story on river pollution not only I got scolded by my editor... but the director of the Department of Environment *kena* (was) transferred in 24 hours because

²⁷ The Barisan Nasional (National Front or BN) is a political coalition in Malaysia. Formed in 1973 as the successor of the Alliance (Parti Perikatan), it has ruled Malaysia uninterrupted (its term as the Alliance included) since independence. As of December 2005, Barisan Nasional's member parties are: United Malays National Organization (UMNO), Malaysian Chinese Association (MCA), Malaysian Indian Congress (MIC), Gerakan Rakyat Malaysia (Malaysian People's Movement), People's Progressive Party, Parti Pesaka Bumiputera Bersatu, Sarawak United People's Party, Sabah Progressive Party (SAPP), Parti Bersatu Sabah, Liberal Democratic Party, Parti Bersatu Rakyat Sabah, United Pasokmomogun Kadazandusun Murut Organisation and Sarawak Progressive Democratic Party (www.bn.org.my)

²⁸ The Bakun Dam was planned to be the largest dam in southeast Asia, at a cost of about RM7 billion, generating 2400 megawatts and if built would flood an area of tropical forest the size of Singapore. The decision to build the dam was decided by the national government in 1986. After being indefinitely postponed in 1990, it was resurrected in 1993, only to be deferred again in late 1997, in the face of the Asian economic crisis. The Bakun Dam has been the focus of intense controversy, both from within Malaysia and elsewhere (<http://www.idsnet.org/Resources/Dams/Bakun/BakunDam.html>)

dia yang bagi (he gave) that information. Who is the owner of that company *yang* (which was) dumping toxic waste *dlm sungai Klang* (into the Klang river), who? (She then named the company and asked me not to record it).

Both respondents have had similar experiences and in both situations it is clearly indicated that editors were fully aware of the pressure. The editors not only encourage the situation but also appeared to be fearful to take charge of the restraint.

In the second story, there is evidence of strong pressure from the government as the Director of the Department of the Environment was moved to another department with very short notice just because he gave the “true” picture of river pollution. Another journalist was confident that government censorship has been limiting his creativity as a science and environmental journalist for 11 years. However, he was reluctant to elaborate further on this issue and wanted me to go off the record. He believed that the government censorship and corporate sector interference have left environmental stories with a slim chance to be published in order to protect the two institutions.

Meanwhile, a Malaysian public relations officer disclosed that there were certain things that they could not tell journalists especially on project policies because that would be the under state government jurisdiction; whereas, they just carry out their duty. As such, they admitted to have some limitations to give information on their project development to the media. She said:

...whether you like it or not, often times they are going to face this hurdle. Like I said just now, no doubt state government when it comes to environmental matters, they give us freedom to explain to the media, but it doesn't mean that we don't get blessing from them. Certain aspects, when they say we cannot, we cannot...maybe it is because politically politicians are worried about public perceptions.

However, another respondent said that not all statements have to get consent from the government – only if the issue was controversial. He said:

...we can't simply say what we want, we have to ask the state first. If they say no, we have to keep quiet...Normally, the state will take charge...

He referred to the recent claim on contaminated drinking water and why his organization was found to make the least statements to the media although they were the key players for water distribution in the area. In some ways, government control in some corporate sectors definitely has an effect on the environmental news because journalists could not get the real picture of the issues from the corporate sector. In summary, when it comes to controversial issues, the public relations persons would not have the power to give statements, but always the government can give comments.

On other small concerns, the public relations officer did mention that it is a challenge to have their news stories covered accurately. This is important for their companies' image. One person told that normally the accuracy would frequently be in softer language or in a later paragraph of the news and this made it difficult to correct but could affect her organization tremendously. However, they could accept that the misquoting of the facts was just "part and parcel of game" in dealing with media people.

They also have quite similar views that newspapers did have balanced reporting on their environmental related projects. None of them have expressed any disgruntled experienced with the media and believed they have good relationship with the media. However, these views were contradictory to the scientists/academics and environmentalists who felt that there was a lot more room for improvement.

The Malaysian scientists/academics believe there is interference by politicians in the operation of the media. One person shared his experiences during the haze issue in 1997 and 1998. He said:

All newspapers are held by politicians in the country. The editors seem to be independent, but they are not, actually. They are all governed by their masters, behind there. When we were clouded with haze, *masa tu Menteri Penerangan*

(at that time, the Information Minister) restricted all the media, tv, and radio to shut out all the news on the haze. Afraid that it might affect the country...it is better to hide than to tell. This is rather sad. I remember...even [one of the Ministers] for the last many years, agreed with the notion that you tell least to the foreigners because if you tell more, they will step you back.

This was not unusual as previous research on the Malaysian media have come to almost the same conclusion, as Gomez (1993) in *Political Business* who claimed that the news contents of Malaysian newspapers is under the control of the ruling elites. This view also confirms the statement made by government officials on the previous pages, who admitted that some haze information in 1997 and 1998 was not disclosed to the public purely because of national interest.

The Malaysian environmentalists share the same view. One person described how ownership affects newspaper content by saying:

...sometimes in fact even people in The Star has told me, that especially if the Star...if the issues affect badly the MCA it would not get the coverage. So the ownership has the bearing also. You know *NST*, *Utusan* and *Berita Harian* are under UMNO, *STAR* is MCA, *Nanyang* is MCA, *Sin Chew* is almost MCA. So if the environmental issue is likely to reflect badly and cause a pinch in the interests of the officials of the party then obviously the coverage is killed.

Another example by is from an environmentalist who stated that the papers took signals from the government. He compared two controversial environmental issues in the 70's and 80's and described it as below:

Look at the Tembeling²⁹ situation and earlier on, Endau Rompin,³⁰ which was in the late 70's that it was a Pahang state government that raised the issue, but the federal government was against the release of the information

²⁹ In the early 70's a hydroelectric dam was proposed by the Malaysian government to be built at Tembeling river. Despite there being protests by many parties, the project took place about 10 years after it was first proposed (www.doe.gov.my, www.surfover.com)

³⁰ The Sultan of Pahang state raised an issue of logging by the federal government and created a controversial argument. However, no one knows what was the solution as no media were not allowed to cover the stories (www.surfover.com)

because there was logging of the whole national park. In this case the papers we were blacked out, because the federal government was against it...so, I said that showed that the press in this country takes the signal from the federal government. If the federal government is not strong on it then it will go, they will cover. If the government is for the project, then they will black out criticism as far as possible.

In his statement, he argued that both environmental issues were not published in the papers because of they were federal government projects. This reflected that the papers have no stance, rather projecting their news by consent of the authorities. Perhaps they were too conscious of not offending the government. Still, the same respondent felt that this was ridiculous especially when the consciousness was inappropriate as he described below:

...another problem the media keep on meeting again and again is the idea of balanced reporting. Under the guise of balanced reporting they will even black you out because they don't have government response to what you say. RTM (Radio Televisyen Malaysia) interviewed me on a story on rubbish many years ago. So they got my version but never broadcast because they said they haven't got the info from DBKL (Kuala Lumpur City Council) and MPPJ (Petaling Jaya City Council) to comment, so since we don't get two sides of the story we decided not to air...

However, all environmentalists interviewed were very pleased with recent developments in environmental reporting especially on TV3 (the third Malaysian TV channel) as, at least, it broadcasts environmental stories even when they could not get the relevant authority to comment. They thought TV3 has made the right move by telling viewers that they have gone to see the responsible authority, but they were unable to get their comments. This was the way it should be reported.

In summary, the Malaysian respondents believe that the media owner and politicians have some control over media contents. As the practice has been going on too long, sometimes the media become too conscious themselves so as not to offend the government. As shown in the literature review, the media owners and politicians are not two entities in Malaysia; rather they are based on the same institution, both have the same pressures on the media operation.

However, none of the New Zealand respondents mentioned about this issue as a potential limitation to environmental news construction.

6.2.8 News sources

The Malaysian journalists identified two problems in dealing with news sources: (i) their attitude towards media people and; (ii) the shortage of environmental experts. Most journalists felt that the attitude of sources was the main problem for them in reporting environmental news. For example, some sources refused interviews and others “just liked to be hard with journalists”. One respondent described the attitudes of government officials and scientists as:

...for us, there is no freedom of information act. You practically have to beg for information and it is not necessarily that the government agency will share the information. The scientists *pula* will do a nice report on something and where does it go after that? They didn't tell us, don't do press conference to tell you this. I found this and that. It is more for research sake.

Apparently, it was really difficult to deal with the government, while scientists just did not know how to make their successful findings known to others or how the findings can be applied to real life. Another journalist added:

...sometimes sources just refused to be interviewed. I have been waiting for one month to get comments from [new source]. It was just clear-cut info. But after waiting for a month, the [new source] told me to talk to somebody else. Wasting my time...

Journalists also commented that scientists were the most difficult news sources to deal with. The journalist believed the expectations of scientists that their stories to be written as complete as in the science journals have made them frustrated with media people. This was simply a clash of a lack of understanding of each others work which could be remedied by greater discussion and tolerance.

The lack of environmental experts in Malaysia has led to difficulties in finding the right sources for certain issues which have led the journalists to use the same

source again and again. The content analysis also show some similar findings as the same sources are used repeatedly in a range of topics. This is particularly true for government officials, whom I argue their high amount of quotes is because they are in-charge of the environmental issues.

Most Malaysian journalists also claimed that they were not provided with sufficient information by government officials and that some important information was not documented properly resulting in difficulty in writing environmental news. One respondent said:

... as environmental issues become more important, so there are things that are controversial and issues that are not controversial, it is hard to obtain information...the government people are reluctant to speak to you or to give you documents. That is the main constraint.

She referred this to her recent encounter with the government officers on the issuance of a special permit for breeding Sumatran *orang-utan* in Malaysia. She speculated that there were some negative elements in the process of permit issuance that were kept secret. She explained:

For instance in this particular case, with the [government department], when I asked them to show the special permit, they refused to show. They said...yeah these people have special permits which legalized having it (*orang-utan*) in Malaysia...and I asked them if this is true. Is this what you have allowed in the special permit? They would not confirm it either. They refused to be interviewed, refused to comment, and I actually went up to ministry level to ask them about this. I went to the department...but they refused to give out the information, so the next step is to go to the ministry. Looked for the person in the division who is in-charge for wildlife. And they also don't have the information, because they are the policy makers, they are not the implementers of the laws...they also implement the law, enforce the law for wildlife protection act. So they don't have the information so they have to refer that to the [department], which is [government] department. They won't give the information...giving you freedom of information. The right to get the information...of course it is important to journalists.

Another problem with environmental information is that there is no proper filing system, another respondent thought. She believed Malaysian researchers have a lot of useful findings but they were not kept properly for future use. Most of the respondents also argued on the credibility of government officials as reliable news sources.

Malaysia is not a country which is either recording data or information and keeping it systematically or it there is very little access to it. Somehow or rather it is, I think, the information ends up either being completely inaccessible, because it gets lost, no one bothers to keep it or it is inaccessible because it is some sort of a secret, but no one explains you why is it a secret. Some data you just can't get your hands on, or no one keeps such data. If you want specific information, then it is a problem.

The New Zealand respondents also believed that news sources were the biggest out-of-reach challenge. They say they can overcome page and space limitations because that is within their scope of work, but they cannot urge news sources to give their views within the respondents' own time frame as explained by some respondents earlier.

In general, respondents have problems to get all the relevant sources to comment within the deadlines. There were several reasons for this difficulty as, respondents told, some were simply very busy, some were just not available in the journalists' timeframe; or sometimes they just refused to comment to keep their career safe and keep their good name, especially on controversial issues.

In particular, journalists named government officials and scientists as the most difficult encounters. But these are the important figures in environmental discourse, respondents argued. As such, they have to get the sources' comments especially in complex issues as one person believed "...no one else can confirm facts other than the authorities and scientists..." Another respondent added the two sources were important especially:

...when you write on controversial issues...maybe on the aqua project³¹, for example, it involves environment, resource management, and legal issues too. The story is complex...I need people to check the facts and give specific comments...but they are unavailable...

In an environmental issue, there could be many relevant people involved and their comments are very important to give good arguments in a story. By referring to scientists, one respondent described them as “people who are not easy to interview...not willing to say anything”. He trusted this was just people’s individual personality but also thought perhaps scientists were unable to speak at a layman’s level and thus they refused to make contact with the media people.

On the other hand, respondents thought government officials were more willing to talk to them but they constrained journalists writing in a different way as one person commented:

...sometime authorities can be so protective of information, and they control how the information can be portrayed and they don’t tend to be very helpful which is what I find.

The New Zealand government officials, she claimed, protected themselves by protecting the information from journalists so that it could not be reached by public. However, none of the respondents could detail this argument to the same extent as the Malaysian journalists did. As such, this was probably on a case by case basis in New Zealand and not as serious as the Malaysian ones. But they have the same underlying assumptions – it is the right of journalists to have access to this information.

Another comment on news sources was that some were willing to give statements but were reluctant to allow their names to be used in the stories, respondents

³¹ Project Aqua was a proposed hydroelectric scheme for the lower Waitaki River in New Zealand. The scheme would produce approximately 520MW of power to supply a city the size of Christchurch. The issues that people had with the scheme included land issues, the disruption during construction, and concerns about the sustainability of the river. On March 29, 2004, Meridian Energy, decided not to go ahead with construction. Among the nine reasons they gave for stopping the project was the uncertainty in gaining access to the water, and that Aqua could not come on line soon enough to meet New Zealand’s growing electricity demand. However, one respondent who had been following the issue since the project was first proposed suspected that mounting opposition not just locally but throughout the whole country may have also had an influence. Meridian’s 2004 annual report states they lost NZ\$38.7 million on the project (www.med.govt.nz, www.waitaki-river.org.nz, interview with journalist on May 8, 2006)

claimed. This could prevent the journalists writing the story at all because they could not quote and could not get anybody to confirm the facts.

In short, although both New Zealand and Malaysian respondents believe news sources could limit their writing, the detailed constraints discussed were diverse. In New Zealand, the difficulty frequently occurred when respondents were dealing with scientists; while Malaysian journalists faced many problems with government officers.

6.2.9 Corporate interferences

Another possible limitation was intimidation from some big companies when there was environmental impact associated with their project development. However, only one person could tell me her story in detail. Others did not encounter this unpleasant experience in person, but rather it was aimed at their newspapers companies. The Malaysian journalist told:

...a threat. That's normal. Sometimes you receive a phone call... "If you write this again, you are dead. I know where you work"...but it depends, perhaps they were angry at that time...I think sometimes they just threatened you because you are young, you know...

In order to avoid this situation, she advised journalists to disguise themselves not as media persons when visiting those companies for investigation. This was because first, the companies would not welcome media people; and second, if they permitted the media to visit, it meant the companies would have cleaned up all their mess so that the media would not detect any of their ill-treatment of the environment. Hence, journalists would not get the true picture of the situation. As she stated:

...well that's a norm. When we tell them we are reporters, they will lie. They will say..oh...everything is good, but when we enter the slaughtering factory...when I got into the factory with the [one of the big corporate sectors] people and we saw the real situation....very filthy and dirty... If journalists want to visit, they will clean it up and

everything was ok. So if you want to report on environmental situations, don't introduce yourself as a reporter. Then you will get the real stories.

This literally shows that not only some companies have the power to determine what stories should be printed but also try to show off their power by telling people what should and should not be written.

Newspapers have two sources of revenue: advertising and readership. It was important to study on the advertising affect on media content because in Malaysia “the development of advertising was encouraged from national inception by a government hoping to facilitate rapid economic growth” (Holden 2001, 281). In a way, the involvement of corporate sectors as the biggest advertisers that could determine the contents of the newspapers could not be denied.

In the interviews, respondents were adamant that corporate sector advertisements were one of the biggest influential factors to limit the coverage of environmental news. One journalist said:

...corporate influence on media organizations, it is not political interference now, corporate interferences...you know, it is not life threatening rather than political interferences you know...because the corporate can determine your bottom line, your income revenue, your advertisers.

The Malaysian journalists perceived corporate sectors as the “worst culprit” compared to that of political forces in “stealing” space from environmental news. In this context, the corporate sector could influence the reporting in two ways. First, as the biggest advertisers they have the power to determine what stories should be published. As the same respondent continued:

It is better to pull out that...especially if the corporate company is big you know. Chemical company, oil company...these companies have indirectly affected the environment. This kind of interference...I have personally encountered with that. You were asked to drop the story because of these advertisers. Your editor will tell you, we can't afford to offend them.

Second, they have the tendency to take up more space over the news. I guess as environmental stories are not as competitive as political, economic, sports and entertainment subjects, the possibility to axe or shorten the story was undeniable. Another journalist told:

I am an environmental feature writer but sometimes the space is very limited because advertisements are bigger than the news. Big companies....it takes up my space you know. I have got to shorten my features. Have you heard of a short feature?

Throughout the interviews, the Malaysian journalists expressed their resentment towards the corporate sector more than towards government officials because their influence is tangible and made an immediate impact on the journalists' work.

6.2.10 Time and space constraints

None of Malaysian respondents discussed this matter but almost all the New Zealand respondents believed time and space constraints limit their creativity in two ways: first, many times they were unable to describe important stories in the limited space; second, they could not get the quotes that they needed in time. As a result, some stories were not complete and, as some critics said, not well-balanced. Nevertheless, between the two limitations, respondents regarded deadlines as the major one; while they still believed they could still resolve space problems by carefully selecting only important information to be put into the small space available.

As most New Zealand journalists were general desk reporters, they believed they required more time to understand and write on environmental issues than print journalism tends to permit. Some said the stress resulting from time pressures and the complexity of some environmental stories resulted in poor reporting. As one person said:

...because it is a daily newspaper, the deadline is about 5 o'clock. Sometimes it can be stressful in the evening...can be hard to understand fully and write the issue that you are

talking about in a short time, of course to record them wholly...

Another person supported this view as she thought the difficult part was to compress all the important aspects of environmental stories in a few hours and to rephrase the complex information into layman's terms. It could take so much of her time. She said:

I mean the biggest challenge would probably be the time constraints and boiling down something that occasionally can be quite complex into something simple that people can understand...can be hard work...

Another concern mentioned with regard to time constraints was difficulties to get all the required news sources to give their views within the given time frame. The news sources were very important, they thought, because they could not write a story without the views of the sources. In order to overcome this difficulty, many respondents used their regular contacts to replace whomever they could not get the actual quotes from. They have to do this to get the stories out. Otherwise they could not give balanced views from different sources or perhaps the story would not be printed at all, they argued. One of them said:

...you've got your deadlines and often that is an enormous consideration when you are writing stories is your deadline...sometimes there is a really good story out there, but you can't get that needed quote in time, so the story doesn't run...

However, in the content analysis findings, the use of same sources over again did not reflect in the New Zealand sourcing patterns of environmental news. Perhaps this situation only happens occasionally. The most difficult sources to get were the academics and scientists - they suspected because of their busy schedule.

Despite the above arguments, a small number of respondents saw deadlines as part of their jobs. There were some difficulties dealing with deadlines, they admitted, but as one person said "that is the skill you have to have as a journalist".

Besides the time limitations, space could be another problem too. Respondents believed page constraints have led to the production of, as one person described as, “short snappy stories”. Although some respondents agreed to this notion, the content analysis findings show quite a lengthy write up both in the news events and feature stories. This was in contrast with the Malaysian content analysis findings.

The biggest challenge to overcome limited space was that the stories could be so simplified that it would make readers confused, they argued. One person told “...from time to time your stuff can get chopped to make sure it is simplified for the development of the story...” He said often times the editor claimed they would have to re-write his story so that the public could understand the story flow. Although respondents argued simplifying story development could make the stories distorted, they also agreed that if one wanted to read a detailed explanation of environmental issues, they should refer to the environmental or science journals as they believed this was the way newspapers work – not all details could be written on one small page. As another person stressed the most important thing is that “the story is interesting and tightly written”.

In summary, deadlines constrained New Zealand journalists to write their stories constructively. While limited space on pages could mean some stories might lose important aspects of the issues. Thus, it could cause people to misunderstand the contents and might put them in a state of confusion.

6.2.11 Environment is viewed as a source of conflict

The last possible force was mostly commented on by the New Zealand respondents, but it can be linked to the Malaysian answer on tactics to boost circulation by the newspaper companies.

The perception of the journalists of the environment as an area of conflict has led to the mass production of negative environmental stories, New Zealand environmentalists claimed. They disagreed with this view because there were so many ways to tell readers about the environment. That was why the public

relations officers kept sending press releases from time to time to make sure the media received the correct picture of the environmental status in New Zealand, which I argue this could be one way to promote their cause. However, they claimed such information was not of media interest. As one person said: “if it is anything controversial, they (journalists) will put in into print, if it is just ordinary stuff, they won’t print”.

The respondent referred this to many of her press releases sent to the press. Normally, she added, her organization’s statements on controversial matters such as the whaling issue would be printed in a short time; whereas, as far as she could remember only about ten percent of the educational statements were printed in the past year. It was pretty sad, she thought, as this information was very useful for the public.

Another person told that in his case he believed that journalists have already set their angle for a particular story, which most of the time would be very much controversial, and there was nothing much he could do about that. According to him:

...you will get a situation where...you know a lot of journalism is about conflict and so there will be a point of view which they (journalists) have established and they will want the opposing view...

Based on his argument, the respondent believed journalism practice labelled the environment as a conflict situation has caused journalists to act in such manner. Thus, the main problem here could be that of journalism legitimization of conflict as a major discussion topic for the environment. As one person argued earlier that the environment would not fit neatly into this frame because the public should be presented with more environmental information as education as we are all part of the environment.

Respondents also found that some journalists were very determined that the environment should be presented as a synonym for conflict, thus they would do whatever they could to portray the story as conflict. One person stressed:

...you might want to say something very carefully, sometimes what you say doesn't come out in the quote, it gets paraphrased into a stronger statement than you made...

In addition to the above statement, another person said although she has been working so hard to get the correct message across, but often her stories would be framed in a different manner. She stated "I just have to sort of keep trying and try the right information across to the public as much as we can, but it is hard..."

In short, the belief of journalists that conflict was the right frame for environmental stories could limit their ability to convey the correct message to the public. Respondents agreed that was the dilemma many environmentalists had when giving information to the press. As a result, they were seen as projecting themselves in an opposing manner to certain environmental issues, which was not their intention at all. However, according to respondents, as they have got used to this situation, they basically learnt to live with it.

Similarly the New Zealand public relations officers thought that journalists would usually present their environmental related projects in a negative way. Respondents feared this mind-set could also shape public perceptions towards environmental issues in the same way because the media was a powerful tool to build up public opinion. As such, it was not fair to portray the environment in such manner especially if it was related to their project development because it could only create negative perceptions amongst the public towards their companies.

In order to avoid the formation of public negative perceptions, one respondent explained that every time his company commenced any project; the first thing they would do was a media briefing so that the journalists and editors would have some basic understanding of the issue. However, journalists often write on the bad side of the story only. He emphasized:

Environmental news is often quite controversial because there are different views on what is good or bad for the environment, the media loves controversy. They do, and so

if there is an argument or a disagreement over environmental aspects that would be highlighted in the coverage and that is how they write the story, so the media knows that if they can get a good argument going over environment then they have got a good story there.

When different views clash, the environment would be in news, he argued. Papers would not be interested if there was no disagreement. Therefore, the respondent believed most environmental coverage patterns were about controversy as shown in the content analysis findings.

In addition, another public relations officer claimed that it was difficult to avoid this situation because it was out of his reach, but journalists could change this if they wanted to, he stressed. In spite of this, he believed his job was to give a true picture of the story, not to cover it up. He stated:

...as a media spokesperson it is not my job to try and avoid it or try and cover it up, it is to give our point of view. And I guess while I am concerned about fairness and our point of view, it is to reflect it in the coverage.

In other words, he believed that newspapers should be fair to all parties because it could influence public opinion. But many times, newspapers only write on bad aspects of his company, which he felt was not fair. Focusing too much on controversy would reflect environment news as always bad news. It could also jeopardize the public relations officers–journalist relationship. As told by another person:

I have had some absolutely downright dishonest reporting of environmental aspects, you know, so much so that I have nearly considered taking the reporters to the press council. I have had some very negative experiences with environmental reporting because again, journalists they can stir up controversy about the environment because the environment is always a sensitive subject.

He speculated journalists purposely framed his stories to stir controversy. The content was totally false and his organization was greatly affected. As such, he

strongly believed the media was a powerful tool to influence the public but media people should not take advantage of it. He explained his story in detail:

Well, it was tied up with...that was the year that there was an energy shortage in New Zealand, because the inflows into our hydro-lakes were quite low, and this reporter wrote what I considered to be a fraudulent story about circumstances surrounding that and I took it up with his editor and the editor agreed with me that a less than satisfactory job had been done. I mean I am sure what motivated that journalist was the fact that he knew environmental subjects will always get people stirred up.

In order to get the story out, the journalist took things out of context and totally misrepresent the situation, the respondent argued. In fact, the journalist was willing to take a risk just to get a “byline”. This was the real story of environmental reporting, he stressed. As a result, he refused to deal with that particular journalist as he said “I told the editor that not to assign him to do any stories that involved my company because I was not confident that he was going to represent us fairly and the editor agreed to go along with that”.

Another similar comment made was that the New Zealand media could be quite unfair in portraying environmental issues related to some big companies’ projects because they have intention to frame the stories as controversial stories. This was due to, they believe, the inability of the journalists to comprehend two related aspects: business and environment, in order to understand their operations. Second, they strongly believe journalists have set their minds as to what angle they wanted to frame the story; and the blame was put on the big companies as the environmental destroyer. One person stated:

I don’t think we are well-served in many cases by our media in New Zealand, it is always shadowed with controversy and it is always the big organization that is in the wrong...

Another person commented that, in fact, journalists already have “the ending of each story” they wanting to write. Thus, he argued articles on the environment could not create good public debate, rather than just be another conflict story. He

said “I think they (journalists) have got their own conclusions worked out, I think they are not interested so much in arousing debate as controversy...”

For example, another person discussed the Aqua Dam project that his company was involved in and said it was presented in such a controversial manner as opposing parties, destruction of the environment, which he believed was just to influence the public. He commented:

...the position that the press takes on Aqua...plays a huge role in influencing public opinion...too many conflict issues presented...

Although he admitted it was a rough year for him, he denied that the project was stopped due to public pressure as he claimed:

...we decided not to go ahead because the government brought in a new legislation that introduced such a lot of doubt into whether it was worth going ahead with that we decided that the appropriate thing to do was to stop it.

However, at my interview with one journalist who had been covering Project Aqua since it was first proposed he alleged that public pressure was the main reason the Aqua dam project was stopped.

The New Zealand scientists/academics also agreed that the main limitation to produce good articles was because the media perceived the environment as conflict. Thus, they argued most environmental coverage patterns would be in a re-active reporting manner in order to sell the papers as one person described “...it is a sort of mantra they have in journalism that it has got to be a tragedy or it has got to be something that grabs the headlines...”

Respondents were confident that stories were written in such a way with journalists’ intention to get it printed, as one person told that there were two ways to get their stories printed: the journalist might sometimes sensationalize the story or frame the story from a different angle. He explained one situation based on his experience as below:

I have written a few articles about the Resource Management Act (RMA), because it gets lots of criticism and I have managed to get them published but it is hard work because they (the journalists) are always looking for some kind of a slant, a sensational slant...I pointed out that it really was a lack of good control in terms of the Resource Management Act (RMA) in the first place, and the failure by the regional council to fulfil its responsibilities in that regard. I wanted to do that, they made that the feature part of the article which was not really my intention. I wanted to draw people's attention more to the way the RMA works in relation to water allocation issues but to get it published it had to be the sort of catch-cry as it were. Then of course that sparked a reaction from the regional council in defence.

The above scenario was always the case when scientists/academics trying to communicate the true picture of an issue to the public. That was why they argued most environmental contents were misleading. I asked him perhaps the article was edited because the media people were trying to avoid any grudges with the regional council, but he believed they should stick with their own professionalism to publish the correct message and to serve the public. I quote another person with a similar view as saying:

There have been occasions when I have said I will only allow something to be published that I have written only if it gets published in the form I wanted it. They are reluctant about that. Sometimes they do, but they like to retain the freedom to edit your work to suit the newspaper.

The media people would decide the best angle for the story; while news sources only acted as the provider of the contents and persons who could legitimize the facts of the journalists. Respondents felt this was an unhealthy sign because if journalists kept on practicing the policy of only looking for sensational issues, they could leave out the important aspect of environmental issues for the public. For example, one person shared his experience working on the Clyde Dam³² case in the early 80's. The case was very important for New Zealanders, he argued,

³² The construction of the Clyde Dam on the Clutha River formed part of a scheme to generate electricity for smelting aluminum in late 1979. Construction of a proposed smelter at Aramoana and Otago Harbour never eventuated largely because of resistance on environmental grounds.

but it only attracted media attention when the conflict was about to be resolved.

The respondent explained:

...it (the Clyde dam case) was a major case in New Zealand environmental law and the case was viewed in Queenstown, it lasted about three weeks. It was undoubtedly a major case for New Zealand ...but it was only towards the end the major New Zealand papers and television suddenly realized that something quite important had been going on for three weeks...

The situation happened because it was media practice to cover only the result of a case, not following up on stories as such, as journalists confirmed in the interviews. However, I argue it might also be an indicator that networks of the journalists are not so good.

The respondent disagreed with my argument and confirmed “I was told...at that time there was a part-time journalist who was also involved in setting up vineyards at that time and he suddenly realized that the case was important. He rang *The Otago Daily Times* office and Radio NZ”. In other words, he was confident that journalists were not aware of the issues because they were busy looking for conflict news.

The same respondent also gave an example of a more current environmental issue that was Lake Taupo³³. He said:

Lake Taupo is an important case. The lake is at risk. The reason it is important because for the first time in New Zealand under the Resource Management Act they are trying to put into place some objectives and policies and rules to control the level of nitrates, nitrogen that is getting into Lake Taupo. Lake Taupo is New Zealand's icon lake, it is an icon in terms of natural features. So it is of national importance really.

³³ Lake Taupo is at risk of increasing levels of nitrogen because among the reasons is farmers have been poring fertilizer on the soil for decades and the groundwater gets into the lake. Scientific findings prove that increasing nitrate levels at the bottom waters of the lake could lead to increases in algae and eventually could kill the lake. However, Environment Waikato denies this claim and confirms that based on their recent review of monitoring data shows the lake continues to be of high quality, clear and low in nutrients. But they also admitted that Lake Taupo's water clarity has tended to fall over the last few decades (www.ew.govt.nz, interview on 14 March 2006)

He argued if journalists overlooked the problems at Clyde Dam because of low environmental awareness in the 80's, it should not be allowed to happen again in the case of Lake Taupo. The Lake Taupo issue is very important because it involves the Central government, Taupo District Council, Waikato Regional Council, also farming interests, forestry interests, strong Maori interests, but it receives very little coverage from the media, he stressed. Although, Lake Taupo has yet to be a conflict story, he felt newspapers should alert the public to the negative impact on Lake Taupo. He added that was why he believed it was the newspapers' practice to look for sensational stories which has led them to be unable to see a big national issue such as Lake Taupo. However, he said "I am sure when Lake Taupo is polluted, you will see big coverage..."

Although I agree with argument of the respondent that the two important cases were not reported perhaps because to some extent it was not "sensational" enough to be a story, but this research suggest other factors to this reaction such as the ignorance of journalists which will be discussed later in the conclusion section.

In another case, one respondent said sometimes even an honest view and accurate information could not penetrate the papers if the angle did not suit the papers. It must be an interesting and conflict story, the New Zealand scientist emphasized. He informed:

...they contacted me because I am nationwide a recognized expert in resource management law and environmental law...when I give them what I am pretty confident is a good opinion or a good view of the matter, but it doesn't suit their conflict and tragedy purpose. I mean that was a conflict case the Waipara case, that was the real angle but it does not suit their purpose, I put a bit of dampener on the conflict angle, they didn't want to know about that...I just did not give the journalist the message that she wanted, so the story was not published...

Additionally, one respondent said some longer-term environmental stories should also be included because as he described "it could give the public more background information on important environmental issues" so that they could

prepare themselves for any possibilities. Another person with a similar view added:

The press are responding to current topics as they come along and that is the role of the newspaper because that is news. But there are more serious long-term environmental sustainability issues that are not being reported. Everyday we have share market news, so why don't we have information about the state of the environment?

Environmental news is as important as the share market because both could affect people lives tremendously, he stressed. The ideology of the newspapers to publish only current and sensational issues could only lead to a re-active environmental coverage pattern. Above all, respondents believe this practice is due to the newspapers' intention to increase their circulation.

The New Zealand government officials are also worried about the style of reporting and framing of news by journalists. These are very important elements to look at because it could give different interpretations, respondents argued. They claimed that many newspapers preferred to cover conflict and occasionally, some news gave a one-sided picture and some were just out of context. This could create anxiety among public and it was not a very good practice, they thought. Although they were not happy with it, they also admitted this was not a usual scenario. As one person said "...sometimes we think they (journalists) have not got the right angle or they haven't given us a fair go, but not very often..."

In order to avoid one-sided stories, for example, respondents thought journalists should know who to be quoted in relevant issues. It is good journalism practice to have different views and furthermore, unbalanced reporting could not solve any problems, they argued. One respondent explained:

Sometimes we have had journalists who have written stories that in our view have been unfair, unbalanced when they have only presented one side of the picture and particularly if they have done that without coming to us in an attempt to get a different perspective on it. Clearly we don't believe that the journalist has to fully accept what we say but if someone is saying something bad about our

department then we believe that we should be offered the opportunity to provide a rebuttal or a different perspective.

He added that this type of story could create negative perceptions among the public towards the government departments. An explanation from their side was very important, he argued, so that the public could get a clear picture and make up their own minds. Another government official person shared his experience:

...sometimes we have difficult relationships with some farmers over some issues, district plans for example and this was a farming story where the viewpoint of the farmer was the only viewpoint that was being presented and so that was what we were concerned about.

I asked if any negative consequences emerged from this incident, he replied “no, it did not have any serious consequences other than it reinforced a negative stereotype...about what the department does or does not do”.

With reference to the discussion about the journalists on earlier pages, I hypothesize that this situation could be caused by difficulties to get quotes within journalists’ time frame, hence, it is quite fair to say that time constraints would affect the news content a great deal. In addition to unbalanced reporting, one respondent said:

If you take for instance...we just agreed an investment by AgriQuality into our council controlled organisation to target pests. This is going to have very important synergies in terms of national and regional working expanding Environment Canterbury’s capability and some of the bio security areas but also giving AgriQuality which does a lot of the bio security work throughout NZ, giving them a very effective field force which they haven’t had access to other than by contracting in the past, so it is a very complimentary arrangement in terms of improving the skill base for pest management and bio security in Canterbury and NZ. Of course it is not reported that way, they reported in ways that I would say suggested there are problems or issues rather than the positive aspects of getting the two organisations together that have some mutual compatibility.

He added that the angle of the story was totally different but certainly the emphasis was on potential conflicts; rather than indicating that this is a positive outcome in terms of a better service delivery for these particular services in the region and nationally.

In the Malaysian context, this situation was described as “sensationalizing the story” speculated to increase the circulation of the paper. It was a big concern among the Malaysian respondents because many times the contents were misleading. I think this kind of incident only occurred occasionally in New Zealand, thus the level of concern was not as much as in Malaysia.

Nevertheless, the respondents were very concerned that this type of reporting could give a different impression to the public and could effect their reputation as well. As one person said “...once something is printed it can never be retracted..” However, some of them were relieved because when incidents like this happened they could express their opinions to the media people in the meetings. This was the benefit of having a good relationship with the media, they confirmed. As one said “...we have a mechanism...we have discussion with the editors...that gives us some ability to counteract what we see as being an inappropriate reporting of a particular issue...”

In summary, respondents felt journalists should be more careful in their reporting so that everybody received a fair share of their opinions. Although this was not a serious problem for the government officials but the public deserved to know the true picture. Thus respondents felt this element perhaps was not so much of limitation to report but if journalists used to this style of writing repeatedly, the environmental news content could be distorted.

On the other hand, environmental stories were complex and sometimes could be very lame, hence, how to make it interesting for readers? A New Zealand journalist described:

...the other difficulty too is that sometimes you may write about something that is a vital part of the ongoing

issue...but is bloody boring, so you have also go to try and write it in such a way that will interest the readers. How to do that?

Another journalist told that when she had to write a boring topic about an environmental issue, she normally tried to relate it to broader aspects of life so that people could feel a sense of belonging to the environment and would read her article. She said:

...something that is not a little story...about a group of people who have planted some trees. Trying to make it broader for more people to find it interesting like maybe everybody is planting trees or something.

She stressed that it was not easy to search for interesting stories on a national level, make it viable and interesting to read. Another respondent told that he could always find ways and means to make his story readable for the average population. Despite that, he said:

...some criticism for environmental stories has always been that newspapers report on the funny quirky stories rather than these big hard hitting things...

But he stressed “if it is not funny, how to make people read environmental stories?” This was the biggest problem, they confirmed.

In conclusion, as environmental stories were not the round that was preferred for the front page, journalists felt it was their responsibility to, at least, get it printed and get people to read it. However, the environmental reporting should serve as education or educational information for the readers.

6.3 Conclusions

The 11 constraints were not speculation; rather they were developed from the respondents’ own experiences. By themselves, none of these alone account for the trend and pattern of environmental news representation, but rather reinforce each other. The main force discussed by most respondents is the lack of

knowledge of journalists on environmental discourse. A possible reason for this limitation could be due to the environment being mostly covered by general desk journalists especially in New Zealand. Another reason is perhaps journalists are not motivated enough to write on the environment because it is not encouraged by the editors, or due to a language barrier, and time constraints. However, most respondents argued this was not necessarily due to a lack in the educational background of journalists, but rather they think passion and interest are more important elements to be able to write on the environment.

Based on the interview findings, it can be said that the dissemination of environmental information in both countries is crucial. Many of the environmental issues given are also quite critical suggesting that investigative journalism is to be applied in environmental reporting. This is because environmental journalists should act as a catalyst for environmental discourse among the public so that they can take part in the environmental discourse. Besides, the media should act as an educator in creating environmental awareness within the public. In summary, the roles of journalists and the media are vital in the process of understanding the environment.

However, in many cases this is quite impossible to achieve because there is a clash of views between journalists and their news sources on how environmental news should be shaped for readers. Journalism culture places some value on liberal public debate, while the government and other sources value national unity, which reflect distrust and mismatch. Therefore, there is misunderstanding of and a clash between the objectives of both parties. This study also reveals that both parties do not form a closed relationship suggesting that journalists or editors could possibly have full control of the news content.

Chapter 7

Discussion and Conclusions

This study sets out to describe how the representation of environmental news has evolved in the Malaysian and New Zealand press over the three years of the study. In particular, this study observes differences and similarities in the news trends and patterns and explores possible forces shaping the representation. My research questions are:

1. What are the differences and similarities in the environmental news trends and patterns – news characteristics, the use of sources, topic selection, frame and news content – of the two countries?
2. Do journalist occupational norms – tight deadlines, space constraints and editorial pressure – influence the coverage?
3. Does the journalist and source relationship influence the representation of the news in the press?
4. Does media ownership restrict journalists to produce analytical environmental articles?

What are the differences and similarities in the environmental news trends and patterns – news characteristics, the use of sources, topic selection, frame and news content – of the two countries?

Despite having different political systems, economic development, ethnic make up and media ownership, the environmental news patterns in New Zealand and Malaysia were found to be similar throughout the three-year study. The news criteria includes small coverage; reports on event stories; straightforward news with very few photographs or other attachments; very small front page coverage; mostly quoting one news source with a high dependency on government officials; topics are cyclical and most stories are framed as conflict.

However, this study identifies different forces to such patterns. The Malaysian environmental coverage is influenced by internal and external factors. The internal factors include working environment, journalists' attitudes toward their jobs and editor pressure; whilst the external factors are institutionalized in the newsgathering process (McQuail 1993, p. 142) such as the journalist and source relationship. Unlike Malaysia, forces that influence New Zealand coverage are mostly based on internal factors such as space constraints, tight deadlines and journalists' reactive measures towards environmental issues.

The trend of reporting in both countries is quite worrying especially in Malaysia because the underlying environmental problems are worsening. However, the coverage is often about conflict and the number of feature articles published also decreased about 13 percent in 2004. The news patterns also are cyclical in the sense that the issue is only reported when it becomes public debate. This cycle agrees with Downs's (1972) theory of Issue Attention Cycle that certain issues can be a center of public discussion for a period of time before slowly fading away. However, environmental matters would not stay long on the stage of public discussion, not like political issues, as suggested by Downs (1972) possibly because the nature of conflict news is always short. The pattern appears to be influenced by economic factors which restrict environmental coverage.

The trend of environmental news reported by the two countries is also different in terms of amount of news coverage. The Malaysian coverage was decreasing over the years of study; while New Zealand reported more environmental news in 2004 than in 1996. As a whole, the New Zealand press also reported about 20 percent more environmental news than Malaysia throughout the years of the study.

There are a few possible reasons for such a trend and pattern based on the content analysis and in-depth interviews findings. For example in Malaysia, the drop is due to fewer occurrences of environmental tragedies in 2004. As about 80 percent of the stories are event stories, it suggests that fewer environmental

disasters happened in 2004 as compared to 1996. This trend confirms Dunwoody's study (1993) that the media mostly report on event stories of environmental news which they see as having high news value (Gans, 1990) compared to long-term environmental issues such as climate change which do not have an immediate impact on the public.

On the matter of newspaper ownership and government influence on environmental reporting, the interview findings discovered a very small indication of restriction by the two institutions. There is no direct answer received on whether ownership or government does restrict environmental reporting but I include here two examples on how the institutions could be involved in the reporting.

Some Malaysian journalists interviewed mentioned editorial pressure such as axing the stories, which editors think are "sensitive" or "less important", to publish. One journalist informed how she was instructed to stop writing on a water issue which was a topic of public debate at that time; while another journalist was not allowed to do an in-depth write up on smuggling of Sumatran *orang-utan* into Malaysia and her story was re-angled to the extinction of *orang-utan*. The reasons for both incidences were because the relevant government departments were still doing investigations into the matters so the issues could not be released to public as yet.

The interview findings also suggest that investigative writing on environmental issues is not encouraged by editors; and the issues of the *orang-utan* and the water crisis might have some relation to the newspaper companies and the government (as also claimed by the journalists), thus resulting in the stories being banned. The interviews also revealed that government control of the media is done through the editorial board which practice self-censorship of news content in order to preserve their interests and profit. The self-censoring practice has become a norm in the Malaysian newsroom due to government regulations on news content censorship

via the press act, journalists informed. This practice has developed a “culture of fear” among journalists and editors, whereby they become too wary of producing any government-environmental related stories, which might be labelled as “sensitive” by the government. How these institutions are related could be examined by future studies.

In the interviews with the Malaysian government officials, three of them agreed that there were some sensitive issues which could not be released to the public but that these only apply in certain time frames. That particular “time frame” refers to when there is political tension or controversial issues at national or international levels which are raised by individuals, political groups, lobby groups or maybe other countries. However, none of them could clarify what exactly is a “sensitive issue” but claimed those issues were not released for national safety and ethnic integration and harmony. This suggests that there might be a number of environmental issues which are categorized as sensitive issues.

The interviews also disclosed that the possible reason for the decreasing amount of environmental news in the Malaysian press is the ignorance of editorial boards on the importance of the environment and thus they would normally use such issues as fillers, not presenting it to educate people. In one case, the environmental page was scrapped and replaced by a page on politics because the editor felt the articles written were not of sufficient quality. Also, the decreasing amount of coverage might be due to concentrating too much on event stories; while covering very little on long-term environmental issues such as climate change. There are three possible reasons for the above arguments: first, the organizational policies encourage journalists to produce human interest articles that could attract more readers; second, this is partly because journalists were not interested in the topics but were forced to write and their lack of knowledge of the subject resulted in poor articles and; third, journalists also have a negative attitude to having to search for news, rather than waiting for an environmental disaster to occur, which has led to the small amount of monitoring stories written.

Similar to Malaysia, New Zealand has more than halved the coverage of event stories, although they also produce a larger number of monitoring stories as compared to Malaysia. This might be able to answer why there was an increase in the number of environmental articles in 2004 as public concerns on energy issues raised the coverage that year. Therefore, it suggests that more articles printed might not reflect the improvement of the coverage because the news quality can still be argued.

It is also difficult to gauge the forces driving New Zealand news trends and patterns as almost all journalists responded positively towards their job scope, newsroom environment and their interactions with news sources. The only elements that could influence their writing are tight deadlines and space constraints. However, an underlying issue may be because most of them are general desk journalists; whereby they have to catch up with a lot of issues and have to understand these issues in a limited time before they could produce an article. The two elements mentioned restrict them from including details, writing in-depth and from including different types of source in their articles. Further deliberation on these elements will be discussed further later.

The news sources group when interviewed proposed the main possible reason for having such a pattern and trend is that in their opinion because New Zealand journalists are lazy to search for news which results in little event coverage and reduced investigative writing. One New Zealand respondent informed that the issue of Lake Taupo contamination was only reported by journalists after running a hearing for several months which later stimulated media attention to present the issues (Hannigan 2006, p. 72). The reports were full of inaccuracy, he claimed, because of lack of investigation. This could be avoided by examining the issue thoroughly, the respondent argued.

I also would like to highlight journalist perceptions of their audience which could influence the representation of environmental news. Most Malaysian and New Zealand journalists interviewed believed that the environment should be written about in as concise and precise a manner as possible, regardless whether event or monitoring stories. People will get bored with long-winded stories especially to do with complex environmental information. Besides, what people want to know most about the environment is how it affects their lives. This is the idea of “consensual reality” (Hartley 1982) whereby journalists perceive the public as one entity with same attitudes and needs towards environmental reporting. However, this perception would not be able to help the public to define the environment or to understand the importance of the environment in full, rather than shaping public opinion to view the environment in a negative manner.

I contend the idea of consensus reality develops during the news reporting process (Hannigan 2006). For example, at the stage of assembling information, due to the limited knowledge of journalists on the environment, the difficulty to get good news sources within tight deadlines has sometimes made them write their “own stories” according to their understanding and stance on the issue. At the presenting stage, the environment must be seen as important (Gans 1990) to attract readers. Journalists informed that sometimes there is also some pressure to get their name printed as the author, known as a “by-line”, which could lead journalists to frame the issue in such a way as to reach the news value standard required. For example, they cover issues that are of close proximity to the readers, those which have an immediate impact and would create anxiety amongst the readers. In addition, the business of the news strongly shapes what issues they choose to cover.

In particular, different newspapers project different news to their targeted communities. For example, among the Malaysian newspapers, the English versions publish more on national issues and environmental policies to cater for readers in urban areas. Meanwhile, the Malay papers discuss more on event

stories at the local level for their rural Malay readers. This situation occurs because proximity encourages people to know more about their surroundings. Newspapers strategize their news to be something that is close to their readers in order to get their attention and to boost circulation. They provide what readers want to know, not what they should know. Thus, a question should be raised to ask if it is the newspaper's role to serve the need of the public for environmental information.

In looking at the above arguments on news trends and patterns, I think the newspapers' role as public "educator" (Campbell 1999, p. 5) to increase public awareness could not be applied to reporting environmental news in the Malaysian and New Zealand press; rather they act as "information providers" (Lowe and Goyder 1983, p. 74) to inform the public about the environmental status surrounding them.

Trends and patterns of news sourcing

As a whole, more than half of the Malaysian coverage (52 percent) used only one source; while the New Zealand coverage averaged around 45 percent. However, there is a trend in Malaysia towards multiple sources. The number of stories with one source decreased in 2004 and the quotation from more types of source increased significantly. In contrast, the New Zealand coverage showed no significant change in the number of sources used throughout the years of study, suggesting a stable set of reporting conventions.

The use of only one source can be explained to an extent by the fact that environmental stories are often event stories of small coverage. In that very small space, journalists are constrained as to how many sources can be included for comment. Furthermore, I found that event stories are often largely descriptive with the apparent aim to inform readers of what has happened, and are not argumentative in approach which leaves readers to make up their own minds on the wider implications. However, in considering feature stories only, the

Malaysian trend indicates slow progress in environmental news coverage because there are a fewer number of in-depth reports in 2004 as compared to 1996.

The environmental news sourcing patterns in the Malaysian and New Zealand press show some similarities to patterns found in previous research on the high dependency on government officials. This reflects their dominance in the area of environmental news. Although some Malaysian journalists agreed that government officials are used for their authority to legitimize the story and to make the news contents more credible, journalists themselves dispute that government officials are credible suggesting that they quote officials so frequently because of practical reasons and, underlying those, an imbalance of power lies between the two groups.

The content analysis findings show broadly the same pattern of news sourcing for both countries, with a slight difference in the use of public relations officers. Both countries' newspapers make high use of government officials – at a rate of more than double the use of other sources - followed by scientists/academics. The third largest category of sources for Malaysian environmental coverage is public/local people; whilst New Zealand newspapers quoted public relations officers more. Environmentalists are the least commonly used group among those coded for. This pattern can be linked to matters of journalist-source interactions, availability and trusts as described below.

Both the Malaysian and New Zealand journalists agreed that the high use of government officials is vital because they are always available (Dunwoody 1995) especially for a quick or urgently needed comment. The Malaysian journalists, however, confessed that government officials were quoted not because of their credibility but to put the “responsibility” on their shoulders and to make them accountable for what they have said and promised to deliver. Meanwhile, the New Zealand journalists perceived government officials as the “right source” to comment on environmental issues.

The high dependence on government officials has a different meaning to both groups of respondents. Both groups of respondents seem reluctant to look at government officials as particularly credible. Previous research has suggested that dependence on government officials is based on their credibility. However, the findings here describe a slightly different picture. The Malaysian journalists do not look at the high use of government officials as dependence, rather as “alerting them to their responsibilities” towards the environment and the public. Because of a good relationship between New Zealand journalists and government officials, I think the situation is not as tense as in Malaysia, thus the New Zealand journalists perceive government officials as “the right choice” to comment on environmental news. This suggests that the use of government officials by the Malaysian and New Zealand press is not because of credibility as suggested by some scholars and revealed by previous research, but rather because of their availability to legitimate the news (Erikson 1991; Gans 1990) in order to construct believable stories for readers.

Despite journalists’ not so positive views of government officials, they are quoted across a full range of topics, reflecting their importance in providing environmental information for the public. The high dependency on government officials probably enables them to influence the news content. However, as stated before, it is beyond the scope of this study to prove the forces shaping the news, but rather to observe some possible factors through analysis of the representation of environmental news and interviews. The direct quotations of Government officials, the high amount of use and topics covered do indicated that they might have significant power to shape the news content.

On the other hand, government officials in both countries perceive themselves as credible and reliable sources for environmental information and believe they should be quoted more often as it is their responsibility to tell the public about the status of the environmental. Their major concerns in meeting this goal are the

attitudes and lack of knowledge of the journalists which they claim could lead to bias, incomplete and inaccurate environmental stories being disseminated to the public.

The second most widely used source for both countries was scientists/academics. Both countries show a quite an encouraging trend, whereby the use of scientists/academics as news sources increased gradually from 1996 to 2004. This finding is in contrast with Dunwoody's (1980) and Friedman's (1986) research that journalists use very few scientists in environment-science related news. With regard to Dunwoody's (1980) argument that tight deadlines result in scientists/academics being quoted less often, this is not confirmed by this study. Almost all journalists interviewed expressed their satisfaction with the cooperation of scientists and academics when giving information in a short time period. Normally scientists/academics are available for comment, thus there is no question of a lack of availability.

The third most common source for Malaysia was the public/local people; whilst in New Zealand public relations officers were quoted more on the environment. The number of public/local people included in the Malaysian press coverage of the environment increased tremendously from 1996 to 2004. Since the overall amount of coverage in 2004 was smaller than in 1996, this suggests that the public/local people are getting more attention from the press. However their quotations are used only to put some human interest element in the stories, and also to present so-called balanced stories for readers. This pattern remains the same over the three years of the study suggesting that despite the increased numbers, this does not reflect the importance of public/local people as news sources. Hence, I partly agree that the public/local people can only gain access to the media with unusual dramatic stories (Gans 1990) as most stories quoting the public or local people are referring to landslides, floods and earthquakes. However, in the case of the Malaysian coverage they were also quoted in monitoring stories such as waste management, freshwater and recycling. The topic pattern covered by public/local

people has changed from event stories in 1996 to a slight increase in monitoring stories in 2004, which reflects positive progress in the sourcing pattern. But, I would not want to argue that this provides evidence of the quality of environmental news increasing as the public/local people are referred to as victims to explain what has happened to them, with very small quotations about their hopes and the implications of events for them.

Public relations officers consistently figure as the third most common source in New Zealand. They are sources for stories in almost all topic categories studied including event and monitoring stories such as energy, freshwater, floods, waste management and recycling. This pattern remained the same over the years of the study. They distribute press releases to convey their statements to the print media, but mostly their quotations are not sourced from press releases as suggested by previous research (Griffin & Dunwoody 1995; Sachsman 1976; Witt 1974). They normally get their voices into newspapers via press conferences and interviews. Also, their statements are used to provide general information rather than detail about particular issues (Nelkin 1987).

Public relations officers are mostly quoted in stories relating to their organizations, normally on controversial issues such as on the energy issue. Hence, like Malaysia, many New Zealand public relations officers are former journalists who are appointed to ensure better dealings with the media, respondents said.

Environmentalists are quoted the least of all the news sources studied. Almost all journalist respondents, especially Malaysians, expressed their fear of environmentalists trying to project their motives through the press. This finding confirms claims made in the academic literature (Jung-Hye 1999; McDonald 1993; Dunwoody & Griffin 1993; Lowe & Morrison 1984). Thus, journalists are cautious when quoting environmentalists as their source of information. In fact environmentalists are rarely used in controversial stories in the coverage in both

countries, but are used in small numbers in monitoring stories. Throughout the years of the study, the number of environmentalists used decreased gradually, reflecting the decreasing trust that the journalists have in them. Nevertheless one must remember that environmentalists also use alternative media such as blogs and websites to project their environmental beliefs to the public, although the number of the public reached might not be as large as through newspapers.

Environmentalists interviewed felt that journalists gave too much attention to government officials and only used the environmentalists to make the news look more balanced. Furthermore, the Malaysian environmentalists also criticized journalists for not writing more about longer-term environmental issues which would make use of their expertise to comment on. Meanwhile, journalists felt environmentalists were not experts but rather were trying to influence people to moving towards their beliefs.

In news with more than one source, the same pattern of news sourcing is found – government officials, scientists/academics, the public/local people and public relations officers - for both countries. This is the same sourcing pattern used since 1996, with slight increases in the number of public/local people in the Malaysian press. Based on this three-year trend, I would argue that the same sourcing pattern is likely to continue into the medium term. Among others, government officials have a tendency to shape the environmental news in the Malaysian and New Zealand press. However, the power of sources should not be overstated. There are also some forces from the media organizations themselves to set what kind of stories should be presented to the public by framing the stories to what they perceive to be good for their audiences.

Trends and patterns of topic selection

Both countries show a similar trend in topic selection over the years studied. The environmental reporting trend in Malaysian newspapers shows a high coverage of natural disaster issues such as landslides and floods from 1996 to 2004; while

pollution, sanitation and forestry issues were reported heavily for short periods probably due to external occurrences. Similarly, natural disaster stories such as the weather and floods were highly reported by the New Zealand press in each year of the study; while stories on water resources/quality and forestation were among the other issues covered frequently.

Despite similarities in trends, both countries have slightly different topic distribution. The pattern clearly shows that both countries reported on the environment based on public concerns or conflict issues; which indicates natural disaster stories figured highly in both countries but other prominent issues were slightly different based on national concerns. For instance, an important issue in Malaysia is flooding, while in New Zealand the weather is more heavily reported. Although the topics seem different, underlying the coverage is a similar emphasis on covering environmental issues to the extent that they directly affect the public.

The newsroom culture and the lack of expertise in the environment among newsroom personnel could be a major influence on this pattern. It is likely to be a major factor shaping the coverage primarily as event stories. As Gans (1990) mentions that the media see the community as a series of manageable spheres based on beats and organize their stories based on those spheres. In practice, they use human interest elements in their stories to attract the public. Thus, Gans (1990) stressed that this results in a pattern of coverage organized around how newspapers work rather than how the events actually happen. This was confirmed by journalists interviewed as they believed the public is looking for sensational stories and is only interested in events that have a direct impact on them.

Another point made by my interview respondents is that the pattern emerges due to the laziness of journalists in searching for environmental issues and their lack of interest. It could be for this reason that they report more on events. These stories mostly are short, condensed and straightforward. I found evidence to

support this argument in particular in the Malaysian context. All of the journalists interviewed were environmental specialist writers but their expertise was overshadowed by a probable lack of interest or individual negative attitudes resulting in such a pattern of environmental reporting.

This analysis of content also affirms that one environmental issue is interrelated to the next. For instance, deforestation on hill sides causes flash floods that lead to massive landslides. The pattern suggests that: (i) newspapers act re-actively towards environmental issues; (ii) the representation is solely focused on environmental effects on humans and; (iii) it is not easy to solve environmental issues as they could involve many parties that are responsible for one particular issue. In other words, the environment offers a lot of issues to be printed by newspapers, but journalists choose to portray the environment as conflict which could also give negative perceptions to readers about what the environment is.

Journalists could of course write on many topics if they sought them out, not just waiting for natural disaster stories. However, such an approach raises questions of which topic is most important to present to the public. Respondents' reaction to this question based on their own fields and interests produced a variety of answers. In general, the government officials and journalists preferred issues that have an immediate impact; while scientists/academics and environmentalists argued that longer-term environmental stories should be covered more. Their definitions of environmental news seem contradictory which could be a possible reason for a clash of opinion on the representation of the news. As the interview respondents are actors within the news construction process, I argue there is a need for audience studies on what kinds of environmental topics the public want to know most about and what kind of topics should be presented to them.

It is difficult for newspapers to print both event and monitoring stories due to space limitations. Especially with the influence of advertisers, and as newspapers' editorial policies emphasize more coverage on political and economic news,

stories on the environment would be left out. This perhaps has caused editors to only pick fresh topics that have a direct impact on the public. Besides, this fits the news value criteria that news should be timely and negative (Galtung & Ruge 1965). In the end, commercially run newspapers prioritize the increase of their circulation; hence environmental stories must be able to attract readers. As one journalist argued that writing on long-term issues might not enhance people's awareness, but rather make them feel bored and that would not help to increase the readership rates. Ideally it is best to report on long-term environmental issues in order to educate and warn the public of the consequences, taking into account of the newspapers limitations and their deadline pressures. However, in reality the logic behind the printing of the environmental event stories is clear.

Finally, the correlation of topics and sources shows that topics vary by source in both Malaysian and New Zealand coverage. Government officials get quoted across the whole range of topics. Meanwhile, scientists/academics and environmentalists are mostly used in monitoring stories. Their quotations mostly are descriptive. However, I found that scientists/academics are quite critical in the opinions quoted in the New Zealand coverage. The other two groups of respondents namely public relations officers and the public/local people, are commonly used in event stories. This pattern suggests as if topics and sources have been grouped in such a way by journalists perhaps for their own convenience. The implication of this scenario is that the news consumers are fed with the same ideology from the same sources, thus it could make the environmental news representation less credible.

Trends and Patterns in News Content

The study found that the majority of environmental articles printed in the Malaysian and New Zealand press are event stories. As a result, news content is quite predictable in the sense that it is straightforward and generally takes a neutral position in reporting. Most articles are written to prioritize the following three elements: (i) when and where the incident took place; (ii) who is involved

and; (iii) what action has been taken. This is a relatively fair pattern for event stories, presenting the environment in terms of the idea that the report is a single statement of fact, rather than a means of social education (Fiske 1987, p. 289). Hence, I would argue that there is evidence that the news does a limited job of pointing out to the public the need to respond to environmental issues.

In examining feature articles, I found that most of the New Zealand coverage presented a relatively comprehensive approach with factual information, use of a number of different news sources and an investigative approach to writing. Journalists also opened up debate in these articles by comparing a number of views from different news sources without over-emphasizing any one particular perspective in the way the stories were framed. The New Zealand journalists explained that feature stories normally cover public issues such as agricultural land use with the intention of highlighting any problem to bring it to the attention of the authorities, not to take sides on the matter.

In general terms, Malaysian newspaper feature articles are similar, including the provision of factual information and the use of news sources, but I found the articles are mainly framed on one particular angle for readers. One simple example is an article on the building of a dam in 2004 which clearly showed its stance in supporting the government project. This is the most significant difference in feature coverage between the two countries. I also found that feature coverage in 1996 was better in coverage than in 2004 in terms of providing readers with balanced stories.

The study did not gather data able to account for this situation but I believe the reason is more related to a problem of ignorance among journalists about the importance of the environment for public knowledge. One English-language newspaper journalist told that the power of advertisers has made her editor cut down the number of words in feature articles. Another Malay journalist revealed that the environment page in the paper was scrapped due to an editor's claim that the writing was not up to standard. I think this reason is rather peculiar as the

standard could be reached by giving journalists the opportunity to improve their writing and increase their knowledge on environmental issues. Editors' ignorance has led them to publish only conflict stories and event stories which could attract more readers to boost profits.

New Zealand feature articles do a better job of informing and educating readers. However, as the number of this type of news is relatively small, the impact of this coverage on public awareness could be limited; whereas the underlying issues in Malaysia are editors' refusal to recognize the environment as an important issue to raise.

Do journalists' occupational norms – tight deadlines, space constraints & editorial pressures – influence the coverage?

The trends in environmental coverage discussed above might have emerged due to a number of forces. As journalists clearly play a significant role in the news production process, I would argue that their occupational norms must be considered in accounting for environmental coverage.

The interview findings revealed significant differences between the two countries. The New Zealand respondents agreed that those limitations could affect the news coverage; whilst Malaysian respondents stated more complex reasons such as a difficult interaction with news sources and interference from editors. In general, the Malaysian journalists felt that their occupational norms had a very minor impact on coverage. They argued that space constraints are a normal limitation for print journalists that journalists could overcome with years of experience. It is very important, they stressed, for journalists to work "fast" and to be able to organize the news content accordingly. Besides, they said journalists would develop "inner judgment" and be able to judge what is news and what is not. These elements help journalists to put together all the important items in the limited space provided.

The “inner judgment” mentioned is related to the journalistic emphasis on objectivity and the belief that their instinctive news values match the needs and interests of readers. It is particularly important in feature writing where journalists engage in more analytical work. This is also another method of defence that journalists use in order to guide their professional practice (Golding & Elliot 1979, p. 208).

Malaysian journalists also felt that tight deadlines are just part and parcel of working for daily newspapers. Again, they contend it could be overcome through years of working experience. However, the sourcing pattern illustrates that tight deadlines have encouraged journalists to use government officials repeatedly because they are easy to reach. Tight deadlines could also lead journalists to write news according to their perspective, as admitted by a few Malaysian journalists, because they could not get hold of the sources needed. Other respondents interviewed also expressed their worries that they could even spot errors in straightforward news, which they thought might be due to a shortage of time for journalists to revise articles.

On editorial pressure, Malaysian journalists think there is no direct influence in shaping the news content, rather some restrictions not to write on particular issues which they suspected were due to instructions from the government. There is academic literature to support this concern. Newspaper companies are indirectly owned by the government, thus news content must be supportive of government aims. Therefore, there is a tendency that the government is able to project its ideology through the editorial board into the news content. The restrictions from editors are better seen, however, as self-censorship, whereby editors filter stories which they think are sensitive issues or could damage the government’s reputation. Other respondents also sensed an invisible connection between government and editors which could shape the environmental news; but they could not gauge how precisely that connection operates. However, in the case of

environmental news, I doubt if there is tremendous effect by government-editor interaction as much as in political news unless it is related to government projects.

One striking finding was that New Zealand journalists felt space constraints and tight deadlines were the major factors that could influence their work. Although they admitted that space constraints will always be a limitation for print journalists, they felt that frequently complex information about the environment could not be explained properly to readers. They struggled to choose the best information to put into their articles and thus used the 5W 1H (What, When, Where, Who, Why + How) method to write on environmental news. Tight deadlines also contribute more problem as sometimes journalists could not get the right sources for the story on time. These limitations lead to incomplete stories and a high use of government spokespersons as the main source of information. However, none of them agreed that editors limit their creativity, rather sometimes they were asked to do some framing on particular issues which is not a major problem for them.

The findings with respect to the concerns of the New Zealand journalists about space constraints and tight deadlines echo much previous research done worldwide. The interview findings reflect that New Zealand journalists are more relaxed in handling their jobs probably because: (i) there is little pressure from editors; (ii) they have negative and distrustful feelings towards the government; (iii) they have good relationships with other sources and; (iv) there are fewer immediate environmental disasters than in other countries such as Malaysia. This good environment means New Zealand journalists experience limitations largely only in terms of space constraints and tight deadlines.

On the other hand, the Malaysian journalists were probably unaware of the constraints of space and time as they are facing more major problems and restrictions. Different working environments and company policies have made the two groups perceive their limitations in their own way. The Malaysian

journalists might also experience the problems suffered by New Zealand journalists but are unable to identify them as they are minor compared to other problems they are facing everyday.

Besides the three dominant factors argued above, the majority of non-journalist respondents actually claimed that the laziness of journalists and their lack of knowledge were major drawbacks in producing good environmental news. Journalists' attitudes are reflected in environmental news presentation. Thus it could be that the commonness of event stories and imbalanced feature articles especially in the Malaysian press is due to journalists' laziness in searching out news. Many news sources also stressed that journalists were sluggish when it came to researching environmental issues before interviewing people or attending press conferences. Without basic knowledge journalists are unable to ask important questions of news sources; but daring enough to ask sources to explain the issue in detail which is not supposed to happen. This is before the journalists pose questions to the sources. The sources generally expressed frustration over journalists' limited knowledge on environmental issues which leads them to write inaccurate stories; while at the same time refusing news source requests to review drafts. Interviewed respondents believed that journalists could make a lot of difference if they were more positive in attitude and increased their knowledge of environmental issues.

However, there was no consensus among respondents that a formal background education would make journalists better environmental writers, although it was agreed that this would help them to understand the issues better. Most respondents believed that passion and interest in the environment could make more of a difference to the quality of journalism.

Based on the analysis of content and the in-depth interviews, I am confident that space constraints and tight deadlines are inevitable problems in producing environmental writing. This is already widely known. However, this study also

suggests that environmental news production is very much dependent on the attitude of journalists towards their jobs, because of their central role in the process. Other elements such as editorial pressure and a lack of cooperation seem minor but have a great impact on news quality. It is difficult to establish the government influence on environmental news content. This could not be taken as evidence that there is no influence, and further thorough study is worth conducting on the government-environment connection.

Does the journalist and source relationship influence the representation of the news in the press?

This research aimed to explore news sources' influence on news content by employing in-depth interviews. Rather than use semiotics or discourse analysis which look at the influence through details of language, it explores the possibilities of source power through respondents' experiences. Hence, it is important to first look into the journalist and source relationship to gain an idea of how the relationship works.

The journalist and source relationship pattern is different in each country. The situation in New Zealand is rather simpler than in Malaysia, whereby New Zealand respondents perceive the relationship as professional. In Malaysia, however, it is more complex, to the degree that people start blaming each other for the collapse of environmental reporting.

Most Malaysian journalists claim it is difficult to write good articles when news sources tend to hide the news, are not cooperative, project their own agenda, or defend their own organizations. Among the five types of news sources examined, government officials are labelled as the most difficult ones to deal with, especially when the issues are related to governmental projects. Therefore, their relationship runs on a "work" basis. I would not describe this relationship as professional because their interaction could be influenced by negative feelings and prejudice.

Government officials interviewed perceive their relationship with journalists also on a narrow working basis and make contact regularly on matters relating to the environment. But they are worried that journalists are more interested in sensationalizing environmental stories rather than educating the public on the issues. In the view of the government officials, the behavior of the journalists breaches their trust because it gives a bad reputation to the government sector.

Despite their tense relationship, government officials are still quoted the most in the environmental news. The content analysis also shows that the number of government officials used as news sources is more than double that of any other source; across all range of topics and usually with the use of direct quotations. Hence, as discussed above, government officials have a potential to be able to influence the news content by their authoritative status, rather than through a close relationship with journalists.

Unlike government officials, the Malaysian journalists claimed to have good relations with some scientists/academics after several years of interaction. They refused to label the relationship as “close” because their regular contact is strictly on environmental issues. Although scientists/academics expressed their dissatisfaction with environmental reporting, they also admit to have managed to build up their relations with journalists throughout the years of working interaction. This confirms the increase in quotations made by scientists/academics in environmental coverage in 2004. However, in term of news quality, scientists/academics are still worried that journalists would not be able to present the correct information because of problems of knowledge and laziness. They also pointed out that journalists already have their “own story” to write before interviewing. This gives the implication that, first, scientists/academics are only used to provide information but journalists will angle the story to what they think is best for the public and; second, this leads to

the elimination of important issues (in their view) that should be brought to the public attention.

In fact, the scientists/academics stressed that sometimes journalists refused to present the story as they believed it is supposed to be but instead choose to pick up on catchy lines to attract readers. It shows that scientists/academics have less power to mould the news content. Besides, the three major topics covered by scientists/academics - endangered animals, weather and ecological science - suggest that scientists/academics are used in more technical topics for their expertise. Therefore, scientists/academics seem to have a limited ability to influence news content overall. However, because they are used mainly in monitoring stories and to comment on particular issues based on their expertise, they have influence on some of the more important stories on the environment

In the meantime, the journalist-environmentalist relationship is less encouraging because journalists are worried environmentalists would want to project their agendas through the press. Hence, they perceive that issues and perspectives presented by environmentalists are less trustworthy (Dunwoody & Griffin 1993; Jung-Hye 1999). Environmentalists also agreed that they face difficulties in getting their voices into the press and that journalists seem not interested in whatever activities the environmentalists have conducted. Evidence for this can be found in the slight drop – from an already low number – between 2000 and 2004 in the number of environmentalists used. In this case, a lack of trust is the main reason that environmentalists are not able to use their expertise to shape the news.

A similar situation can be seen in the journalist-public relations officer relationship. Malaysian journalists deny that they are avoiding public relations officers, but the small amount of coverage they get is because generally the information from public relations officers is not helpful enough to be of news value. Journalists claim they ‘already knew’ the public relations officers answers

to all their questions; that is to defend their organizations as much as they can. On the other hand, the public relations officers stated that the only concern they have is when journalists have set their minds to frame their organization stories negatively which could result in a disbelieving public. In this situation, I think both parties have a misconception of each others' job scope and hence they increase their negative perceptions of each other.

The New Zealand environment is quite different from Malaysia. In general journalists claim to have a good relationship with all news sources. They do face some minor problems such as difficulty to reach and to get information from government officials and being cautious with the intentions of environmentalists in putting forward their beliefs, but as a whole their relationship works well. However, I would be cautious in concluding that any one of the group sources are able to influence the news content because journalists seem to be in control of the production.

New Zealand journalists agreed that they are highly dependent on government officials as news sources because of the authoritative status of government officials. Similar to the arguments of the Malaysian journalists, government officials are not used because of their credibility, but rather to have someone to legitimize their stories. New Zealand government officials when interviewed stressed that they always want to build up a good relationship with journalists and believe they have managed to do that by conducting regular meetings to discuss environmental matters. I notice that both parties have a very professional relationship and doubt if government officials could angle the environmental stories for public consumption.

Of the four news sources, scientists/academics are the most critical and commented on the way journalists cover environmental issues. They contend that there is a lack of in-depth writing and journalists do not search for news but rather wait until the issue has become a matter of public debate. Despite their criticism,

they never felt sidelined by journalists when giving their opinions in the press. Journalists, on the other hand, claim their interaction with this group of sources is good except for their incapability to describe technical information in layman's terms but this constraint does not limit their writing.

The journalist-public relations officer relationship has some similarities in the sense that they are less used because their reaction will be biased in favor of the companies they represent. Nevertheless, public relations officers still received a high amount of coverage from the press over the period of the study. The pattern perhaps reflects an increasing involvement of big organizations in environmental issues. The two groups keep their relationship as professional as possible and as most of the news is reporting on the negative side of an organization, it is fair to say that public relations officers would not be able to strongly shape news coverage or the news agenda.

Finally, like in Malaysia, the journalist-environmentalist interaction in New Zealand illustrates journalists' reluctance in using them as sources because of the perceived rigid beliefs they have. Environmentalists admit it is difficult for them to get their voices in the press. Hence, one way for them to reach the public is by sending press releases to newspapers but they say the response is quite disappointing. There is, then, only a slim possibility for them to influence news content.

Based on the relationship background, I argue none of these news sources appear to have a strong power to shape the news because interview findings revealed that there is no indication of a close relationship between journalists and sources. The New Zealand journalists depend on news sources for information; especially for technical stories, but still journalists are capable of shaping the stories to what they think is important and is needed by the editors. Simply because a source is used repeatedly used sources would not suggest that such sources are able to control news content. More important is the constraint of tight deadlines, which

almost all New Zealand journalists emphasized. In conclusion, journalist-news source interaction does not guarantee news source influence in news content. In fact, there is no sign that New Zealand journalists and news sources have a close interaction, but they simply interact on a professional basis.

Does media ownership restrict journalists to produce analytical environmental articles?

Media ownership has always been a critical element to study with regard to media content. Both the Malaysian and New Zealand press have a different type of ownership, yet producing the same pattern of environmental news. The Malaysian press, in physical, is owned by corporate sectors which are linked to politicians and ruling political parties. Meanwhile, the New Zealand press is owned by international organizations. They are different in structure and aims; but their operations are based on profits.

The Malaysian press ownership influences news content in two ways. Firstly, for profit and secondly, for self interest. This study has found evidence to support the argument that in order to boost profit, the press is encouraged to provide the public with what they want to read about the environment in order to increase circulation. I argue this practice is generated from the newsroom environment.

The press owners impose the tactic through the newsroom and gradually it has become embedded in the routines of the journalists. First, the newsroom environment instills the notion that negative stories are news or have value. Journalists tend to produce more negative news as it is considered to have news value (Gans 1990). Readers also are more attracted to conflict and human interest stories thus this suggests why many event stories are reported rather than long-term environmental issues; which are unlikely to be printed as the impact on humans is not immediate. Second, the competition to get bylines has forced some journalists to produce more controversial stories on the environment, hence it is

likely that journalists will re-angle stories to what the press organization is looking for. Third, the competition could pressure journalists to come up with conflict stories that could attract readers in the very limited time they have to write and limited space to publish. This could lead to inaccurate, biased, and incomplete articles. Fourth, the role of environmental journalists is insignificant in this kind of working environment, because most event coverage is by general reporters. Hence I argue to have or not to have specialist writers on the environment does not make a major difference to the increased quality of environmental news. Fifth, the advertisers' power as the main providers of resources for the press have a structural power to stifle unattractive stories, which have no human interest dimension, as they will not increase circulation. Also, the interviews revealed that newspaper companies see the environment as a less important issue than other topics such as economics and politics, thus the coverage is rather small. Perhaps the ideology of the press as an educator is considered irrelevant in the environment context as obviously they only provide information on events that have happened. Journalists may well not see the situation in this way, as they have become used to such routines, but these intangible factors could be possible forces in shaping environmental news.

In order to protect their self interest, this study discovered that the press produce positive news on the government and restrict news production which could lead to a negative public perception. In the environmental news context, there is a tendency that press owners restrict publicity on environmental destruction generated from project development such as the building of the Bakun Dam in 2004. The implications of this are that readers will not get adequate information on the issue.

In New Zealand, ownership has a small effect on environmental news content compared to Malaysia, mostly in terms of encouraging more conflict stories in environmental coverage. Although in previous research there are some arguments that New Zealand media would prefer to have international news on the

environment as it is cheaper to produce than local news, this study shows environmental reporting covered mostly local stories. A major problem, however, revealed in the interviews is the power of advertisers, which affects environmental coverage in terms of space. In other words, the press gains profit from not only from circulation, but also advertising. Despite this limitation, the New Zealand press produces a greater amount of articles on the environment throughout the years studied.

Conclusions

People's understanding of the environment is shaped by media coverage, therefore, the media plays a very important role to educate the public and enhance their knowledge of the environment. However, this research discovered that environmental information is not well represented for public consumption by both the Malaysian and New Zealand press throughout the period of study. The study findings raise a question if the newspapers in both countries can play their role as educators on the environment because in both countries the newspapers explicitly represent the environment as suffering destruction via event stories. Also, there is a question if awareness could be created with this type of coverage. The impact on the public is that people are fed with the same conflict news which consequently shapes people's perspective that the environment is about conflict because the media has the power to "give meaning to an issue" for the public (Gamson & Modigliani 1971).

This study also suggests that journalists have total control in constructing the news, especially in New Zealand, but they are still dependent on sources (Feldstein 2007) for environmental information. However, it can be argued that the frequent use of government officials would enable the sources to shape the news (Ginneken 1998), rather than just legitimate journalists' stories. In Malaysia, however, editors have some influence such as to ban particular issues which are believed to be sensitive by the government. This self-censoring

practice is of concern because even when there is no evidence that the government opposes an issue's coverage in the news, editors over-react, because of a long history of government control of media content. Hence, many Malaysian editors have developed a "culture of fear" whereby they are too conscious of the risk of producing stories that might be regarded as sensitive by the government. Although there is some possible level of ownership control in environmental news, it is not well demonstrated in this study. But it can be argued that the connection is practiced through editors' censorship of news production.

As journalists have direct control over news construction, it is important for journalists to be specialized in environmental matters so that the environmental discourse can be stimulated through the media. However, in the Malaysian context, where most media organizations have their own environmental journalists, the most important aspect to look at is how far these specialized journalists can expand their knowledge and creativity in disseminating environmental information to the public. This is because the Malaysian environmental journalists are unable or have little practice of investigative journalism in their work. This situation occurs partly due to the ignorance of editors and media organizations, thus, they do not recognize the environment as an important issue to be debated by the public. In this context, both the Malaysian and New Zealand press are not acting as media watchdogs as Protess et al. (1991, p. 15) suggests in his model of investigative reporting.

There are two important criteria – environmental knowledge and interest – needed from the journalists and editors to help them appreciate and understand the environment well. Lack of environmental knowledge and interest among journalists contributes to the same conflict pattern of reporting; while analytical writing on the long-term environment is less reported. Hence, it can be said that a background education is also important to help journalists to write in an analytical manner.

The environment is not listed as priority news because the impact is delayed or the effects are not easily observed (Cox 2006, 173), for instance, global warming. With few visual images, as found in the content analysis findings, the environment does not fit the newsworthiness requirements (Anderson 2000, pp. 121 – 122). This leads to the same pattern of conflict story written again and again which Hannigan (2006, p. 72) perceives as more “saleable”. Second, commercialization has knocked the environment off the media agenda as newspapers are more interested in printing sensational stories that have the ability to make a profit (Galtung & Ruge 1965, p. 62). Commercialization also has discouraged journalists to be analytical in producing environmental stories; rather they “have” to write articles that can boost up readership. Although journalists could write a lot of different stories about different aspects of the environmental – in a way to educate the public – they choose to represent the environment as conflict or from a human interest approach, perhaps to satisfy the needs of media organizations to increase readership.

The newspapers in both countries represent the environment as a problem or threat (Meisner 2004, p. 431) with some relation to humans as victims of environmental problems (p. 7). They are presented as “soft” stories from a human interest perspective (Campbell 1999, p. 15). In order to cover environment issues, the media prefers to find an event or human action, rather than to long-term social and economic development, to link to the story (Wilkins & Patterson 1990). This practice raises a question concerning the forces that shape the news.

The newspapers representation of the environment in both countries is not about politics, ownership or news sources; it is about the media workers – journalists and editors – who “observe” and “communicate” the environment through their own perspectives, not from the views of news sources. However, the coverage of the environment is too small to see if there is an agenda set by journalists or editors. Nevertheless, this study reveals that investigative journalism in reporting

the environment is not practiced in order to serve and educate the public on environmental matters.

The interview findings in this study offer useful insights into journalism practices in Malaysia and New Zealand; and what they can learn from each other. As a whole, journalism practices in New Zealand seem to be more professional than in Malaysia. For example, in terms of the way the environment is presented in feature articles and the use of and interaction with news sources. This scenario could perhaps be due to fewer constraints faced by the New Zealand journalists; whereas in Malaysia, the journalists are facing internal and external problems such as editorial pressures, bureaucracy, lack of proper record of research findings and interference through ownership and regulation. Further, regular occurrences of severe environmental destruction in Malaysia, as compared to New Zealand, could have contributed to the conflict of interests faced by journalists which prevents them from acting as “environmentalists” rather than as “environmental information providers” when reporting the news. All these have somewhat made the whole process of reporting on the environment a source of frustration for the Malaysian journalists, which could also affect journalism practice at large.

Although there are many obstacles in the reporting process, the Malaysian journalists could still learn from the experiences of the New Zealand press and take note of their journalism practices to overcome the reporting problems in Malaysia. For instance, the Malaysian journalists could learn the effective way to report and to educate the public on the environment by presenting an open debate style of writing in their reporting. In this case, full support from the editorial board is needed to change the newsroom culture from focusing too much on sensational issues to a more mature responsibility to help the public to effectively understand the environment. Newsroom culture and editorial pressures should not interfere with the creativity of journalists in producing effective environmental news. Less interference from the New Zealand media editorial

board encourages the New Zealand journalists to be more independent in terms of what to report as compared to Malaysian journalists.

Another aspect of journalism practice that the Malaysian journalists could adopt is the way the New Zealand journalists deal with their news sources. The relationship between the New Zealand journalists and their news sources is based on “good” and “professional” interactions which perhaps help the journalists to report on the environment with lesser problems in terms of getting information, unlike the situation in Malaysia. Although this study suggests that there is a slim chance that news sources could influence the environmental news content, it is important to nurture a good interaction with news sources because the implications arising from journalist and source interaction could greatly affect greater public knowledge of the environment.

There are some techniques that news sources in Malaysia could learn from their New Zealand counterparts in order to maintain a good relationship with journalists and to penetrate the media. It is interesting to note how the New Zealand government officials interact with journalists by having regular meetings to solve certain problems. This effort should be implemented by the Malaysian officers too, especially when they claim that journalists do not understand their role as governmental officials. The New Zealand scientists/academics also cleverly use the university public relations departments to help them rewrite their research findings to be suitable for the media.

This study also reveals the environmental stakeholders are unable to contribute accordingly to ensure environmental information reaches the public, especially in Malaysia. For example, the inability of scientists to translate jargon for lay understanding; the failure of government officials to provide for a systematic record and filing of environmental issues; the lack of capable public relations practitioners and environmentalists with their inability to use press conferences effectively and to influence the media with good press releases; and the inability

of journalists to understand and to write on environmental issues effectively have all affected the process of reporting environmental news. All these limitations are within reach of the groups, therefore, they should be able to identify and solve their limitations in order to achieve the aim to disseminate effective and accurate environmental information to the public.

Both groups of respondents mentioned the apparent lazy attitude of journalists; however their stories are in different contexts. The Malaysian respondents basically describe the laziness of the journalists for the many misquotes made; for taking advantage at press conferences and for sensationalizing stories. Meanwhile, the New Zealand journalists are critiqued for not looking for news and rather just waiting until an environmental issue becomes acute. This study suggests two different reasons for both critiques. The Malaysian journalists are bound to newsroom regulations and editorial pressures to write on certain issues only. Further, language barriers have limited the understanding of some Malaysian journalists of environmental discourses and to write accurately because much discussion on the environment is in English. This also could be the reason why the English newspapers in Malaysia produce a larger amount of environmental news compared to the Malay papers. In New Zealand, using a high number of general desk journalists for environmental reporting has been seen as if the journalists there do not search for news. The true fact is that these journalists are not specialized writers and have to report on many issues within tight deadlines, as they argued in the previous chapter, and this has led to difficulty in searching and investigating current environmental issues for public consumption. Hence, the New Zealand media organizations could employ and train more environmental journalists to write on environmental issues as currently done in Malaysia. The high number of New Zealand general desk journalists covering the environment is perhaps the reason why some serious environmental issues are not covered because they have to write on many types of stories within a limited time. This problem could perhaps be reduced if more journalists specialized in environmental writing. In short, it is rather unfair to describe

journalists as lazy because there are some underlying issues that have made them appear to act in such a way. It is hoped that this thesis can be the basis for the necessary changes in journalistic practices both in Malaysia and New Zealand.

Knowledge of the environment among the public is important so that they can take part in the environmental discussion. We are part of the environment; therefore, the destruction of the environment means the destruction of our life. Public education on the environment is vital and the media is the best tool to reach the mass public. In conclusion, there is a need for environmental writers who can practice investigative journalism in reporting environmental issues, with strong support of editors and other environmental stakeholders such as government officials and scientists.

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Appendix 1

The Representation of Environmental New: A Comparative Study of the Malaysian and New Zealand Press

Content Analysis Coding Categories

Coder 1: _____

Coder 2: _____

Section A: Newspaper characteristics

1. Newspaper:
 1. The New Straits Times (NST)
 2. The Star (TS)
 3. Berita Harian (BH)
 4. Utusan Malaysia (UM)
 5. The Press (TP)
 6. The Dominion Post (DP)
 7. The New Zealand Herald (NZH)
 8. The Otago Daily Times (ODT)
2. Day:
 1. Monday
 2. Tuesday
 3. Wednesday
 4. Thursday
 5. Friday
 6. Saturday/Sunday
3. Month:

1. January	7. July
2. February	8. August
3. March	9. September
4. April	10. October
5. May	11. November
6. June	12. December
4. Year:
 1. 1996
 2. 2000
 3. 2004

5. Language:
 1. English
 2. Malay
6. Appeared on front page:
 1. Yes
 2. No
7. Level of news coverage:
 1. International
 2. National
 3. Local
8. Type of story:
 1. Event
 2. Monitoring
 3. Feature/News review
 4. Opinion/Perspective
 5. Other
9. Section:

<ol style="list-style-type: none"> 1. Editorial 2. Front page 3. Local news/The region 4. Feature 5. Politics 6. Business/Economic 7. International/World 8. Opinion/Perspective 	<ol style="list-style-type: none"> 9. Letters to the Editor 10. Education 11. Sports 12. In Brief 13. Environment 14. Agricultural/Farming 15. Tourism 16. Other
--	--
10. Event location:
 1. Urban area
 2. Rural area
 3. Not mentioned
 4. N/A
11. Author:
 1. NZPA
 2. Bernama
 3. Staff reporter
 4. Staff reporter and NZPA/Bernama
 5. Staff reporter and international source
 6. International source
 7. Individual
 8. Not mentioned

12. International author:
1. AAP
 2. Reuters
 3. AFP
 4. AP
 5. Times
 6. Other
13. By-line:
1. Yes
 2. No
14. Size (cm²):
1. 49cm² and below
 2. 50cm² – 199cm²
 3. 200cm² – 349cm²
 4. 350cm² – 499cm²
 5. 500cm² – 649cm²
 6. 650cm² – 799cm²
 7. 800cm² and above
15. Type of attachment:
1. Photograph
 2. Diagram/Layout
 3. Background/Info box
 4. Cartoon
 5. Caricature
 6. Combination of above
 7. None
16. Number of attachments:
1. 1
 2. 2
 3. 3 and more
 4. None (Skip to question no. 19)
17. Who/what is portrayed?
1. Environmental phenomenon
 2. People
 3. View of nature
 4. Other
 5. N/A
18. Scope of attachment:
1. Conservation
 12. Fire

- | | | | |
|-----|----------------------|-----|------------------------|
| 2. | Restoration | 13. | Weather |
| 3. | Land(slide) | 14. | (Flash)flood |
| 4. | (De)forestation | 15. | Earthquake |
| 5. | Sea/Coastal waters | 16. | Energy |
| 6. | Freshwater resources | 17. | Food and farming |
| 7. | Marine fisheries | 18. | Waste mgmt & recycling |
| 8. | Oil spill | 19. | Industrial/Dev. impact |
| 9. | (National) parks | 20. | Ecological science |
| 10. | (Endangered) animals | 21. | Environmental policies |
| 11. | Air quality | 22. | Other |

Section B: Topic selection

19. Main topic:

- | | | | |
|-----|----------------------|-----|------------------------|
| 1. | Conservation | 12. | Fire |
| 2. | Restoration | 13. | Weather |
| 3. | Land(slide) | 14. | (Flash)flood |
| 4. | (De)forestation | 15. | Earthquake |
| 5. | Sea/Coastal waters | 16. | Energy |
| 6. | Freshwater resources | 17. | Food and farming |
| 7. | Marine fisheries | 18. | Waste mgmt& recycling |
| 8. | Oil spill | 19. | Industrial/Dev. impact |
| 9. | (National) parks | 20. | Ecological science |
| 10. | (Endangered) animals | 21. | Environmental policies |
| 11. | Air quality | 22. | Other |

20. Secondary topic:

- | | | | |
|-----|----------------------|-----|------------------------|
| 1. | Conservation | 12. | Fire |
| 2. | Restoration | 13. | Weather |
| 3. | Land(slide) | 14. | (Flash)flood |
| 4. | (De)forestation | 15. | Earthquake |
| 5. | Sea/Coastal waters | 16. | Energy |
| 6. | Freshwater resources | 17. | Food and farming |
| 7. | Marine fisheries | 18. | Waste mgmt & recycling |
| 8. | Oil spill | 19. | Industrial/Dev impact |
| 9. | (National) parks | 20. | Ecological science |
| 10. | (Endangered) animals | 21. | Environmental policies |
| 11. | Air quality | 22. | Other |
| | | 23. | None |

21. Tertiary topic:

- | | | | |
|----|--------------------|-----|--------------|
| 1. | Conservation | 12. | Fire |
| 2. | Restoration | 13. | Weather |
| 3. | Land(slide) | 14. | (Flash)flood |
| 4. | (De)forestation | 15. | Earthquake |
| 5. | Sea/Coastal waters | 16. | Energy |

- | | | | |
|-----|-----------------------------|-----|------------------------|
| 6. | Freshwater resources | 17. | Food and farming |
| 7. | Marine fisheries | 18. | Waste mgmt & recycling |
| 8. | Oil spill | 19. | Industrial/Dev. impact |
| 9. | (National) parks | 20. | Ecological science |
| 10. | (Endangered) animals | 21. | Environmental policies |
| 11. | Air quality | 22. | Other |
| | | 23. | None |
| 22. | Focus: | | |
| 1. | Conservation | 10. | Activities |
| 2. | Restoration | 11. | Achievement/Discovery |
| 3. | Environmental Policies | 12. | Action |
| 4. | Negative effects | 13. | Claim/Counter claim |
| 5. | Individual-level envt. beh. | 14. | Ecological disaster |
| 6. | Development | 15. | Local story |
| 7. | Research | 16. | Salvation attempt |
| 8. | Disagreement | 17. | Other |
| 9. | Serious incident | | |
| 23. | Frame: | | |
| 1. | Conflict | 5. | Economy |
| 2. | Controversy | 6. | Responsibility |
| 3. | Human interest | 7. | Morality |
| 4. | Politics | 8. | Other |

Section C: News sources

- | | | | |
|-----|----------------------|-----|---------------------------|
| 24. | Number of sources: | | |
| 1. | 1 | | |
| 2. | 2 | | |
| 3. | 3 | | |
| 4. | None | | |
| 25. | Main source: | | |
| 1. | Government officials | 6. | Local people |
| 2. | Environmentalists | 7. | Public Relations Officers |
| 3. | Scientists/Experts | 8. | International News Agency |
| 4. | Academicians | 9. | Other |
| 5. | Public | 10. | Not mentioned |
| 26. | Secondary source: | | |
| 1. | Government officials | 6. | Local people |
| 2. | Environmentalists | 7. | Public Relations Officers |
| 3. | Scientists/Experts | 8. | International News Agency |
| 4. | Academicians | 9. | Other |
| 5. | Public | 10. | Not mentioned |

27. Tertiary source:
- | | |
|-------------------------|------------------------------|
| 1. Government officials | 6. Local people |
| 2. Environmentalists | 7. Public Relations Officers |
| 3. Scientists/Experts | 8. International News Agency |
| 4. Academicians | 9. Other |
| 5. Public | 10. Not mentioned |
28. Most quoted:
- | | |
|-------------------------|------------------------------|
| 1. Government officials | 6. Local people |
| 2. Environmentalists | 7. Public Relations Officers |
| 3. Scientists/Experts | 8. International News Agency |
| 4. Academicians | 9. Other |
| 5. Public | 10. Not mentioned |
29. Source acts as:
- | | |
|-----------------------|-------------------------|
| 1. Victim | 6. Public |
| 2. Policy maker | 7. International Agency |
| 3. Environmentalist | 8. Other |
| 4. Scientist/academic | 9. N/A |
| 5. Spokesperson | |

Section D: News content

30. Jargon?
1. Yes
 2. No (Skip to question no. 33)
31. Type of jargon:
1. Scientific
 2. Business
 3. Policy
 4. Economic
 5. Technology
 6. N/A
32. Explanation of jargon:
1. Yes
 2. No
33. News stance:
1. Opposing
 2. Supportive
 3. Neutral
 4. Unclear
 5. N/A

34. News comprehensiveness based on:
1. Factual info
 2. Number and different types of sources used
 3. Background info
 4. Constructive critics
 5. Suggestions
 6. Other
35. What needs to be done?
1. Yes
 2. No
 3. Unclear
 4. N/A