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How the News Media Cover Environmental Issues in United Kingdom: A Comprehensive Study of Mexico Gulf Oil Spill Disaster in 2010

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ABSTRACT

It is widely known that an increasing number of attentions have paid on environmental issues and meanwhile, the mass media promotes its role in helping define the concept and field of environment and also bringing environmental issues into social attention. This paper intends to investigate how news media in covering environmental issues in United Kingdom through the perspective of Mexico Gulf oil spill incident in 2010 particularly. In details, this study focuses more on the study of trends and patterns of news coverage on oil spill disaster during the research process. The sample is made up of two mainstream newspapers in UK (the *Times* and the *Guardian*) which are selected based on circulation figures and politically centre-based figures from April 2010 to April 2011. This study employs content analysis as its primary methodology to observe the trends and patterns of news coverage. In addition, this study not only discovers characteristics, trends and patterns of each newspaper but also uses comparative way to discover differences and similarities in order to investigate how national newspapers differ from each other when focusing on the same environmental news. Through the investigation step by step, this study answers the hypothesis and concludes that news media cover environmental issues in a particular ways as they adopt different trends and patterns in coverage while they still have some ways in common.

1. Introduction

Human being as an individual live in the environmental world and all actions and behaviors generate impacts on both the natural eco-system and human society. Hence, it is essential to get a better understanding of environment through communicating information. Disasters are occurring more frequently around the world nowadays and the media becomes more and more pervasive throughout the whole society. As Davison (1982) states, public awareness is increased and national or international aid efforts are

influenced by the media coverage given to particular disasters. In contemporary society, the media does not only report on events themselves but also does functions to interpret and construct meanings for the public.^[1]

According to Hansen (2009), there is an increasing number of research have been done on the relations of mass media and environment which means that mass media has played a key role in bringing environmental issues into public and political concerns. Therefore, this study will continue focusing on previous research directions that with further investigation on how news media cover envi-

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ronmental issues.^[2]

The first section is about the literature review on this research field. This study picks out ten related literatures from other authoritative researches aiming at demonstrate and support the hypothesis of this study. Generally speaking, Hansen's (2010) statements will help us understanding the deep relations among environment, media and communication at first. Hansen's (2000) another research achievement will help demonstrating media coverage of environmental issues from perspectives of claims-making and framing on British newspapers secondly. Smith's (2000) research theory will help understanding media's policy on the representation of environmental issues thirdly. Bakir's (2005) research results will enhance our knowledge on media's role in risk communication, especially through analysis of Greenpeace and Brent Spar issues fourthly. Fifthly, the result from Molotch and Lester (1975) demonstrates news coverage given on Santa Barbara oil spill incident which will help pointing a direction at how to analyze newspapers in order to investigate news coverage on a specific environmental issue. Sixthly, the research achievement by Widener and Gunter (2007) will keep demonstrating interpretations of environmental issues from newspapers that focus on Exxon Valdez oil spill disaster. Seventhly, a new direction carried by Anderson and Marhadour (2007) on media politics of oil spill will analyzes and demonstrates how an environmental incident influenced by maritime policy in different country with a comparative research.^[3]

The rest three literatures will be much closer to the topic of this thesis as they focus on research of media and Mexico Gulf oil spill incident particularly. The eighth literature refers to the evaluation of media coverage on Mexico Gulf oil spill investigated by Pew Research Center's Project for Excellence in Journalism (2010). It will discuss and demonstrate how the media cover oil spill disaster through seven key points. Ninthly, Associated Press (2010) investigate how newspapers cover BP oil spill incident which focus on a combination of media discourse and political discourse that will help better understanding the relationship between the media and agents of politics in news coverage. The last but not the least, according to the research result from Meckel and Vople (2011), it will improve understanding of how traditional and social media are interrelated in covering the BP oil spill disaster in 2010. All in all, the whole ten literature reviews aiming at demonstrate and support the question of how news media cover environmental issues in current study.^[4]

The second section is about which methodology will be applied in this study. Content analysis is the only method

in analyzing newspapers' coverage on Mexico Gulf oil spill incident in this study. Besides explaining why content analysis is used, this section will describe how to select sample articles, what kind of sample will be adopted and how to do coding categorization in order to better explain the research method in the research process.^[5]

The third section is about data statistics and findings in terms of collected data analysis. The main purpose in this section intends to describe and analyze datum in each type and specifically manifests the differences and similarities of various ways in covering oil spill disaster for both two national newspapers in terms of each coding categorization.^[6]

The last section in main body of the thesis is about a comprehensive discussion based on above data statistics and findings. The aim of this section not only does discussions of ways of news coverage in two national newspapers in UK but also does comparisons of how the *Times* and the *Guardian* differ from each other in covering the Mexico Gulf oil spill disaster.^[7]

In short, this thesis intends to discuss how news media cover environmental issues particularly from perspective on Mexico Gulf oil spill disaster in 2010 that reported by the *Times* and the *Guardian* which belong to UK's national newspapers. On one hand, the study will investigate trends and patterns of each newspaper in covering this representative environmental disaster; on the other hand, the study will compare each trends and patterns in order to reveal the differences and similarities in their news coverage which will definitely help analyzing and demonstrating how news media does coverage on environmental issues.^[8]

2. Literature Review

Both public and political concern has paid on environmental issues in a large extent as it has been a kind of social problem. According to Hansen (2010), the term "environment" has been associated with a special dialog about natural environmental problems which to do with relationship of human beings. Hansen (2010) also states that mass media and communication have played the vital role both in helping define 'the environment' as a concept and bringing environmental issues into social and political concerns. In the present paper, it tries to investigate and analyze how news media cover a particular environmental issue-Mexico Gulf oil spill disaster in 2010 and with the hypothesis that news media has its own trends and patterns in covering specific environmental issue with great contributions in making environmental problems issues for public and political consideration. The following ten

literature reviews will attempt to demonstrate and support the hypothesis of current study.^[9]

In the book by Hansen (2010), he had done a deep-going research on the relations among environment, media and communication. Each chapter in his book focused on a specific aspect to explaining and analyzing relations of media process with environmental issues. There were two specific questions that were addressed for supporting the study. As he states, understanding media roles in the construction of the environment and environmental issues gradually becomes a matter of designing the vital and interactive expression of environmental issues. According to Hansen (2010), there was a comprehensive literature on public opinions and attitudes towards environmental issues. Majority of researches suggested that public awareness and considerations about environmental issue gradually developed from 1960s and recent studies also indicated that public concerns have increased. Similarly, as Hansen (2010) stated, there was an increasing number of researches on media coverage of environmental issues which together with the searches on public opinion. In terms of related research, it suggested that environmental issue became a subject of media coverage in the 1960s firstly. Moreover, Hansen (2010) indicated that there has been a relatively dramatic increase research on media content and media interest in the analysis of environmental news coverage.^[10]

Through the analysis of relations between mass media and the social construction of the environment from Hansen (2010), it concluded that it definitely requires a perspective which was beyond traditional approaches to the study of news media when trying to understand the character of the media in the development of environmental issues for both public and political concerns. Lastly, Hansen (2010) claimed that agenda-setting, propagation studies, research of public opinion and media influence, the study of media organizations and relationships of source and communicator in news production have all made significant contribution to our understanding of mass media and environmental issues in variety of ways.^[11]

The next literature review in relation to the media coverage of environmental issue is strongly demonstrated by the research of Brent Spar as a representative issue of environment. In the research article written by Hansen (2000), he did detailed analysis and discussion on claims-making and framing on British news coverage of the Brent Spar controversy. At first, Hansen (2000) put forward the concept of claims-making by using dialectical method. He argued that if environmental issues did not be identified and defined, issues won't present themselves

for public concerns or political actions. Hence, he got a conclusion that claims-makers play a crucial role for the identification and construction of social problems. Accordingly, mass media as a key public arena for definitions, voices of claims-makers should be given more attention and investigation. Generally, gaining media coverage often been seen as the most immediate task in the process of claims-making. So, Hansen (2000) pointed the vital element 'framing' in media coverage in order to better analyze and explain the British newspaper coverage of the Brent Spar issue.^[12]

All of these results combined to answer one hypothesis of how news media does news coverage on environmental issues. It is clear from above literature analysis that different newspapers frame and inflect the specific issue which they give coverage to in an extremely different ways. Some prefer reporting the issue itself while others prefer to do reports including subjective opinion which try to affect public opinions.^[13]

Thirdly, in the research article by Smith (2000), he did investigation on performance and changes of business, the media and the news environmental politic after the Brent Spar incident. Besides summarized the event itself, the discussion more emphasized media treatment of the issue and it looked at the influence of the Brent Spar on both business thinking on corporate responsibility and policy making about the representation of values in sophisticated decisions as well.^[14]

The fourth literature should be mentioned is the investigation of Social Amplification of Risk Framework. SARF has been examined in order to get comprehension of the media's role in risk communication. In the process of investigation, the battle between Greenpeace and Shell UK over the deep-sea disposal of the Brent Spar as a complicated heavily mediated risk communication case study was used to explore whether the Social Amplification of Risk Framework functioning well or not.^[15]

First and foremost, Bakir (2005) pointed the purpose of Social Amplification of Risk Framework which aimed to inspect contextually how risk and risk event interact with psychological, social, institutional and cultural processes in ways that amplify risk perceptions and concerns, thus shaping risk behavior and consequences. According to Murdock et al (2003) and Pettes et al (2001), Bakir (2005) concluded that from the perspective of media studies, Social Amplification of Risk Framework had a number of critiques. The first aspect refers to SARF's static conception of communication; the second aspect refers to SARF's lack of attention towards how key actors use the media; the third one refers to its lack of systematic atten-

tion towards the media as an amplification station; the last refers to its simplistic assumptions of how the media operate as an amplification station.^[16]

In Bakir's (2005) research, UK television news reporting was chosen for close textual analysis given that in the Brent Spar issue. The campaign of Greenpeace as pressure group targeted a decision of Shell UK and the UK government, hence, UK television news was expected to be a major amplification station. Also, as Layder (1998) maintains, the particular choice of UK television programs were governed by purposeful sampling. The research even found that more in-depth television evening news programs were chosen in order to achieve a wide range of prime time television news debate on the Brent Spar issue. During Greenpeace's seven week campaign for direct action, every Spar-related broadcast provided a database of twenty news items as well.^[17]

Apart from the analysis of how mass media did on Brent Spar, Bakir (2005) also analyze media's role in Shell's response to the risk signals. Journalist reporting was regarded as key way to translating Shell's details into sound-bites and creating matters of interpretation. However, it came late to weaken the influence of Greenpeace's risk signals.^[18]

In the research of Bakir (2005), it highlighted the layering in various amplification stations including the mass media itself. Surely, the use of the Social Amplification Risk Framework to understand the Brent Spar issue highlighted the requirement for closer examination of media coverage during seven-week campaign of Greenpeace.

Regarding to another kind of news coverage of oil spill disaster, a series of investigation had focused on Santa Barbara oil spill incident. This is the fifth literature worth being mentioned to support the topic. Molotch and Lester (1975) published their research results on coverage that be given the Santa Barbara oil spill as local occurrence and national event by a national sample of newspapers. As they stated, case study was used in this investigation in order to developed a coordinating perspective and propositions about how to made news appearing generally in the United States. And then, they suggested a duplicable methodology which can be applied to test similar propositions in a wide range of cases. In the process of this investigation, Molotch and Lester (1975) borrowed from the ethno-methodological perspective instead of traditional theory and experience. Their strategy was to compare two available fields of news which was created for the Santa Barbara local publics and another was created by newspapers from the rest of the country. As for coding, it was coded in terms of the source of story, the location of

the story in the newspaper, the length of the headline, the length of the story and the placement of the event in the story as a given occurrence was found in the newspaper. With the development of research, Molotch and Lester (1975) found that none of the sampled newspapers came close to the local paper according to the number of occurrences covered although the Santa Barbara oil spill was considered as one of the nation's big stories in 1969.^[19]

Among results, one surprising finding was that geographic propinquity to the oil spill is a good predictor according to frequency of occurrence reporting. However, there was one existing fact that frequency of occurrence reporting declined with an increasing temporal distance from the date of the spill. It didn't only refer to the coverage declined over time but also referred to the proportion of occurrences published in the local paper. Another surprising finding focused on different access to event making which pointed at subject. It provided an obviously discernible hierarchy among possible newsmakers according to access to newspapers with the president who was regarded as the most potent creator of events in the United States. The subject 'oil' came close to the president according to frequency of coverage. The third most excellent group of subjects was actions and statements in the federal executive branch. In addition, Molotch and Lester (1975) mentioned that oil companies and conservations were the most easily conflicting interest groups according to the use of newspapers after the spill. The third surprising finding focused on different access to event making which pointed at activities. The coverage which resulted from various activities indicated that the pattern that appeared was similar to that for occurrence subjects. Complying with previous findings in regard to access of both subjects and activities, Molotch and Lester (1975) pointed that the pattern can be divided into two specific patterns. One fingered that a nationwide coverage of activities was favorable to oil companies more than coverage given to conservationists. Another one pointed that national coverage of activities was thoroughly concentrated in a period immediately following the spill disaster when contrasted to local coverage.^[20]

As the investigation used the findings to explore the relationship between procedures and habits of news producers on one hand and the content of coverage on the other, the problems of this study would follow up. One finding showed that an occurrence received much coverage close to its date of origin but subsequent related happenings received comparatively little coverage. Nevertheless, the tendency of American journalists did not persevere in a story to judge the consequence. But, all

in all, with considerations that including the content of what is published and the types of news work procedures which have been allowed to resist as a kind of appropriate professional practice, the media supported the powerful without doubt.^[21]

In allusion to above concept, the sixth literature followed to do detailed explanations. Widener and Gunter (2007) carried a research to examine the mutual interpretations of disaster recovery as developed in the alternative Alaska Native newspaper, the *Tundra Times* that following the Exxon Valdez oil spill disaster. In the process of research, they examined the dominant themes of recovery and characterized the interpretations provided by newspapers as an “Alaska Native perspective”. Firstly, Widener and Gunter (2007) analyzed how recovery of the oil spill was portrayed in the *Tundra Times*, conducted a secondary analysis of the *Anchorage Daily News* and *Anchorage Times* and used secondary sources to undertake limited comparison of oil spill coverage reported in the Alaska media. Secondly, Widener and Gunter (2007) argued that the differences between the *Tundra Times* and the mainstream media lie in the processes by which they construct media packages. During this period, Widener and Gunter (2007) conducted an ethno-graphic content analysis to discover the meaning of recovery be portrayed in the *Tundra Times* after the oil spill disaster. There were four findings after this deep procedure of investigation. The first aspect refers to sponsor activities and media practices. Widener and Gunter (2007) found that the majority of claims makers were government representatives, scientists and Exxon oil spokespersons in their investigations of a long-term recovery in the *Anchorage Daily News*. Also, they found that seven of the eight Alaska Native voices appeared in the newspaper entitled with Fears Color Subsistence Life. In most aspects, the coverage presented in *Tundra Times* provided an obvious comparison with the voices that found in the mainstream media. Widener and Gunter (2007) even found that marginalized cultures and selective media had their own expertise systems. The second aspect refers to the cultural resonance. Widener and Gunter (2007) found that coverage of recovery was restricted basically to measurable existence such as financial compensation or wildlife after checking *Anchorage Daily News*. In contrast, the *Tundra Times* sought to make a connection between damage and expanding themes of respect, duties, and the betrayal of the oil industry and so on and so forth. The third aspect refers to package variation. Widener and Gunter (2007) suggested to including disagreeing views that lent credibility to the newspaper. They noted that articles in the *Tundra Times* emerged to resonate with a guar-

antee to both sustainable ecosystems and the state’s economy of resource. In contrast, the *Anchorage Daily News* provided a wider range of perspectives which including the presentation of different assessments of whether a specific species had recovered or not. In a word, the *Tundra Times* and the *Anchorage Daily News* both offered an internal package variation. The fourth aspect refers to the constricting symbols. As Gamson and Modigliani (1989) suggest, constricting symbols sentimentously capture the key position through image and word choice which is always regarded as the final tool in understanding media packages. As for this, constricting the key message of the *Tundra Times*, Widener and Gunter (2007) found its symbolic image was death while the *Anchorage Daily News* adhered to visual figure of tough wildlife.^[22]

As a plenty of investigations were done how mass media covered oil spill disaster, Anderson and Marhadour (2007) carried a new direction on media politics of oil spill. It is the seventh literature to support the thesis. Their article examined the different ways that newspapers of Spanish, French and United Kingdom framed the *Prestige* oil spill. Also, it reported the findings of a comparative study of the different ways that inflected the issues with concern of the influence of the disaster and maritime policy among those three countries. Furthermore, Anderson and Marhadour (2007) analyzed how national and local newspapers differed in their framing of the *Prestige* oil spill. Looking at the method that been used, it found that the study was carried based on content analysis of newspaper coverage of the *Prestige* accident. The sample mostly selected from Spanish and UK newspapers with two French newspapers which in order to enhance cross-cultural contrast.^[23]

According to Anderson and Marhadour (2007), there was crucial variability among space devoted to the oil spill by national and local newspapers in Spain, France and UK. The result showed that the highest level of coverage was in the Spanish local newspaper while the lowest number of articles was in UK during the sample period. In the process of coverage research, Anderson and Marhadour (2007) found that in the United Kingdom, the newspaper coverage reflected the fact that it was a country far away from the incident with a little consideration directly to the threat. Besides, UK newspapers had paid more attention on the consequences for the environment rather than the impact on the local organization or socio-economy after oil spill disaster. But regarding to French newspaper, the first report covered the *Prestige* oil spill as an accident spared from the country. But with the very quick and variable expansion of pollution, newspapers rapidly made an

association between arrival of balls and oil spill. Meanwhile, authorities feared that tourists would cancel travels because of the pollution. Anderson and Marhadour (2007) also noted that there was a tendency for the news media to concentrate on closer-to-home items to get a high degree of relevance. Through this point, comparison among these three countries manifested that local or regional newspapers gave much more concentrated and continuing coverage than national press. Generally speaking, national newspapers in Spain, France and UK framed *Prestige* oil spill in accordance to its environmental impacts and political controversy while local press in Spain focused on implication for local economy. The last vital finding in the study was that websites discussion about *Prestige* had an obvious effect on mainstream news coverage as it provided more competing accounts. Nevertheless, Anderson and Marhadour (2007) argued that internet news coverage still under the domination of news agency material.

Apart from findings in the study process, Anderson and Marhadour (2007) admitted that the study of *Prestige* oil spill had failed to provide a systematic analysis of news coverage to some extend.^[24]

No matter how much extensive discussion and studies been done on media and environment, or specific environmental issues, such as Brent Spar, Exxon Valdez oil spill, Santa Barbara oil spill and *Prestige* oil spill, news media still have a limited research content to investigate media coverage on these typical environmental issues. Naturally, when a new catastrophic environmental incident appears, news media will move to do related tracking reports rapidly. It is widely known that Mexico Gulf oil spill causes tremendous impact on the earth which continued to gush for another three months since happening date April, 2010 and especially be seen as a new research representative of media coverage of environmental issues. Without doubt, such a disaster poses a set of challenges and opportunities for the news media. Recently, some of researches begin to investigate different aspects about media coverage of oil spill disaster. The following literature will show how the media cover the Mexico Gulf oil spill disaster and its related issues that analyzed and discussed by other researchers.

All of these results combined to answer one hypothesis of how news media does coverage on environmental issues. It is clear from above previous literature analysis that news media carefully choose different angles to cover the specific news. News media tried to report and explain the efforts to contain the oil spill and make reliable estimates of the extent of the environmental and economic damage out. And the news media coverage of the disaster

also includes valid amount of technical and scientific expertise.

Nevertheless, the news media not only does coverage on events themselves but also functions to interpret and construct meaning for the public through its media coverage. On one hand, the media function to provide news of disasters; one the other hand, it also to reiterate social ideology that make contribution to social order. As Button (2002) states, the media decides which stories are the most news-worthy and whose voices the public will hear. However, Button (2002) then observes that it is unavoidable to make a combination of media discourse about disasters and political discourse about disasters which attributes to the power structures of society that links the media and the agents of politics.

This links to the ninth literature that has been researched by Associated Press (2010), they did investigation over six articles which covered the BP oil spill and analyzed them in three groups. The first two articles made up the control group that did not mention any government related words in the headlines.

In the case of BP oil spill, the first article of control group had a tendency to focus on the oil industry as the sinner of the disaster. This article framed the disaster as an accident and blamed it for human mistakes. The second article discussed the engineer's report on the oil spill. It evaluated the disaster with reference to government's agencies and personnel despite that there was bits of government terminology in the headline. In addition, the article analyzed the content of the report with criticism of federal regulators for not identified the high risk methods implemented on Deepwater Horizon. In a word, this article pointed specific faults in the operation of the oil industry and assessed the failure of government in monitoring the industry efficiently.

Following, the next two articles were published with terminology of government in the headlines along with reports of oil spill. The first one here mainly discussed government responsibility in step into oil spill issue. One side, it talked over the responsibility of oil companies; the other side, it insisted that the government was accountable for supervision and regulation as well. According to Associated Press (2010), the second one not only reported the disaster itself but also established the key role of government in federal safety regulation.

With deep-going research on last two articles, Associated Press (2010) found that the government was not the only one to be blamed in media coverage on Gulf of Mexico catastrophe. There was a criticism pointed to president as well. Apart from blames on BP's responsibility of the

disaster, the newspaper media also forcefully claimed that the president had huge responsibility in response to the disaster.

Based on the investigation by Associated Press (2010), it concludes that the media do not function barely to report on action but also assigns significance and value to the action with purpose. Media coverage of disasters involves government and even cast full blame on the government or the president in relation to a given disaster.

One more, Meckel and Vople (2011) investigated the relations between mass media and BP oil spill disaster and then published a report mainly on how traditional and social media were interrelated in covering the BP oil spill in 2010. As the explosion of the oil rig Deep Water Horizon in Mexico Gulf had caused the most tremendous oil spill in the history of United States, this disaster was considered as one of the major topics on the news agenda in the summer of 2010. According to the Meckel and Vople (2011), there was an intensive coverage in traditional media and ultra discussion on social networks in regarding to BP oil spill. The study on media coverage in both traditional media and social media was carried by Meckel and Vople (2011) in choosing the date from 31st, May to 30th, June that aimed at analyzing a complicated interrelation in the agenda setting and several media coverage. The results came from a quantitative and qualitative analysis of the coverage through seven major traditional media, two hybrid media outlets and social network like Blogosphere. First of all, Meckel and Vople (2011) concluded that traditional media and social media diffusely covered similar themes. But in details, they found traditional media focused more on political news and facts while social media did media coverage catered to rumors and human interest. In the next place, as Meckel and Vople (2011) stated, media releases mostly driven by President Obama and government, which means the news agenda regarded White House actions as its primary driver.

Based on the research results by Meckel and Vople (2011), it gets a conclusion that there is an obvious difference between traditional media and social media in covering the same environmental issue as they own diverse perspectives and purposes. Nevertheless, difference also has one thing in common that refers to the main driver of news agenda for media coverage in both traditional and social media.

By reviewing previous research achievements in this field, majority of investigation had addressed on claim-making and framing of news media on environmental issues, media policies on environmental issues and media's role in covering environmental issues. In details,

most of researches focused on media's angles in news coverage on a specific environmental issue. The content analysis and case study were also the most popular methodology that been applied in this research field. Yet, the reporting angles of news media, such as coverage towards characteristics of environmental news, and the trends and patterns of news media in covering specific issue do not reach extended study and analysis on how news media cover environmental issues actually. Based on above previous research results, this thesis will keep intensive study on how news media cover environmental issue from Mexico Gulf oil spill disaster in 2010 particularly. Furthermore, it will focus more on perspectives of the trends and patterns of news media in covering a particular environmental incident.

3. Methodology

This chapter only discusses one method that will be used for this study: content analysis. It will observe the trends and pattern of environmental news coverage from two national newspapers (the *Times* and the *Guardian*) in United Kingdom and does comparisons between these two national newspapers with the purpose to analyze and discuss both similarities and differences of news media's representation concerning environmental issues.

3.1 Why Content Analysis?

According to Berelson (1952), content analysis is a kind of research methodology for the objective, systematic, and quantitative description to manifests content of communication. In the mean time, McCombs, Shaw & Weaver (1997) and McCombs & Shaw (1972) also maintain that mass media regard content analysis as the most productive method in investigating the phenomenon of agenda setting. In the book written by Hansen, Cottle, Negrine and Newbold (1998), they state that content analysis is a quantitative method by definition. This method aims to identify and calculate the occurrence of specified characteristics or size of texts and then it is able to figure out some information about messages, images, representations of texts and their wider social significance. Meanwhile, Barcus (1959) defines content analysis as the scientific analysis of communication messages that commands the analysis to be precise and systematic.

Generally, the development of content analysis study is divided into two stages. As Krippendorff (2004) writes, content analysis proceeded simplistic studies but did management to produce remarkable findings in the early years. Previous studies found, for example, religious, scientific or literary matters in the media were declined in favor of

gossip, sports or scandal. Krippendorff (2004) then claims that the second stage of content analysis research has risen to questions of representations.

All in all, content analysis has been proven as an important study method in the research of newspaper content. In addition, content analysis can provide new insights, improve a researcher's understanding of a specific phenomenon and generate practical actions in the study of environmental coverage in newspapers.

3.2 Purpose

Content analysis is chosen as the primary method of research in this study because of its extensive utilization of the technique in previous researches which have some similarities to current study. In more detail, this study intends to examine news media coverage on environmental issues using three terms: trends, patterns and differences/similarities of the environmental articles which are defined by Krippendorff (2004, p. 47) as a kind of inference.

In the first place, the trends and patterns refer to observing individual characters of news coverage for these two national newspapers and even their changes among news coverage on one specific environmental issue. Aiming to find how news coverage behaves over time in a sample period. Here, this paper mainly focuses on studying each trends and patterns of news coverage in each newspaper through the sample period which including the number of article in each sample month, the location of story, the length of article, news sources and theme selection.

In the next place, comparisons between two national newspapers include differences and similarities on news coverage which mainly based on characteristics of news (length of article and location of story), types of news sources and theme selection.

3.2.1 Differences

The first term refers to the characteristics of environmental news which including the number of articles in each month of sample period, the length of article, location of story in each newspaper. It aims to find how these aspects differ from each other when cover the same environmental incident from different political centered newspapers in United Kingdom. The second term refers to the different news sources in each newspaper. It aims to find differentiations between political centre-left and centre-right newspapers. The third term refers to the theme selection in each newspaper in the same sample period. It aims to investigate the preference of each newspaper both on Mexico Gulf oil spill disaster.

These three terms will be analyzed in details in accor-

dance to three aspects that are explained in the following section of coding categorization. As for this study, it is assumed to describe systematic relations between subject categories in newspapers.

3.2.2 Similarities

Apart from above presupposed research terms, this paper will not neglect similarities between two national newspapers through the comparison process. And the detailed explanation will be recorded in Chapter 4.

3.3 Methods

3.3.1 Selection of Newspapers

For this study, content analysis was conducted on two mainstream national newspapers in United Kingdom. They are the *Times* and the *Guardian*.

The selection is based on circulation figures and political figures. According to the British Business Survey (2005), the *Times* has the highest number of readers among diverse social class of any of the "quality" papers. The certified average circulation figures for November 2005 showed that The *Times* sold 692,581 copies per day. Besides, the *Times* is regarded as a politically centre-right newspaper. Although, the *Guardian* does not have the second highest circulation among the "quality" newspaper, it is a politically centre-left newspaper. However, these two national newspapers as representatives of the UK's mainstream newspaper, especially represent two political parties have comparative enough persuasiveness to explain how news media cover the same environmental issue in United Kingdom.

3.2.2 Unit of Analysis

As Pellechia (1997) defines, the unit of analysis means that environmental news story that be measured in column centimeters. Hence, this study will define environmental news content as that which deals with a specific theme on the same issue in terms of the purpose of research, but excluding positive or negative judgments. According to preliminary estimates, this definition will include plenty of reporting themes on Mexico Gulf oil spill disaster.

3.2.3 Sample

As the Mexico Gulf oil spill disaster happened 15 months ago, there are not over abundance of media coverage on this incident, especially focus on coverage of two mainstream newspapers. Hence, this study prefer choosing one year as the researched date which will observe the news coverage of such an incident from the time of occur-

rence 20th, April 2010 to 20th, April 2011. The reason why choose one year as a sample period is because one year can be regarded as a complete cycle in covering BP oil spill disaster, which is possible and convenient to compare the changes of news coverage.

As for sample tool, Nexis UK will be applied as a key tool in order to identify coverage in both national mainstream newspapers. First of all, typing ‘BP oil spill’ in Search terms section, and choosing UK National Newspapers in the Sources section, the *Times* and the *Guardian* are included here, then choosing the date between 20th, April 2010 and 20th, April 2011 in Specify date section. According to above three elements, the searching result shows 155 articles in total. As all results are not completely relevant to 2010 Mexico Gulf oil spill disaster, it is necessary to do further selection from subject section. As Nexis presents, there is a specific subject named ‘2010 Gulf Coast Oil Spill’ which contains 56 articles. There into, the *Times* involves 25 articles while the *Guardian* presents 31 articles. The following investigation will be done through the comprehensive analysis of these 56 articles.

All collected articles are coded based on the coding categorization which will be discussed in section 3.4 in this chapter. The coding sheets will then be analyzed by using the SPSS software, Microsoft office with corresponding diagrams.

3.4 Coding Categorization

The coding categorization was divided into three sections: the characteristics of environmental news, news sources and theme selection. The coding categorization is designed based on the research objectives.

In the first section, the characteristics of environmental news coverage mainly focus on the number of articles in each mother of sample period and the location of the story in the newspaper (e.g. front page, news section, home page, financial page or other inside pages) and the length of articles. Coding categorization of Location of article and Length of article will be listed in Appendix 1.

In the next section, news sources here intend to observe the main sources that been quoted or referred to in the news coverage. It is the vital section as it suggests who makes the news basically. The main news sources list will be displayed in Appendix 2.

In the final section, the list of themes was compiled after above steps. It mainly aims at studying what is about the oil spill that the news coverage focuses on. Obviously, it seems a long list to provide a variety of themes from the same environmental issue. Coverage from different themes can contain different subjects. In addition, the

“Others” category will include the least reported themes on the oil spill issue for both national newspapers. And the coding categorization will be list in Appendix 2 as well.

However, the main limitation in constructing coding categorization exists in the process of get a comparable measurement for theme listing to match both national newspapers. Hence, it will definitely take a longer time to get a comparably reliable coding categorization of content analysis. The final coding categorization will be given in Appendix, while the statistic analysis and findings will be discussed in Chapter 4 and a comprehensive discussion of research results will be stated in Chapter 5.

Statistic Analysis and Findings

This chapter analyzes news content which intends to observe both the trends and patterns of news coverage in each newspaper and the differences/similarities of news coverage between the *Times* and the *Guardian*. The comparison part in this chapter will be divided into three specific sections: the characteristics of environmental news, news sources and theme selection.

4.1 Trends and Patterns of News Coverage in Each Newspaper

It is a little bit difficult to figure out the change of news coverage on a specific environmental issue during the sample period for a particular newspaper. For this part, the paper will investigate the trends and patterns of news coverage of both the *Times* and the *Guardian* from the number of article in each month of the sample period and the placement of story with time progression.

4.1.1 Number of Article in Each Month (Sample Period) of Each Newspaper

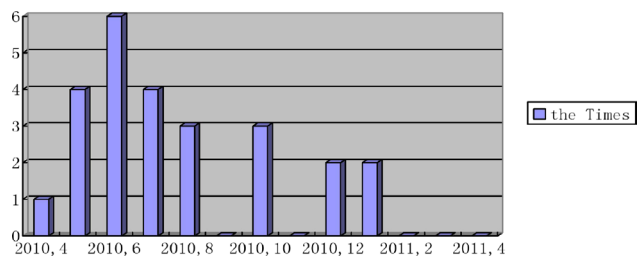


Figure 1. Number of article in each month in the *Times*

Above bar Chart 1 shows the number of article from 20th, April, 2010 which is the time of incident occurrence to 20th, April, 2011 in the *Times*.

Obviously, the general trend of news coverage in the *Times* presents a situation of fluctuation which reaches a largest coverage in June 2010 with 6 articles in total. There is no news coverage on Mexico Gulf oil spill in September 2010, November 2010, February 2011, March

2011 and April 2011 while there are 4 articles both in May 2010 and July 2010, 3 articles both in August 2010 and October 2010, 2 articles both in December 2010 and January 2011. In addition, there is 1 article in April 2010 since the oil spill incident happened. According to the statistics of number of article, the quantity of news coverage in the *Times* manifests a rising tendency from the beginning and reaches its peak in June, and then gradual reduced to zero in September 2010. Although, the *Times* covers oil spill with several articles in later seven months, the holistic quantity of coverage decreases month by month until no coverage. If it divided the sample period into two parts, the first part which contains six months is the main time for oil spill incident coverage while the rest six months as another part does the least number of coverage.

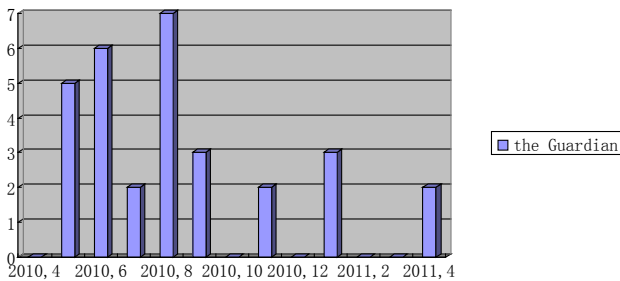


Figure 2. Number of article in each month in the *Guardian*

Above bar Chart 2 shows the number of article from 20th, April, 2010 which is the time of incident occurrence to 20th, April, 2011 in the *Guardian*.

The most obvious difference from the *Times* is that there is no coverage in April 2010 when the incident happened. However, more and more coverage begins in May 2010 with 5 articles and 6 articles in June 2010 and 7 articles in August although there is a little drop in July with 2 articles. And the quantity of news coverage in the *Guardian* reaches its peak in August 2010 which differs from the *Times* that in June 2010. As the bar chart shows, there is a fluctuation of the quantity of coverage from September 2010 to April 2011. There are 3 articles both in September 2010 and January 2011, 2 articles both in November 2010 and April 2011 while there is no coverage in the rest of 4 months. It has the similar situation as the *Times*, the first six months as a part has the majority of quantity of news coverage.

4.1.2 Location of Story in Each Newspaper during the Sample Period

According to data statistics, it finds that the placement of story in the *Times* and the *Guardian* has a little intersection area which means that it's not easy to compare rela-

tionship of the location of story. So, the following two bar charts listing number of article for each newspaper in its unique newspaper edition piece that in order to manifest the difference between them.

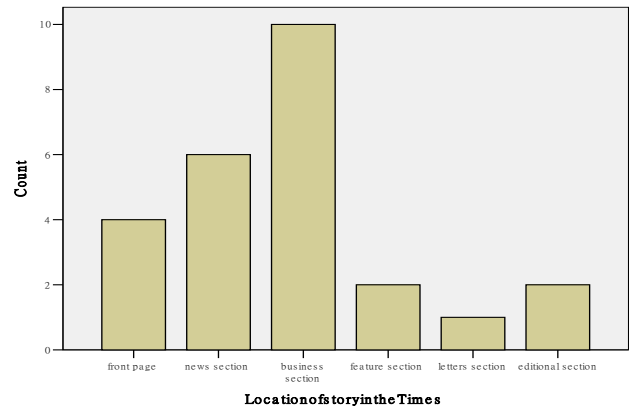


Figure 3. Location of story in the *Times*

After analyzing total 25 articles in the *Times* from 20th, April 2010 to 20th, April 2011, page classification as above bar Chart 3 shows that includes six sections: Front Page, News Section, Business Section, Feature Section, Letters Section and Editorial Section. The *Times* gives much more coverage of oil spill incident on the Business Section with 10 articles in total. The News Section ranks in the second place with 6 articles followed by Front Page which contains 4 articles. Furthermore, the Feature Section and Editorial Sections cover the same amount of article in 2 while the Letter Section only gets 1 articles of oil spill. As a whole, the *Times* put much coverage on the Business Section and the News Section in regarding to Mexico Gulf oil spill disaster while the Front Page not covers enough reporting.

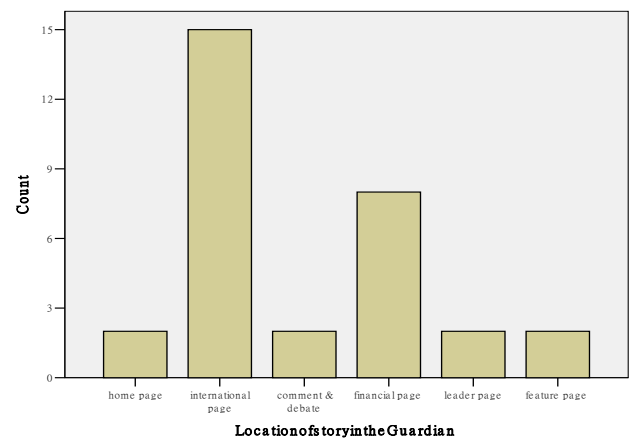


Figure 4. Location of story in the *Guardian*

With the same analysis, the page classification of the *Guardian* get a result as above bar Chart 4 shows that

there are also six kinds of pages but with different specific classifications which including Home Page, International Page, Comment & Debate Page, Financial Page, Leader Page and Feature Page. It is obvious that the International Page owns the largest number of articles which focus on Mexico Gulf oil spill. Meanwhile, the Financial Page obtains 8 articles in total given by the *Guardian* which make it ranks in the second place. The rest four pages cover the same amount of articles of oil spill disaster. In a word, the *Guardian* put more coverage on International Page and Financial Page which differ from the *Times* as they both do news reporting on the same issue. And also in regarding to less covering pages, it finds that the *Guardian* put the equal amount of articles on each which is not the same as the *Times* does.

4.2 Comparison of News Coverage between the *Times* and the *Guardian*

It will be divided into three sections: the characteristics of environmental news, news sources and theme selection.

4.2.1 The Characteristics of Environmental News

As the explanation above in section 4.1.2, the comparison of characteristics of environmental news between these two national newspapers will basically focus on other two aspects: the number of article of each month during the study period, the length of articles.

4.2.1.1 The Number of Article in Each Month during the Study Period

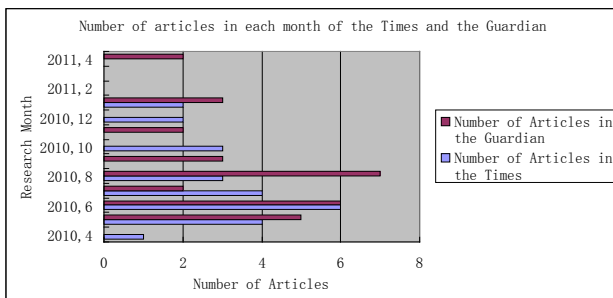


Figure 5. Comparison of number of article in each month of the *Times* and *Guardian*

The first different trends of the *Times* and the *Guardian* can be analyzed from the number of articles in each research month. As above strip Chart 5 shows, both of these two national newspapers have a tendency that the quantity of coverage reaches a maximum and then presents a drop trend with the time progression. However, the difference in their trend of coverage lies in the different quantity in each month. It is obvious that the *Times* gives immediate

coverage since the incident happened on April 2010 while the *Guardian* does no response in the same month. The following four month from May 2010, both the *Times* and the *Guardian* give comparative large coverage on the oil spill. But, there is less coverage of both newspapers from the September 2010 to the end of sample period. And as the chart shows, the *Guardian* still does coverage on April 2011 when the incident happened a year while the *Times* has already stopped reporting this incident on February 2011.

4.2.1.2 The Length of Article

The figure below demonstrates that both national newspapers have a similar pattern of length of news coverage. The length of article is calculated by number of words in each article. And the coding process will be listed in Appendix 1.

Table 1. Descriptive statistics of length of article in the *Times* and *Guardian*

	N	Minimum	Maximum	Mean	Std. Deviation
The <i>Times</i>	25	29.00	1411.00	422.2400	437.80487
The <i>Guardian</i>	29	129.00	1322.00	592.2759	280.36111
Valid N (list wise)	25				

The figure in Table 6 above describes the length of article in each newspaper. It finds that minimum number of words is only 29 in a reported article in the *Times* while the minimum of the *Guardian* is 129 words; in regard to maximum words in each article, the *Times* and the *Guardian* contain proximate number of words which is 1411 and another is 1322.

The following two tables are listing frequency and valid percent of number of words according to coding categorization in order to help analyzing difference of media coverage in two national newspapers.

As Table 7 shows, 40 percent of coverage is less than 100 words which take up a high range in news coverage. Length between 101 and 300 words occupies 16 percent in total. Following by the length between 501 to 700 words and 901 to 1100 as they both take 12 percent in a whole. The third place is taken by the length between 701 to 900 and more than 1001 with 8 percent for each. The least percent refers to the length from 301 to 500 words. The result suggests that the *Times* prefer to cover the specific incident in a short and succinct report or in a long and detailed report.

Table 2. Length of article in the *Times*

Number of Words	Frequency	Percent	Valid Percent	Cumulative Percent
less than 100	10	32.3	40.0	40.0
101-300	4	12.9	16.0	56.0
301-500	1	3.2	4.0	60.0
501-700	3	9.7	12.0	72.0
701-900	2	6.5	8.0	80.0
901-1100	3	9.7	12.0	92.0
more than 1101	2	6.5	8.0	100.0
Total	25	80.6	100.0	
Missing System	6	19.4		
Total	31	100.0		

Table 3. Length of article in the *Guardian*

Number of Words	Frequency	Percent	Valid Percent	Cumulative Percent
101-300	5	16.1	16.1	16.1
301-500	6	19.4	19.4	35.5
501-700	8	25.8	25.8	61.3
701-900	7	22.6	22.6	83.9
901-1100	3	9.7	9.7	93.5
more than 1101	2	6.5	6.5	100.0
Total	31	100.0	100.0	

Compare to the *Times*, there are some differences in the number of words in each article reported by the *Guardian*. According to above Table 8, there is no article with the length that is less than 100 words firstly. Secondly, the length from 301 to 500 words, 501 to 700 words and 701 to 900 words take major percent in contrast to the same coding categorization in the *Times*. However, there is less percent in last two coding categorization than those in the *Times*. The result suggests that the *Guardian* prefer doing coverage with moderate length while on the same reporting target.

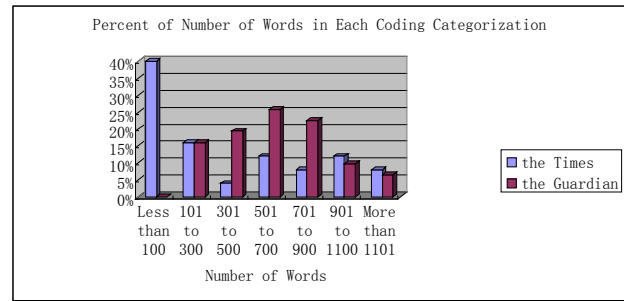


Figure 6. Comparison of percentage for length of article in the *Times* and the *Guardian*

The comparison of the *Times* and the *Guardian* on the percent of number of words aims to point the preference of each newspaper in order to investigate how different news media cover the oil spill incident. The bar Chart 9 above suggests that the *Times* seems to prefer using the least number of words in news coverage while the *Guardian* usually uses moderate number of words especially in 301 to 900 words in each article. In addition, comparing the words categorization of “901 to 1100” and “More than 1101”, it suggests that the *Times* uses comparative much more words than the *Guardian* in each coverage. In general, the *Times* tends to use the least or the most number of words in reporting the oil spill incident in contrast to the same coverage while the *Guardian* generally adopts a right amount of text.

4.2.2 News Sources

Table 4. Types of News Sources in the *Times*

Types of News Sources	Frequency	Percent	Valid Percent	Cumulative Percent
Scientists/Experts	2	4.9	8.0	8.0
Governmental officials	11	26.8	44.0	52.0
Public relations officers	2	4.9	8.0	60.0
Environmentalists	1	2.4	4.0	64.0
Academics	2	4.9	8.0	72.0
International news agency	3	7.3	12.0	84.0
Other	4	9.8	16.0	100.0
Total	25	61.0	100.0	
Missing System	16	39.0		
Total	41	100.0		

This section aims at comparing the main news sources used in both national newspapers to investigate the differences and similarities of the sourcing patterns and trends. This section will be divided into a following few sub-sections. The coding categorization of news sources will be listed in the Appendix 1. In general, the sourcing patterns for both national newspapers are quite similar with some small differences.

The above Table 10 shows that 44 percent of news sources in the *Times* come from Governmental officials about Mexico Gulf oil spill incident. Except for other news sources, international news agency is regarded as the second main news source for the *Times*. In contrast, Scientist/Experts, Public relation officers and Academicians have the equal percent in the news sources of the *Times*. However, the *Times* use the least news sources which come from Environmentalists. “Others” in coding categorization refers to the least quoting sources; this paper will not give explanation.

Table 5. Types of News Sources in the *Guardian*

Types of News Sources	Frequency	Percent	Valid Percent	Cumulative Percent
Scientists/Experts	3	7.3	9.7	9.7
Governmental officials	4	9.8	12.9	22.6
Public relations officers	2	4.9	6.5	29.0
Environmentalists	3	7.3	9.7	38.7
Academicians	1	2.4	3.2	41.9
International news agency	14	34.1	45.2	87.1
Other	4	9.8	12.9	100.0
Total	31	75.6	100.0	
Missing System	10	24.4		
Total	41	100.0		

Compare with the quotation of types of news sources in the *Times*, the *Guardian* presents some difference in choosing the types of news sources. From above Table 11, it finds that International news agency takes the largest percent in the *Guardian's* news sources. Governmental officials rank in the second place with 12.9 percent. Apart from other news sources, Scientists/Experts and Environmentalists get the same percent while Public relation

officers follow with 6.5 percent. Obviously, the *Guardian* uses the least news source that comes from Academicians. The same as the *Times*, ‘Others’ here also refers to the least sources being quoted and it has no intersection to news sources in the *Times*, this paper will not do explanation as well.

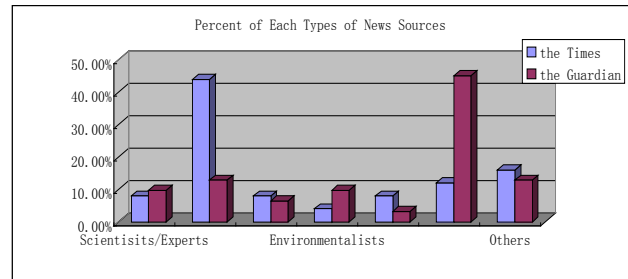


Figure 7. Comparison of percentage of type of news sources in the *Times* and the *Guardian*

The most significant difference between the *Times* and the *Guardian* on types of news sources lie on two aspects. In the first place, the *Times* regards Governmental officials as its main news sources while the *Guardian* cites news mostly from International news agency that focus on the Mexico Gulf oil spill disaster. But, it also reveals that Governmental officials and International news agency are both considered as the popular news sources cited in the *Times* and the *Guardian*. In the next place, the news source from Environmentalists is the least one in the *Times* while the *Guardian* uses the least news source which is quoted from Academicians.

4.2.3 Theme Selection

As this paper investigate news coverage on environmental issue through analyzing the Mexico Gulf oil spill incident particularly, it's essential to find on which themes two national newspapers prefer to focus separately. The coding categorization of theme selection will be listed in Appendix 1.

Table 13 above shows different themes chosen by the *Times* on Mexico Gulf oil spill news coverage. According to date statistics, it finds that the coverage on the theme of Marine life, Restoration and BP's economic losses takes the large proportion comparatively in the *Times* while the theme of Governmental responsibility, BP's responsibility, Environmental policy and Impacts on society get equal percent in news coverage. In contrast, other five themes, Deep sea pollution, Disaster prevention, Impacts on oil industry, President Obama and Energy are less covered in the *Times* on this specific incident.

Table 6. Theme Selection in the Times

Types of Theme	Frequency	Percent	Valid Percent	Cumulative Percent
Governmental responsibility	2	4.9	8.0	8.0
BP's responsibility	2	4.9	8.0	16.0
Deep sea pollution	1	2.4	4.0	20.0
Marine life	4	9.8	16.0	36.0
Environmental policy	2	4.9	8.0	44.0
Disaster prevention	1	2.4	4.0	48.0
Valid Restoration	5	12.2	20.0	68.0
Impacts on society	2	4.9	8.0	76.0
Impacts on oil industry	1	2.4	4.0	80.0
BP's economic losses	3	7.3	12.0	92.0
President Obama	1	2.4	4.0	96.0
Energy	1	2.4	4.0	100.0
Total	25	61.0	100.0	
Missing System	16	39.0		
Total	41	100.0		

Table 7. Theme Selection in the Guardian

Types of Theme	Frequency	Percent	Valid Percent	Cumulative Percent
Governmental responsibility	4	9.8	12.9	12.9
BP's responsibility	2	4.9	6.5	19.4
Deep sea pollution	2	4.9	6.5	25.8
Marine life	3	7.3	9.7	35.5
Environmental policy	2	4.9	6.5	41.9
Disaster prevention	3	7.3	9.7	51.6
Valid Restoration	1	2.4	3.2	54.8
Impact on society	6	14.6	19.4	74.2
Impacts on oil industry	1	2.4	3.2	77.4
BP's economic losses	2	4.9	6.5	83.9
President Obama	4	9.8	12.9	96.8
Energy	1	2.4	3.2	100.0
Total	31	75.6	100.0	
Missing System	10	24.4		
Total	41	100.0		

Table 14 above shows another situation on Theme selection in the *Guardian* which obviously manifests a distinguishing coverage. It suggests that the *Guardian* does reporting on oil spill with much more preference on the theme of Governmental responsibility, Impact on society and President Obama. However, the coverage on the theme of Restoration, Impacts on oil industry and Energy takes the least percent in regarding to oil spill incident. The rest six themes seem to get more or less equal attention from the *Guardian*.

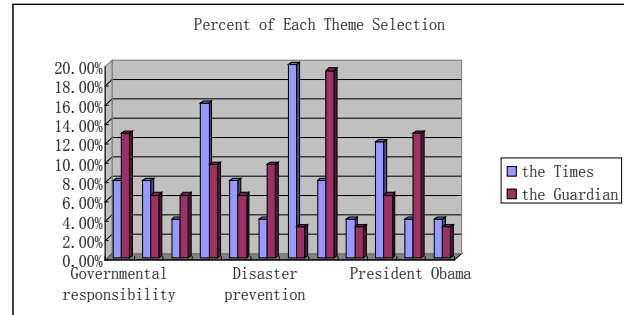


Figure 8. Comparison of percentage of theme selection in the *Times* and the *Guardian*

Through comparison of themes selection between the *Times* and the *Guardian*, it presents two main diversities specific to news coverage. The one is that there is no intersection on the most preferred theme in both national newspapers while the *Times* covers Marine life, Restoration and BP's economic losses, the *Guardian* chooses Governmental responsibility, Impact on society and President Obama; the another is that there exists some intersections in their least preferred theme on one hand, they still get a little opposite theme selection on the other hand. To be specific, both the *Times* and the *Guardian* cover the least proportion on the theme of Impact on oil industry and Energy. Nonetheless, the Restoration as the most preferred theme in the *Times* becomes the least preferred on in the news coverage of the *Guardian* while the theme of President Obama is the most welcomed one in the coverage of the *Guardian* changes into the least proportion in the *Times*.

5. Comprehensive Discussion

This paper sets out to investigate how the news media cover environmental issues through specific analysis from Mexico Gulf oil spill incident that been reported in UK's two national newspapers: the *Times* and the *Guardian*. In particular, this study not only focuses on the trends and patterns of coverage in each newspaper but also observes differences and similarities in the news trends and patterns

between the *Times* and the *Guardian*. In addition, the paper will discuss results from current research compares with previous research achievements which are mentioned in Literature reviews section. And then, it will suggest related problems that are raised during research processes on news representation of environmental issues.

Current research questions are listed below:

What are the news trends and patterns of the each national newspaper (the *Times* and the *Guardian*) in UK focusing on Mexico Gulf oil spill disaster?

What are the differences and similarities in the environmental news coverage of these two national newspapers in UK focusing on Mexico Gulf oil spill incident?

What causes the differences between the *Times* and the *Guardian* while in regarding to the same environmental news?

5.1 News Trends and Patterns in the *Times* and the *Guardian*

The news trends and patterns are investigated through analysis of the number of article in the coverage of every month during sample period, the length of article in each newspaper (the *Times* and the *Guardian*), the location of story in each newspaper (the *Times* and the *Guardian*), the news sources of news coverage and theme selection in the whole sample year coverage from 20th, April 2010 to 20th, April 2011.

5.1.1 News Trends and Patterns in the *Times*

First of all, it discovers that the quantity of news coverage in each month presents obvious fluctuations in the *Times*. Since the oil spill incident happened, the *Times* gives immediate reports lasting for five months until the August, 2010. In the meanwhile, the quantity of coverage in June stands for the highest number. Although, there are still several articles in October, December and January, the quantity of coverage decreases distinctly in the later months as if the *Times* becomes pay less attention on such an incident with the time progression.

Secondly, it discovers that the *Times* prefer using fewer words or more words in cover the oil spill news, generally less than 300 words or more than 900 words in regarding to the length of article. Certainly, the length of article in the *Times* with varietal presence as sometimes it chooses moderate number of words that little more or less than it usually adopts. But, it shows that the *Times* covers BP oil spill disaster in using extreme number of words especially, either less words or more words during the sample period.

Thirdly, directing at Mexico Gulf oil spill incident, the *Times* covers it basically on Front page, News section,

Business section, Feature section, Letters section and Editorial section. Among these locations, the Business section has been given the most articles while the News sections and Front page following behind. It does not mean other pages do not cover this news but actually, Feature section and Editorial section covers the same amount of articles while the Letters section owns the least number of articles.

Fourthly, looking at the news sources in the *Times*, it discovers that majority of news come from Governmental officials and comparative large news from International news agency while other types of news course take a little percent individually. In terms of news sources coding categorization, it takes equal percent of news sources from Scientists/Experts, Public relations officers and Academicians. Apart from 'Other' in coding categorization, Environmentalists is regarded as the least news sources in the *Times* focusing on Mexico Gulf oil spill disaster.

Lastly, the *Times* cover the Mexico Gulf oil spill incident mostly from the perspective on the theme of Marine life, Restoration and BP's economic losses. And other themes in accordance to theme coding categorization own comparatively less equal percent in the coverage. These three types of theme take majority of proportion in total which manifest a preferred theme selection in the *Times* in regarding to Mexico Gulf oil spill incident.

5.1.2 News Trends and Patterns in the *Guardian*

Firstly, the quantity of articles in each month in the *Guardian* also presents an obvious fluctuation. But, it differs from the *Times* as it does not cover the incident in April 2010 when the incident happened and the largest quantity of articles in the *Guardian* is in August 2010. Another difference remains on the reporting duration of news coverage. The month between May and September is the time with largest quantity of coverage in the *Guardian* which contains 23 articles in total. The same time in the *Times*, the quantity of coverage reduces gradually and even in some months, there is no coverage on oil spill incident which means that the *Guardian* reduces its attention on such an incident over time as well. There is also a similar phenomenon for both national newspapers. It shows that the situation of quantity is intermittent from September 2010 to April 2011 which means that both national newspapers do not abandon the specific environmental news completely with time progression.

Secondly, it finds that the length of article in the *Guardian* greatly differs from the *Times*. The *Guardian* tends to use comparative moderate length of article in its news coverage which generally contains 500 to 900 words in contrast to the *Times*.

Thirdly, the *Guardian* covers the oil spill incident normally on six pages in regarding to location of article compares to the *Times*. There are Home page, International page, Comment & debate page, Financial page, Leader page and Feature page. But, only the International page and Financial page receive majority number of articles about Mexico Gulf oil spill incident. And the other four locations own equal number of article during the sample period.

Fourthly, with regards to news sources, it finds that the *Guardian* adopts the largest number of news from International news agency and a comparatively large number of news from Governmental officials which is a slight difference from the *Times*. If apart from the 'Other' in terms of coding categorization, arranged by valid percent of their actual quotation, Scientists/Experts and Environmentalists rank the first place in rest of types of news sources. Public relations officers is considered as the less adopted news sources while Academicians is the least quoted one in the *Guardian*.

In the end, it finds that the *Guardian* prefer choosing the theme of Impact on society, Governmental responsibility and President Obama especially rather than any other themes in coding categorization of theme selection. It makes a quite big difference with the theme selection from the *Times*. Moreover, the rest of types of theme can be divided into three categories which own 9.7 percent, 6.5 percent and 3.2 percent separately when focus on Mexico Gulf oil spill disaster.

5.2 Comparison of News Coverage between the *Times* and the *Guardian*

This section will discuss the differences and similarities between these two national newspapers (the *Times* and the *Guardian*) in United Kingdom in order to help understanding how news media cover specific environmental news and how they differ from each other. In addition, it will present candid appraisal of research findings and link findings to other previous research results from the Chapter 2 literature review. The last but not the least, limitations of this study and other recommendations for future research will be discussed as well.

The trends and patterns of news media that covers on Mexico Gulf oil spill incident presenting a roughly same tendency between the *Times* and the *Guardian*. As a whole, there are many related articles cover on oil spill incident since the disaster happened and the quantity of coverage decreases after reaches a peak of amount of news coverage. The news patterns are cyclical in the sense that the issue is only covered when it becomes public debate. The cycle situation here agrees with the theory

of Issue Attention Cycle that proposed by Downs (1972) which means that a certain issue can be a center of public discussion for a period of time before fading away slowly. Moreover, environmental issues would not stay longer on the stage of public discussion as Downs (1972) suggests that the nature of conflict news is often short. Hence, the patterns of environmental news appear to be influenced by economic factors which restrict environmental news coverage. Besides, it finds that the *Times* covers the oil spill incident immediately in April since the disaster actually happened but the *Guardian* does coverage just begins from the next month, May 2010. This phenomenon can be explained by what Hansen (2000) points that Agenda-setting is a crucial element in media coverage. Moreover, claims-makers also play a vital role for the identification and construction of environmental news coverage.

Another important finding refers to the total number of articles in each newspaper's coverage during the sample period. According to Methodology part, this study analyzing 56 articles together from the *Times* and the *Guardian*. The total amount of articles seems not enough and lack of persuasion to some extent, but it reflects an obvious status that the quantity of news coverage in the United Kingdom is much less as it is the country far away from the incident place that leading to the country with a comparatively little attention directly to the disaster, which agrees with the previous research result suggested by Anderson and Marhadour (2007) that the geographic distance to the accident can go some way toward explaining this coverage since the national press tends to focus on stories that are much closer to local places. The finding in current study reflects that there are plenty of other factors that combining to affect the perceived newsworthiness of any given environmental news stories.

The length of article in each newspaper as a representative of characteristics in news coverage appears to be different which might because it is influenced by media framing. Although the length of article in two national newspapers present obvious difference, the one common character lies in both of them get a restriction in the length of its news articles. It seems a little bit hard to analyze what specifically causes the extremely different length in each newspaper but it definitely reveals a problem that it's really hard for newspapers to put the whole event and related information due to space limitations in print pages. Especially, other factors such as advertisers, editorial policies influence it in the same time, and even emphasize much more coverage on economic or political news.

The placement of article in the *Times* and the *Guardian* manifests significant differences as they do not put the same news articles on a comparative same layout of

a printed page. In terms of individual printed pages, the Business section in the *Times* owns the largest number of articles while the International page in the *Guardian* does the same way. It finds that both the Front page of the *Times* and Home page of the *Guardian* do not receive the largest percentage of number of article which suggests that the environment might not be a prominent topic of discussion for both national newspapers. But, it does not mean that the environmental news is not a prominent one among various news topics. And obviously, this is a result that opposite to what Pew Research Center (2010) suggests that the oil spill disaster is regarded as a dominant news story. On the other hand, the *Times* and the *Guardian* put the same issue on complete different pages present a distinguishing feature individually. This is might because that these two national newspaper project news to their targeted readers; on the other hand, according to Cox (2006), both of newspapers do not fully use its front or home page to cover such a disaster show that the environment is not listed as a kind of priority news because that its impact is delayed or not easily observed. Moreover, Anderson (1997) also states that in terms of his content analysis findings, the environment sometimes does not fit the newsworthiness requirements actually.

While in regarding to types of news sources for the *Times* and the *Guardia*, it shows that both the Governmental officials and International news agency are the most welcomed news sources for the *Times* and the *Guardian* and the only difference lies in the *Times* uses more that from Governmental officials comparatively while the *Guardian's* more sources comes from International news agency. According to date statistics, the high dependency on Governmental officials for both national newspapers in UK manifests the dominance of government in the area of environmental news. It agrees with the states by Dunwoody and Griffin (1993) that the news from governmental officials is vital because that it is always available and credible. The second mostly wide used source for both national newspapers is from the International news agency, especially for the *Guardian* which highly depends on it. The same as Governmental officials, International news agency is considered as a credible one being quoted as well as Dunwoody and Griffin (1993) claim.

And as for other types of news sources, they are equally considered as the comparatively secondary sources for the *Times* and the *Guardian* that only take approximately 4 percent to 8 percent for each in terms of coding categorization. However, it does not mean that other news sources are not as important as the Governmental officials and International news agency in the area of environmental news coverage as the news sources only act as the

providers of the news contents. In addition, there is an obvious situation that both the Environmentalists and Academicians as the news sources in both the *Times* and the *Guardian* are considered as the least sources for their quotations. As Dunwoody and Griffin (1993) suggest, issues and perspectives perceived and presented by environmentalists and academicians are less trustworthy more or less. Nevertheless, it should not over-state the power of news sources. Media organizations usually intervene to set the framing of news stories and the strategies of audience targeted by some of their forces.

In the end, both of national newspapers in United Kingdom show a completely different trends and patterns in the theme selection. In terms of coding categorization about theme selection, it shows that the theme of Marine life takes 16 percent, Restoration takes 20 percent, BP's economic losses takes 12 percent separately in the *Times* which account for high range in total. Nevertheless, the *Guardian* covers more on the theme of Impact on society, Governmental responsibility and President Obama which account for 19.4 percent, 12.9 percent and 12.9 percent separately. The result reflects that different newspapers project different news theme selection to their targeted audiences and communities. As Solosky (1989) mentions, newspapers usually strategize their news to be some particular thing that is close to their readers in order to get enough attention and thus to promote their circulations. Despite the difference of theme selection on the same environmental issue between the *Times* and the *Guardian*, there is one similar character that worth emphasizing. No matter which theme has been chosen in news coverage on this specific environmental news, both of two national newspapers have linked its coverage to public awareness and political concerns, which connects to what Hansen (2010) claims in the book 'Environment, Media and Communication' mentioned in literature review. Apart from their coverage on oil spill disaster itself, the news always extend their coverage to any related themes with further reporting which usually meet requirements of media policies.

5.3 Limitations and Recommendations

The whole study analyzes news coverage of the *Times* and the *Guardian* that focus on Mexico Gulf oil spill disaster from their characteristics of news coverage, trends and patterns. Besides above analysis, there are still some limitations pointing at this study which should be given enough attention.

First of all, the number of articles collected by Nexis is limit to some extend in sample period as the Mexico Gulf oil spill disaster happened in last year and there is not

enough news coverage in such a limited time. It means that the data statistics might not presents a complete representativeness in demonstrating the characteristics, the trends and patterns of news media in covering environmental issues, but all datum collected from Nexis are real and valid which help explaining its persuasion to some extend.

Secondly, this study investigates how news media cover environmental issues through five aspects of news characteristics: number of article, location of article, length of article, types of news sources and theme selection. But, it does not mean that other factors can not demonstrate the way which news media cover environmental issues. There is one factor that worth mentioning that refers to attachment at the end of news articles in each newspaper. The press always regards photographs as the best extra information attached to environmental articles. It is said that visual images are vital for environmental news representation in order to put some so-called soft elements into the stories. Nevertheless, the sample articles collected by Nexis do not contain any related attachments, especially for visual images. It leads to the lack of analysis through attachment aspect to investigate how news media further cover environmental issues; it means that this study has lost a particular direction to get a better understanding of news coverage.

Lastly, this study gets a conclusion that both national newspapers in United Kingdom have its own trends and patterns in regarding to covering the same environmental issue, Mexico Gulf oil spill while similarities and differences exist together. The content analysis only discovers how national newspapers cover the identical news but it can not give comprehensive and material reasons why these different phenomena appear. On one hand, it means that this study has greatly accomplished the confirmation of research hypothesis that news media use its particular trends and patterns in covering environmental issues; on the other hand, it manifests its insufficiency in fully investigating further in-depth relationship between news media and environmental issues.

Apart from above three limitations being realized in research process, this study prefers suggesting two aspects for future related researches. One refers to adding more useful coding factors under possible situation in content analysis, such as level of news coverage, focus of article and attachments which will definitely help investigating how news media cover environmental issues comprehensively. Another one refers to adding new methods combines with current research method, for example, using 'Discourse analysis' bond to 'Content analysis' in study or 'In-depth Interviews' which are aim to doing a com-

prehensive and ingoing study that meeting the purpose of media research.

6. Conclusion

As it is widely known, human's understanding of the environment is shaped by media coverage to some extend. Hence, it means that the media plays a significant role to attract public attentions and enhance their knowledge of the environment.

Consequently, this study discovered that news media has its own trends and patterns in covering environmental issues, particularly from Mexico Gulf oil spill disaster been covered both in the *Times* and the *Guardian* in United Kingdom. Nevertheless, this study also discovered some problems in investigating media coverage on environmental issues.

In particular, according to findings of this study, both two national newspapers have their own characteristics in covering Mexico Gulf oil spill incident. One on hand, the *Times* does immediate coverage since the disaster happened and keeps reporting for four months with a decreasing tendency in rest months of sample period. Another character is that the *Times* usually use number of words which less than 300 or more than 900 in covering oil spill that means the *Times* prefer choosing either short but succinct or long but detailed length in its news coverage. Based on data statistics, the study discovers that the News section and Business section are the most popular locations of story for the *Times* focus on Mexico Gulf oil spill which expresses a tendency that . And the *Times* does not fully use Front page to cover oil spill disaster which show that the environmental issues cannot be considered as a prominent topic for newspaper coverage. In regarding to news sources and theme selection of specific oil spill incident, the study discovers that the *Times* tends to adopt news from Governmental officials and International news agency in term of news sources coding categorization which is in accordance to Dunwoody's (1986) research result that the news from governmental officials is vital because that it is always available and credible. In addition, it also discovers that the *Times* focuses more on theme of Marine life, Restoration and BP's economic losses in covering Mexico Gulf oil spill; on the other hand, the *Guardian* does not cover news since the disaster happened in April 2010, it begins to cover it from May 2010 and keeps reporting for five month but also with a decreasing trend in the rest seven months of sample period. But, it slightly differs from the *Times* as it still does coverage on April 2011 when the disaster happened for one year. On the contrary, the *Guardian* generally uses moderate length of article in coverage this disaster which refers to the

number of words basically from 300 to 900 while in contrast to the Times. And the *Guardian* puts news of oil spill disaster more on International page and Financial page from statistics. Equally, in regarding to News sources and Theme selection, this study discovers that the *Guardian* mostly adopts news from Governmental officials and International news agency as well but the news source from International news agency takes up much more percentage compare to another type of news source. Besides, it also discovers that the *Guardian* chooses theme of coverage on Mexico Gulf oil spill differently which focuses much on Governmental responsibility, Impact on society and President Obama. It shows that different newspapers prefer choosing different themes when focusing on the same news issue in terms of different claims-making and framing in mass media.

Apart from individual characteristics of trends and patterns in news coverage of the *Times* and the *Guardian*, the study also discovers difference and similarities through the connection of each characteristic.

In the first place, although they cover the same environmental incident with different length of articles and different number of article in each month of sample period, the common character lies in the adoption that they both use valid and actual coverage which suit for each media framing. In the next place, both of the *Times* and the *Guardian* cover the disaster on its layout of a printed page but with the common situation that they put less coverage on Front page or Home page which manifest a problem that the environmental issues cannot be considered as a prominent topic for newspaper coverage so far. In the third place, the *Times* and the *Guardian* generally cover the oil spill issue come from Governmental officials and International news agency while other types of news sources in coding categorization take approximately equal percent, the obvious difference lies in the proportion of those two popular types of news sources. The *Times* tends to cite more news from Governmental officials comparatively while the *Guardian* adopts more from International news agency. It manifests that different newspapers have different claims-making and framing in terms of media policies. In the last place, there is a great difference of theme selection between these two national newspapers as they do not have an intersection on mostly preferring themes. But, the study discovers that both of them take the least coverage on the theme of Impact on oil industry and Energy as if these two themes do not have an enough closely relationship with the Mexico Gulf oil spill incident. Also, the Restoration as the most popular theme in the *Times* is considered as the least popular theme in the *Guardian* which focuses on oil spill disaster while President Obama is the most popular

theme in the *Guardian* is regarded as the least one in the Times. It manifests both their similarities and differences on theme selection in regarding to Mexico Gulf oil spill incident. In details, both of the *Times* and the *Guardian* have a common thing lies in preference of theme selection which refers to their least preferred theme, and the different thing lies in their opposite theme selection in regarding to the most popular and the least popular theme.

The study not only investigates how news media does coverage on environmental issue with causes of this phenomenon but also discovers several problems in research process which is worth revising in future investigation. On one hand, the research on media coverage of environmental issues needs to add more coding factors in order to help analyzing the relationship between news media and environmental issues with the further and ingoing way; on the other hand, a variety of methods can be applied into investigation. In particular, as for methodology, it might be useful to apply 'Discourse analyses' to related researches. Furthermore, there is still a little study on the impact of media coverage on social behavior and psychology from the perspective of news coverage on environmental issues which is worth being investigated in the process of study on news media and environmental issues.

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