

7. Media representation of environmental issues in Malaysia

Newspapers and environment non-government organisation newsletters

Abstract: This research investigates the types of environmental issues represented in Malaysian newspapers and Environmental Non-Government Organisation (ENGO) newsletters and examines the factors in the selection of stories by both social actors. A quantitative content analysis was conducted on 2050 environmental articles in *The Star* and *Utusan Malaysia* newspapers, together with the World Wide Fund for Nature's (WWF) and Malaysian Nature Society's (MNS) newsletters from 2012-2014. A total of 13 people from *The Star* and *Utusan Malaysia*, and 11 from the WWF and MNS were chosen for in-depth interview sessions. The study showed that the methods of choosing environmental information for newspapers and newsletters were slightly different. The ENGOS gave more attention to environmental effort topics like sustainable living while the media focused on more environmental problems like floods. The study also found that the Malaysian media and ENGOS shared some criteria for selecting environmental issues, especially proximity, timeliness and impact.

Keywords: ENGOS, environment, environmental journalism, journalism, Malaysia, media, newsletters, newspapers, news values, representation

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Introduction

IN GENERAL, the word representation can be understood as an effort or action of portraying, depicting or describing visual or digital information by producers or senders to receivers. Fürsich (2010) argued that representation is associated with the social construction of reality, where the media constructs reality in readers' minds, in line with Hannigan's (2006) explanation of the social

construction of reality. Media representations have a great influence on public perceptions, attitudes and beliefs (Lyons, 2000; Marlina & Shakila, 2016). Media representation is known to be a powerful tool in translating science and policy information to the public (Teravainen, 2014). It is not therefore surprising that public opinion about certain environmental issues like climate change corresponds with the information represented by the media (Peters & Heinrichs, 2008).

Media representations of environmental issues can take place within many arenas, scientific, political and social (Boykoff, 2009). A study of media representation can allow us to understand more deeply why certain environmental issues are able to grab the public's attention while other issues disappear from the media and public attention (Hansen, 2011). However, misrepresentations of environmental information especially in the media can occur, which contributes to the confusion among the public (Cho, 2010).

Environmental issues representation in newspapers depends on the choices of the journalists (Massey & Ramanathan, 2001) and news editors (Young & Dugas, 2011) through the agenda setting process which decides which kinds of issue they regard as being important to present to the public (Elmasry, 2012; Hannabuss, 1995). In other words, the belief and values of journalists can significantly influence the types of news that are represented in the newspaper (Taiwo & Igwebuike, 2015). This study looks to fill this research gap and analyse how this compares with media representation of such issues.

Representation of environmental issues by the media and ENGOS

Caple and Bednarek (2015) listed 10 specific news values commonly used by the media in the process of selecting certain topics for coverage including negativity (the negative aspect of the event), timeliness (a recent event), proximity (geography of the event), superlativeness (scale of the event), eliteness (involving a high-ranking individual or organisation), impact (significance of the event based on the consequences), novelty (newness), personalisation (issues with a human face), consonance (a stereotypical event) and aesthetic appeal (interesting or not) (p. 5).

Using the proximity news values, some of the environmental issues represented in the media were based on the current environmental problems occurring in certain places or countries close to the local people. Various studies have shown that environmental news has been reported according to the environmental condition of the country. Kostarella, Theodosiadou and Tsantopoulos (2013), for instance, found that the Greek media represented the greenhouse effect and recycling as the two most popular issues rather than other environmental issues like air pollution, flooding, etc. According to them, this could be due to the recycling programme and campaigns highlighted by the government and through citizen participation events, while greenhouse effect issues have become more visible in

the media since the Kyoto Protocol of 1997 and the Copenhagen Conference of 2010. On the other hand, if we look at the timeliness news value, for example, the type of environmental news represented in the media is also related to the influence of the 'current' environmental issues or debates happening on a global scale such as climate change, global warming and loss of biodiversity.

Kuha (2009) in research about global warming and climate change coverage in UK and US newspapers found that the coverage of climate change issues in newspapers increased, especially among the UK's newspapers, after the UN Climate Change Conference in December 2007 in Bali. Siti Suriani, Liana and Lee (2013) also found that news values such as the interest element, a recent matter discussed by the public (timeliness) and proximity (geographical location) were used as the main criteria for news selection among Malaysian media. However, other factors such as the editors' decision, journalists' experience, readers' interest and the location of the particular news outlet also accounted for news selection in Malaysia (Siti Suriani, Liana & Lee, 2013).

In contrast to the media, it is important to understand that different ENGOs will have different representations of environmental issues in their newsletters, depending on the mission and the goals of each ENGO and, most importantly, the environmental concern championed by the ENGO. Therefore, it is important to discuss the type of environmental issues considered by the ENGOs that usually appear in their newsletters. Firstly, the type of environmental issues considered by the ENGOs depends on the period or era when the ENGO was established. Taking the United States as an example, it has been noted that in the first era, ENGOs like The Sierra Club, which was established in the 1800s, were more focused on the issues of conservation and preservation of the aesthetic environment from the effects of urbanisation and industrialisation. In the second era, modern ENGOs looked into the issues of protection and management of the natural environment (Silveira, 2001). The modern US ENGOs, which were established in the late 1960s and early 1970s, had more concern for natural resources, wildlife, pollution and the quality of life (Johnson, 2008).

A particular ENGO could take on one or more types of environmental issues. For example Greenpeace America, which is the largest and wealthiest ENGO in the US (Shaiko, 1993), has devoted itself to four major environmental issues: the preservation of ancient forests, ocean protection, global warming and the removal of nuclear weapons. Like Greenpeace, for Malaysian ENGOs, the types of environmental topics covered are varied, based on each organisation's background, objectives and interests (Smeltzer, 2008; Rohani et al., 2010). Taking the oldest ENGO, MNS for example, in relation to its mission to protect Malaysia's heritage, this ENGO has put great emphasis on several issues, including rivers, the sea, wildlife, forests, the highlands and air.

The types of environmental issues concerning ENGOs are related to the current

issues happening in certain countries or on a global scale, similar to the media's timeliness news value. According to Hilton et al. (2012), in the 2000s, due to the problem of climate change, many UK ENGOs like the National Trust and Friends of the Earth (FOE), showed their concern for fighting climate change, including an effort to make a large coalition (Stop Climate Chaos, p. 54). Gough and Shackley (2001) found that there are 18 predominant ENGOs engaging in the climate change debate, including Greenpeace, WWF, FOE and Ozone Action America. Climate change clearly dominates the focus of European, UK and US ENGOs.

The types of environmental issues represented in the media are mostly based on their news value. It is different for ENGOs, which usually publish environmental information in their newsletters that concerns their organisation. However, as with the media's timeliness news values, some ENGOs also give attention to recent environmental issues at the local and global scale. Thus, we can expect WWF, for example, to publish about nuclear energy in their newsletters if the issue has recently been highlighted in a global debate.

Methodology

The first aim of this research is to discover the types of environmental issues represented by the media and ENGOs in their newspapers and newsletters. To achieve this aim, two methods were employed. First, the quantitative content analysis was done on media newspapers and ENGOs newsletters. A total of 2050 samples from *The Star* and *Utusan Malaysia* newspapers and WWF and MNS newsletters was selected for quantitative content analysis. All the samples from the newspapers and newsletters were manually gathered and evaluated individually (Djerf-Pierre, 2012). The samples of newspapers and ENGOs' newsletters were taken from a three-year period: 2012-2014. The rationale for selecting this timeframe was to fill a gap in the current research. Until recently, there has only been limited research on the representation of environmental issues in Malaysian newspapers and newsletters. The other motivation for selecting the years of 2012-2014 for this study was the fact that notable environmental events occurred within these three years in Malaysia like the most serious atmospheric haze in Malaysian history which occurred on 21 June 2013 and 15 March 2014.

It is important to note that the creation of coding categories for the types of environmental issues occurred via adaptation from previous local and foreign studies (Sjøvaag & Stavelin, 2012) on environmental coverage in the media and adjusted according to the results of the inter-coder reliability test by two coders. For the types of environmental information, 28 variables were adopted from other studies conducted on environmental coverage in the media such as Mariah, Raihanah and Md. Salleh (2004) and Nik Norma (2007) in the Malaysian context, along with Kostarella, Theodosiadou and Tsantopoulos (2013) in the

foreign context. However, after completing the pilot test, we found new variables of environmental information that had not been mentioned by prior researchers but had been included in the newspapers and ENGOS' newsletters such as cloud seeding, drought, lightning, urban greening and clogged drains, which were added to the coding sheet.

In-depth interviews with 24 interviewees from *The Star* and *Utusan Malaysia* and 11 from the World Wide Fund for Nature (WWF) and the Malaysian Nature Society (MNS) were conducted to assess their views on the types of environmental issues represented in the newspapers and ENGOS newsletters. This was cross-checked against the result of quantitative content analysis. In-depth interviews were also conducted to achieve the second aim of the study, which was to analyse the factors in the selection of environmental information by the Malaysian media and ENGOS.

The Star and *Utusan Malaysia* had the highest circulation during the period under review. From July to December 2012, *The Star* had a circulation of 288,916 copies, while *Utusan Malaysia* had a circulation of 178,211 copies per day (Audit Bureau of Circulation Malaysia, 2012).

The ENGO interviewees were selected from WWF and MNS because these ENGOS have been recognised as among the most active in Malaysia in research, education and conservation efforts (Rusli & Sheikh, 2005). All the interviewees were labelled with identification codes. The average interview lasted about 30 to 40 minutes, depending on the willingness and ability of the interviewees to discuss the topics. The in-depth interview data was subject to analysis using qualitative content analysis.

Results and discussions

The results of a quantitative content analysis of newspapers and ENGOS' newsletters showed that a total of 1143 environmental articles were found in *The Star's* newspaper and 591 environmental articles appeared in *Utusan Malaysia's* newspaper. A total of 150 environmental articles were found in WWF's newsletter and 166 environmental articles in MNS's newsletter. The quantitative content analysis showed that there were 64 environmental topics within the 2050 environmental articles collected from *The Star* and *Utusan Malaysia's* newspapers and WWF and MNS's newsletters across the investigation period from 2012 to 2014.

Table 1 shows that of the four organisations, *The Star* presented the greatest variety of environmental issues in their newspapers (63 environmental issues (98.43 percent) out of the total of 64 environmental issues), followed by *Utusan Malaysia* with 56 environmental issues (87.5 percent), MNS with 23 environmental issues (35.93 percent) in their newsletter and WWF with only 18 environmental issues (28.12 percent).

The issues of environmental management (5.86 percent), floods (6.73 percent) and wildlife (7.08 percent) were the three most published issues in *The Star* newspaper. For *Utusan Malaysia*, the issues of floods (18.27 percent), water crises (7.44 percent) and wildlife (6.09 percent) are the most frequently published. For WWF, the issues of wildlife (24.66 percent), marine protection and conservation (21.33 percent), and sustainable living (19.33 percent) were the three most frequently presented in their newsletters. For MNS, the issues of eco-tourism (16.86 percent), sustainable living (20.48 percent) and wildlife (13.25 percent) appeared the most in their newsletters. Floods were the most popular environmental issues for *The Star* and *Utusan Malaysia* while wildlife and sustainable living were the most popular environmental topics among WWF and MNS. Wildlife was recorded as the most published issue by all four organisations.

The results of the qualitative analysis revealed that the Malaysian media gave more coverage to environmental problems such as deforestation and pollution, instead of environmental efforts like environmental conservation and education. However, this is not a surprise, as some media interviewees and ENGO interviewees referred to what they saw as the Malaysian media's 'bad news is good news' culture that has created the tendency of Malaysian media to pick environmental problems over environmental efforts. EJ8 from *Utusan Malaysia* commented that:

To my knowledge, since I worked as a journalist, most of us gave attention to the negative impact on the environment. (ID EJ8)

The media in general have paid more attention to the coverage of environmental problems, as these are more dramatic compared with environmental efforts, which are often a little dry and less attention-grabbing. Indeed, journalists are sometimes stuck in the conflict between serving society with environmental information that is heavy and less interesting such as climate change and pursuing a story that is snappy and has an eye-catching headline (Gavin, Leonard-Milsom & Montgomery, 2011). In fact, the public is more attracted to dramatic information (Robinson & Levy, 1986) and the media, as profit-driven organisations, end up with more negative stories than positive ones (Faridah et al., 2011) in order to attract the readers (Leckner, 2012).

Consistent with the results of the quantitative content analysis of both the WWF and MNS's newsletters, which found wildlife to be among the top three issues in both newsletters, most of the ENGO interviewees mentioned the loss of biodiversity, including the loss of wildlife such as tapirs, tigers, elephants, rhinos and orangutans. This is because wildlife protection and conservation is part of WWF and MNS's mission. WWF, in its mission statement, clearly states that its aims are to stop natural degradation and to save the planet through conservation activities. Meanwhile, MNS indicated its target of promoting the conservation

Table 1: Types of environmental issues in Malaysia				
Topic	<i>The Star</i> (N)	<i>Utusan Malaysia</i> (N)	WWF (N)	MNS (N)
Agriculture	26	24	1	3
Air pollution	11	2	-	-
Biomass	4	2	-	-
Carbon emissions	8	1	-	-
Chemical pollution	3	1	-	-
Climate change	18	3	-	1
Clogged drains	8	2	-	-
Cloud seeding	3	1	-	-
Dams	3	5	-	1
Deforestation	23	17	-	1
Development impact	23	6	-	3
Droughts	5	-	-	-
Earthquakes	22	17	-	-
Earth hour	10	2	6	-
Eco-tourism	17	11	1	28
El Niño	6	5	-	-
Endangered plants	2	1	1	-
Energy	40	7	1	1
Environmental management	67	23	-	6
Environmental policies or laws	7	1	-	-
Equinox	1	-	-	-
Fisheries	10	-	2	-
Flash floods	15	15	-	-
Floods	77	108	-	-
Forest fires	10	5	-	-
Forest protection	11	4	8	12
Global warming	1	-	-	-
Haze	16	14	-	1
Hill development	10	-	-	-
Landslides	30	12	-	-
Land conservation	10	3	3	3
Lightning	2	1	-	-
Marine education	5	-	9	1
Marine life	23	13	6	-
Marine protection and conservation	43	14	32	10
Mining	11	2	-	-

Topic	<i>The Star</i> (N)	<i>Utusan Malaysia</i> (N)	WWF (N)	MNS (N)
National parks	9	-	1	-
Nuclear reactors	21	14	-	-
Oil spills	6	2	-	-
Open burning	6	2	-	-
Rainfall	19	7	-	-
Rear earth (Lynas)	12	11	-	-
Recycling	15	1	-	21
Snow	13	9	-	-
Soil movement	3	2	-	-
Storms	32	17	-	-
Sustainable living	65	7	29	34
Tourism	42	16	3	10
Transportation	12	8	-	-
Tsunami	2	9	-	-
Typhoons	28	13	-	-
Underwater tunnels	-	3	-	-
Urban greening	11	3	-	-
Volcanoes	8	8	-	-
Waste disposal	22	17	-	1
Waste management	27	15	-	1
Water conservation	13	6	3	2
Water crises	51	44	-	-
Water rationing	11	3	-	1
Water resources	21	10	2	-
Water pollution	23	4	-	1
Waves	3	2	-	-
Wetlands	6	-	5	2
Wildlife	81	36	37	22

of Malaysia's natural heritage. Thus, the loss of wildlife, especially flagship species like the tiger, orangutan and rhino, always catch the WWF and MNS's attention and are discussed in their newsletters. One interviewee from WWF for instance said this was because 'our mission is to maintain the Malaysian national heritage' (ID EN9).

On the other hand, a comparison of the results of the quantitative content analysis among the Malaysian newspapers and ENGOS' newsletters clearly showed that ENGOS had more representation of environmental effort issues than environmental problems. Two of the most visible environmental effort issues

in WWF's newsletters were sustainable living and marine protection and conservation, while the most frequent topics in MNS's newsletter were sustainable living and eco-tourism. Only *The Star* had one environmental effort issue (environmental management) as one of their most frequent issues, besides wildlife and floods. In fact, the top three environmental topics in *Utusan Malaysia* were environmental problems, including flood, wildlife and water crises. Importantly, although both the Malaysian media and ENGOS shared a similar aim of informing and educating society about the environment, the types of environmental issues represented by them were distinctive.

Moreover, the results of the qualitative interview also revealed that there were several factors influenced the selection of environmental issues for publication. For most of the media interviewees, news values were the most important factor used to determine whether an environmental issue was suitable for publication or not, just like other stories, such as politics and economics. It is almost impossible for newspapers to place all the stories or events that happen every day in one newspaper that has limited available space (Chang et al., 2012; Schäfer, Ivanova & Schmidt, 2014); thus news values (also known as newsworthiness or news criteria) are used by journalists or editors as a criteria or principles for deciding which stories are worthy of publication (Bednarek & Caple, 2015) and which events should be excluded (O'Neill & Harcup, 2009). Some media interviewees (EJ4, EJ5 and EJ11) confirmed that they would definitely pick up stories they considered to have high news values. News values are usually associated with media and journalism, but this study found that news values were used by the ENGOS as well when selecting which environmental issues to insert or ignore for their newsletters.

Of the three news values—timeliness, impact, and proximity—timeliness was the most discussed by the majority of the interviewees. Timeliness refers to the relevance of certain issues or events based on time: whether it has occurred recently, is still ongoing or is upcoming (Caple & Bednarek, 2015). In line with Caple and Bednarek's explanation of timeliness, some media and ENGO interviewees used words like 'current' (ID EJ2, EJ9, EJ10), 'new' (ID EJ2), 'latest' (ID EJ11, EN10) and 'recent' (ID EN3) to explain the importance of choosing timely environmental information for their publications. EJ7 cited the example of the death of pygmy elephants and people dying due to river pollution as environmental issues with high impact news value that were selected for coverage.

Usually it involves tragedy, like river pollution... After... People died...
We would be able to make it big. (ID EJ7)

On one hand, spatial proximity, generally understood as the distance of events or issues from the audience (Bendix & Liebler, 1999; Jorge, 2008), was a value used by both the Malaysian media and ENGOS in selecting the environmental

issues for publication. Proximity is often associated with local events or issues that happen near the audience (Johnstone & Mando, 2015), which make the audiences close and part of the stories. Some interviewees like EJ3 from *The Star* gave the example of how certain environmental issues like droughts were certainly selected for publication as they were common environmental problems affecting Malaysians.

You know, it is an issue they see every day when they are driving along the highway; you know, they see all the trees being cut off and, you know, stuff like pollution and droughts—it is stuff they experienced. (ID EJ3).

Despite the value of environmental information, it appears that the readers' interests can also influence the process of selecting environmental information for publication. Some interviewees revealed the need to match the readers' interest in certain environmental issues, as they are the ones who are going to read the newspapers or newsletters. EJ7 from *Utusan Malaysia*, said the media could not be self-indulgent, but must write about issues that catered to the readers' interests or else the circulation would drop and this could even lead to the risk of bankruptcy.

As a final remark, the qualitative interviews also suggest that the background of the media and ENGOS could be another factor contributing to the selection of certain environmental issues for publication. Most *Utusan Malaysia* interviewees said their news organisation focused on four national agenda items: Islam, the King, Malay and the Malaysian constitution. These, in turn, had to an extent influenced the types of environmental issues presented in their newspapers. On a similar note, WWF and MNS's interviewees also said their respective organisations' vision and mission as well as the issues they championed also influenced the type of environmental issues portrayed in their newsletters:

Of course, our mission is to stop the degradation of the planet, the natural environment and we want to build a future where humans live in harmony with nature. (ID EN1)

Conclusion

This study has shown that the Malaysian media and ENGOS had a different focus on environmental issues in their newspapers and newsletters. The Malaysian media were more interested in issues of environmental problems, while ENGOS were more focused on issues of environmental efforts. In addition, the study also found that the media and the ENGOS used timeliness, proximity and impact as the key criteria in the selection of environmental information for publication. Other relevant factors that influenced the selection of environmental information for publication, such as the background of the publishers, have

rarely been discussed by previous researchers. The study shows that the Malaysian media had made little progress in their environmental news reporting and, at the time of the investigation, was still tied to the tradition of bad news as good news. Fewer than five percent of all the environmental articles in this study received coverage on the front page.

This study was limited to the environmental information available in the printed version of Malaysian newspapers and ENGOs' newsletters. Considering the power of social media and websites in the rapid delivery of environmental information without geographical boundaries, it is suggested that future researchers analyse environmental information on the social media sites of the Malaysian media and ENGOs such as their Facebook or Twitter accounts as well as on their official websites. Jauhariatul and Jamilah (2011) for instance, found that MNS and other ENGOs like the Socio-Economic and Environmental Research Institute also preferred to communicate environmental messages associated with their organisation's mission and vision via Facebook.

Although the functions of social media, websites and traditional media are clearly different, it would be useful to compare and explain their functional differences and similarities. Further work could focus on the gap between the representations of environmental information on print, as represented by the results of this study with those on social media and websites.

References

- Audit Bureau of Circulation Malaysia (ABCM). (2012). *Circulation figures newspapers- Peninsular Malaysia, July 2012 To December 2012*. Retrieved from <http://abcm.org.my/wp-content/reports/2012/ABC-Circulation-Figures-Pen-Mal-Geog-Dist-Jul2012toDec2012.pdf>.
- Bednarek, M., & Caple, H. (2014). Why do news values matter? Towards a new methodological framework for analysing news discourse in critical discourse analysis and beyond. *Discourse and Society*, 25(2), 135–158.
- Bendix, J., & Liebler, C. (1999). Place, distance, and environmental news: Geographic variation in newspaper coverage of the spotted owl conflict. *Annals of the Association of American Geography*, 89, 658–676.
- Boykoff, M. T. (2009). We speak for the trees: Media reporting on the environment. *Annual Review of Environment and Resources*, 34, 431–457.
- Caple, H., & Bednarek, M. (2015). Rethinking news values: What a discursive approach can tell us about the construction of news discourse and news photography. *Journalism*, 17(4), 1–22.
- Chang, T. K., Southwell, B., Lee, H. M., & Hong, Y. (2012). A changing world, unchanging perspectives: American newspaper editors and enduring values in foreign news reporting. *The International Communication Gazette*, 74(4), 367–384.
- Cho, A. J. (2010). Silence of the bees: A study of scientific representation in media. Berkeley. Retrieved from nature.berkeley.edu/classes/es196/projects/2010final/ChoA_2010.pdf.
- Djerf-Pierre, M. (2012). When attention drives attention: Issue dynamics in environmental

- news reporting over five decades. *European Journal of Communication*, 27(3), 291–304.
- Elmasry, M. H. (2012). Journalism with restraint: A comparative content analysis of independent, government, and opposition newspapers in pre-revolution Egypt. *Journal of Middle East Media*, 8(1), 1–34.
- Faridah, I., Latiffah, P., Chang, P. K., Fuziah Kartini, H. B., Badrul Redzuan, A. H., & Wan Amizah, W. H. (2011). Journalists and news sources: Implications of professionalism in war reporting. *The Innovation Journal: The Public Sector Innovation Journal*, 16(3), 1–12.
- Fürsich, E. (2010). Media and the representation of others. *International Social Science Journal*, 61, 113–130.
- Gavin, N. T., Leonard-Milsom, L., & Montgomery, J. (2011). Climate change, flooding and the media in Britain. *Public Understanding of Science*, 20(3), 422–438.
- Hall, S. (1997). The work of representation. In Hall, S. *Representation: Cultural representations and signifying practices*. Thousand Oaks, CA: Sage Publications Inc.
- Hannabuss, S. (1995). The study of news. *Library Management*, 16(1), 29–35.
- Hannigan, J. (2006). *Environmental sociology* (second edition). London, New York: Routledge.
- Hansen, A. (2011). Communication, media and environment: Towards reconnecting research on the production, content and social implications of environmental communication. *The International Communication Gazette*, 73(1-2), 7–25.
- Hilton, M., Crowson, N., Mouhot, J. F., & McKay, J. (2012). *A historical guide to NGOs in Britain: charities, civil society and the voluntary sector since 1945*. Basingstoke and New York, NY: Palgrave Macmillan.
- Jauhariatul, A., & Jamilah, A. (2011). Penggunaan Facebook oleh badan bukan kerajaan alam sekitar (ENGO) dalam menyampaikan mesej alam sekitar. *Jurnal Komunikasi*, 27(2), 161–182.
- Johnson, E. W. (2008). Social movement size, organizational diversity and the making of federal law. *Social Forces*, 86(3), 1–28.
- Johnstone, B., & Mando, J. (2015). Proximity and journalistic practice in environmental discourse: Experiencing ‘job blackmail’ in the news. *Discourse and Communication*, 9(1), 81–101.
- Jorge, T. M. (2008). News values in news websites: An empirical study of the criteria of newsworthiness in Argentina and Brazil. *Brazilian Journalism Research*, 4(1), 53–71.
- Kamaliah, S., Adnan, H., Ramli, M., Rohani, H., Mohamad, M. Y., Wong, C. J., & Mariani, A. A. (2012). Handling of environmental issues by non-governmental organisations: An analysis of strategies and activities. In A. H. Hamidah, A. A. Azman, A. Jamilah, A., & N. H. Nik Norma., *Communication and environment sustainability and risks*. Penang: Penerbit Universiti Sains Malaysia.
- Kostarella, I., Theodosiadou, S., & Tsantopoulos, G. (2013). The coverage of environmental issues by the Greek media from the editors’ perspective. Paper presented at GV-Global Virtual Conference.
- Kuha, M. (2009). Uncertainty about causes and effects of global warming in U.S. news coverage before and after Bali. *Language and Ecology*, 2(4), 1–14.
- Leckner, S. (2012). Presentation factors affecting reading behaviour in readers of newspaper media: An eye-tracking perspective. *Visual Communication*, 11(2), 163–184.
- Lyons, A. C. (2000). Examining media representations: Benefits for health psychology. *Journal of Health Psychology*, 5(3), 349–358.
- Marlina, J., & Shakila, A. M. (2016). An ideological construction of the indigenous community: The Orang Asli as portrayed in *The Star* newspaper. *Kemanusiaan*,

23(2), 39–62.

- Mariah, M., Raihanah, K., & Md. Salleh, H. (2004). Isu alam sekitar di dalam akhbar arus perdana di Malaysia. *Jurnal Komunikasi*, 20, 17–37.
- Massey, B., & Ramanathan, S. (2001). Sustainable news: A profile of journalists who tell the story of Asia's environment. *Asia Pacific Media Educator*, 10, 112–126.
- Nik Norma, N. H. (2007). *The representation of environmental news: a comparative study of the Malaysian and New Zealand press*. Doctoral dissertation, University of Canterbury, New Zealand.
- O'Neill, D., & Harcup, T. (2009). News values and selectivity. In Wahl-Jorgensen, K., and Hanitzsch, T. *The handbook of journalism studies*. New York: Routledge.
- Peters, H. P., & Heinrichs, H. (2008). Legitimizing climate policy: The 'risk construct' of global climate change in the German mass media. *IJSC*, 3, 14–36.
- Robinson, J. P., & Levy, Mark R. (1986). Interpersonal communication and news comprehension. *Public Opinion Quarterly*, 50, 160–175.
- Rohani, H., Mariani, A. M., Mohamad, M. Y., Kamaliah, S., Ramli, M., Adnan, H., & Wong, C. J. (2010). The environmental non-governmental organizations (ENGOs) in Malaysia Northern Region: Their roles in protecting water resources. *International NGO Journal*, 5(7), 167–170.
- Rusli, M., & Sheikh, A. B. A. (2005). Why Join an Environmental NGO? A case study of the Malaysian Nature Society. *Pertanika J. Soc. Sci. and Hum*, 13(1), 39–46.
- Schäfer, M. S., Ivanova, A., & Schmidt, A. (2014). What drives media attention for climate change? Explaining issue attention in Australian, German and Indian print media from 1996 to 2010. *The International Communication Gazette*, 76(2), 152–176.
- Shaiko, R. G. (1993). Greenpeace U.S.A.: Something old, new, borrowed. *The Annals of the American Academy of Political and Social Science*, 528, 88–100.
- Silveira, S. (2001). *The American environmental movement: Surviving through diversity*, 28 *B.C. Environmental Affairs Law Review*. 497. Retrieved from <http://lawdigitalcommons.bc.edu/ealr/vol28/iss2/7>.
- Siti Suriani, O., Liana, M. N., & Lee, K. T. (2013). Pemilihan berita dari perspektif wartawan media cetak di Malaysia. *Malaysian Journal of Communication*, 29(2), 51–68.
- Sjøvaag, H., & Stavelin, E. (2012). Web media and the quantitative content analysis: Methodological challenges in measuring online news content. *Convergence: The International Journal of Research into New Media Technologies*, 18(2), 215–229.
- Smeltzer, S. (2008). Biotechnology, the environment and alternative media in Malaysia. *Canadian Journal of Communication*, 33(8), 5–20.
- Taiwo, R., & Igwebuik, E. (2015). Representation of Bakassi Peninsula conflict in Nigeria and Cameroon print media: A critical discourse approach. *Linguistik Online*, 72(3), 127–143.
- Teravainen, T. (2014). Representations of energy policy and technology in British and Finnish newspaper media: A comparative perspective. *Public Understanding of Science*, 23(3), 299–315.
- Young, N., & Dugas, E. (2011). Representations of climate change in Canadian national print media: The canalization of global warming. *Canadian Review of Sociology/Revue Canadienne de Sociologie*, 48(1), 1–22.

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