

7 Representations of the natural phenomenon

Drawing upon tools for critical discourse analysis provided by Meyer (2001), this chapter analyses referential strategies and strategies of nomination employed by the newspapers to represent the natural phenomenon triggering a natural catastrophe. The main interest lies in the way the tsunami, the hurricane and the earthquake are categorized. The analysis examines strategies of predication in order to reveal the traits, characteristics and qualities attributed to the natural phenomena.

The focus is placed on an investigation of both lexical and grammatical devices. The first part of the chapter reveals that the newspapers largely employ a metaphorical portrayal of the natural phenomenon. The second part adopts van Leeuwen's (2008) categorical system for an investigation of social actors in discourse to examine a discursive categorization of the natural phenomenon. Concerning grammatical means, the analysis focuses on the transitivity pattern of sentences, examining the voice of sentences and paying attention to what type of processes tend to be ascribed to the natural phenomenon and what participant roles are occupied by it.

7.1 Metaphorical representations of the natural phenomenon

All three newspapers heavily employ metaphorical expressions with reference to the natural phenomenon, with the only exception being the newspaper discourse on the Haiti earthquake (commented on in subchapter 7.1.8). Following the claim of the cognitive theory of metaphor that metaphorical expressions in discourse are realizations of underlying conceptual metaphor themes, the aim of this subchapter is to "look behind explicit utterances to find conceptual structures that the users themselves may not be aware of" (Musolff 2004, 3). In other words, through the analysis of concrete metaphorical linguistic expressions, the goal is to track the metaphor concepts in discourse, with the help of which the newspapers make sense of the natural phenomena.

The empirical results of the analysis reveal that the metaphoric expressions referring to the natural phenomena stem from three main underlying themes: the representation of the natural phenomenon as an ANIMATE BEING, the depiction of the natural phenomenon as a MONSTER, and the portrayal of the natural phenomenon in terms of WAR. These themes are systematically realized by both

lexical and syntactic devices, and, importantly, occur over the whole spectrum of the fourteen-day time period of reporting under study.

7.1.1 *The natural phenomenon as an ANIMATE BEING*

A variety of lexical and syntactic means is employed to portray the natural phenomenon as an ANIMATE BEING. First of all, the natural phenomenon is represented as having a life of its own. The formation of the natural phenomenon is described as if an animal came into existence, as shown in Example 2, where an analogy with the production of eggs by aquatic animals is constructed, and in Example 3, where the expressions *be born* and *embryo* portray the hurricane as an organism.

Example 2: *Huge Quake Spawns Tremors and Tsunamis in Southeast Asia* (headline, *New York Times*, 26 December 2004)

Example 3: *Tropical Depression 12 was born, giving few hints that it was an embryonic monster that would grow into Hurricane Katrina*. (*New York Times*, 29 August 2005)

The independent existence of the natural phenomenon is also conveyed by the syntactic structure of a number of sentences adopting a middle ergative option (Halliday 1985). The term ergativity is used to distinguish between sentence structures that represent an external process and those resulting from an internal process. Halliday illustrates the difference in the following example: *Mary sailed the boat/the boat sailed*. In the first case, there is a participant that functions as an external cause of the process of *sailing*, which is referred to as ‘the agent,’ while in the second case, the process is represented as being brought about from within, with no separate agent. Ergativity thus concerns a representation of the catalyst of the process. A number of sentences in the newspapers represent processes ascribed to the natural phenomenon as self-engendering, i.e., as being instigated by the natural phenomenon itself, with no external agent, as can be seen in Examples 4 and 5. This results in the portrayal of the natural phenomenon as being capable of volition and thus having the ability to initiate change.

Example 4: *The whole sea just **lifted up**. It **swelled up**. There was no sound. The sea just **poured** on to the island*. (*Guardian*, 27 December 2004)

Example 5: *It [Hurricane Katrina] **churned** directly over an oceanic feature [...]* (*New York Times*, 29 August 2005)

Another animate characteristic that is discursively ascribed to the natural phenomenon is an animal body. Referring to the actions of the natural phenomenon, the

articles often use verbs that denote a performance requiring animal features: the tsunami *swallows* people (which evokes an image of the tsunami passing people through its mouth and throat into the stomach) and *sucks* dead bodies (which portrays the tsunami as drawing bodies into the mouth by the movements of a tongue and lips), and the hurricane *pummels* (which creates an image of the hurricane having fists) and *sucks up* cool water. Apart from the center of Hurricane Katrina being referred to as an *eye*, the hurricane is portrayed as having teeth (Example 6).

Example 6: *The hurricane [...] continued to putter along into adjoining states, though its **teeth** were gone.* (*New York Times*, 31 August 2005)

The natural phenomenon also shares with animate beings the sound that it makes: commonly, the newspapers refer to the natural phenomenon as *roaring* and *howling*, which are sounds made by animals when in rage or distress. Furthermore, emotions are ascribed to the natural phenomena. Apart from the sounds *roar* and *howl* implying that the natural phenomenon is in a strong emotional state, there are a number of explicit references to negative feelings of the natural phenomena in the articles as shown in Examples 7, 8, 9 and 10. The newspapers create a myth of the natural phenomenon as an extremely angry creature. The reason for such an emotional state is left unspecified, although the employment of the word *wrath* implies that the motive of the actions of nature is one of vengeance and punishment. The discourse thus draws upon personification of the natural phenomenon, i.e., a depiction of a nonhuman entity in terms of human goals, actions and characteristics (Lakoff and Johnson 1980, 33), which is not surprising given that the portrayal of the events is provided from a human perspective and due to the Western belief in the unique status of man (cf., Pavelka 1982).

Example 7: *The waterline was dipping off to the sides and rising **furiously** in the middle.* (*New York Times*, 31 December 2004)

Example 8: *“I want to send pictures back home to the United States so that my family and friends can see **the wrath** of Mother Nature,” he said.* (*Globe and Mail*, 4 January 2005)

Example 9: *This hurricane killed dozens and cut a swath of **fury** across the U.S. South.* (*Globe and Mail*, 30 August 2005)

Example 10: *A day after New Orleans thought it had narrowly escaped the worst of Hurricane Katrina’s **wrath**, water broke through two levees on Tuesday.* (*New York Times*, 31 August 2005)

The punishment motive of destruction is explicitly stated in a number of articles (see Examples 11 and 12), with Example 12 further personalizing nature by portraying it as *our mother*. The view of nature as a mother, capable of inflicting pun-

ishment on people for their wrongdoings, is a common mythological motif (Larue 1975). Its function is to elucidate the events and provide an explanation of the disaster, even if a simplistic one, so that the human desire to make sense of the world is fulfilled. Yet, a search for the real causes of the catastrophe is suppressed.

Example 11: *The storm was potent enough to rank as one of the most **punishing** hurricanes ever to hit the United States.* (*New York Times*, 30 August 2005)

Example 12: *Our mother has **punished** us.* (eyewitness account in *The New York Times*, 5 January 2005)

An idiosyncratic animate feature attributed to hurricanes is a name. Such a characteristic provides the hurricane with a unique identity and portrays it as though it is a being of sorts. Many times, the newspapers refer to the natural phenomenon just by its name, omitting the word ‘hurricane,’ e.g., *Katrina’s fearsome lash* or *Camille was a girl compared to this hurricane*. Apart from referring to the hurricane by a human name, the second example uses another word including the semantic feature ‘human’ – *a girl*.

The origins of the naming practice of hurricanes go back to World War II when the United States armed forces named storms in the Pacific after their girlfriends and wives. This custom was partly inspired by the novel *Storm* by George R. Stewart, published in 1941, in which a junior meteorologist invents the naming practice. The United States Weather Bureau started assigning girls’ names to Atlantic hurricanes in an alphabetical order in 1953, with a change to the system introduced in 1979 when girls’ and boys’ names started to be adopted alternatively for successive hurricanes, still in an alphabetical sequence. A storm’s name is retired once the storm has a great destructive impact (Simpson and Riehl 1981; Fitzpatrick 2006).

Apart from lexical means, the metaphor theme of ANIMATION is also realized syntactically, mainly in a transitivity pattern of sentences referring to the natural phenomenon. The natural phenomenon occurs as a participant in sentences mainly during the portrayal of the immediate aftermath of the disaster and in eyewitness accounts of the event. The majority of these sentences are in an active voice of the following type:

The natural phenomenon	verbal group	(nominal group)	(adverbial group or prepositional phrase).
Actor	Material process	Patient	Circumstances

The natural phenomenon occupies the role of an actor, to which material processes are ascribed. The function of the patient is performed by people, objects and places, as illustrated in Examples 13, 14, 15 and 16. This recurring transitivity

pattern ascribes the responsibility for the destructive actions to the natural phenomenon and suggests that it acts with force and volition. It portrays the natural phenomenon as being in control of the actions, which helps to establish it as animate.

Example 13: *The waves engulfed packed coastal resorts in Thailand, swamped fishing villages along the Indian coast, and smashed coastal resorts in Sri Lanka.* (Guardian, 27 December 2004)

Example 14: *Winds of more than 100mph punched holes in the metal roof of the Superdome Arena.* (Guardian, 30 August 2005)

Example 15: *Hurricane Katrina pounded the Gulf Coast with devastating force at daybreak on Monday.* (New York Times, 30 August 2005)

Example 16: *The tsunami roared over embankments in Sendai city, washing cars, houses and farm equipment inland before reversing directions and carrying them out to sea.* (New York Times, 11 March 2011)

The main function of the metaphorical theme of an ANIMATE BEING is to help people make sense of the catastrophe. By mapping features from the source domain of an animate being to the target domain of the natural phenomenon, it enables readers to understand a complex and unfamiliar aspect of reality in terms of a more concrete and familiar phenomenon. As Santa Ana (1999, 195) points out, “metaphors are conceptual instruments that embody otherwise amorphous or remote concepts in ways that the public can readily understand.” Instead of an abstract picture of a mass of water or an extremely strong wind, the metaphor employed in the newspapers evokes a concrete and vivid image of an entity – an animate being.

One of the implications of the metaphor theme of an ANIMATE BEING is an ascription of extraordinary power to nature. As a result of Enlightenment ideology and a long tradition in Western philosophy and cosmology concerning the relationship between humans and nature, mankind is viewed as dominating nature (Hawkes 2003, 136; Goatly 2007, 148). Humans are considered to be at the pinnacle of creation, with animals occupying the position below them and inanimate objects standing at the bottom of the hierarchy (Goatly 2007, 148). The metaphorical portrayal moves the inanimate natural phenomena up the imaginary ladder, providing them with additional power.

Significantly, the employment of the metaphorical theme of animation mystifies the real causes of the catastrophe. It portrays the disaster as stemming from an extreme anger of nature and the will of the natural phenomenon to punish people. This obscures the fact that a natural disaster is a result not only of nature and its doings but also human actions and social conditions.

7.1.2 *The natural phenomenon as a MONSTER*

The second major conceptual metaphor theme that is systematically employed by the three newspapers is a representation of the natural phenomenon as a MONSTER. The newspaper discourse portrays the natural phenomenon as a large, powerful, frightening, violent and cruel creature.

A number of references explicitly portraying the natural phenomenon as a monster occur in the articles, including the employment of a simile in Example 17. When depicting the magnitude of the natural phenomenon, the newspapers occasionally adopt the word *monster*, as in Examples 18 and 19. [Editor's note: examples 18 and 19 seem to be stretching it a bit, because monster in this case simply means huge.]

Example 17: *The deadly wave was unimaginably big, stretching to the horizons, and it struck suddenly, looming up with a roar like a monster from the deep.* (New York Times, 27 December 2004)

Example 18: *Now they understood why such a monster tsunami had been unleashed.* (New York Times, 31 December 2004)

Example 19: *Officials in Louisiana, Mississippi and Alabama said it was too early to calculate the number of lives lost in the monster storm.* (Globe and Mail, 31 August 2005)

Apart from explicit reference, the metaphorical theme is materialized mainly by the use of emotionally-colored lexis and hyperbole, i.e., “a figure of amplification or attenuation by which the speaker signals emotional involvement through an exaggerated formulation” (Norrick 2004, 1730). Referring to the size of the natural phenomenon, the articles are replete with hyperbolic adjectives, such as *massive*, *colossal*, *huge*, *giant*, *mammoth* and *gargantuan*. The abnormal physical power of the natural phenomenon is depicted by the verbs denoting material processes demanding a great force, such as *batter*, *smash*, *lash*, *pound* and *ravage* (implying the violence of nature as well).

Another means to convey an extraordinary power of the natural phenomenon is by connotations of some of the verbs selected to denote material processes performed by the natural phenomenon, such as *pin*, *peel* and *pick up*. While the objects of such actions when performed by people are commonly small things, the objects of the same actions when performed by the natural phenomenon are big and heavy, as illustrated in Examples 20, 21 and 22.

Example 20: *The rising flow pushed them upward and pinned them against the ceiling and the top of the door frame.* (Globe and Mail, 27 December 2004)

Example 21: *Winds of more than 100mph punched holes in the metal roof of the Superdome Arena, **peeling away aluminium sheets.*** (*Guardian*, 30 August 2005)

Example 22: *A wall of black water crashed through the city of Sendai, a port of one million, **picking up people, vehicles and multi-storey homes.*** (*Globe and Mail*, 12 March 2011)

These examples initiate a comparison of paper (commonly pinned) with people in Example 20, a potato/an orange skin or wallpaper (commonly peeled) with aluminium sheets in Example 21 and strawberries or mushrooms (commonly picked) with people, vehicles and homes in Example 22. Such a comparison leads to the conclusion that something that is able to pin people against the ceiling, peel away aluminium sheets and pick up people, vehicles and homes must be extraordinarily powerful. The contrast and the resulting constitution of an analogy between the two objects are explicitly expressed by similes in Examples 23, 24 and 25.

Example 23: *Concrete pillars are **snapped like twigs.** Cars and buses have been **tossed about like toys.*** (*Globe and Mail*, 30 December 2004)

Example 24: *Modest bungalows and working-class apartment buildings were thrashed, **torn open like cellophane bags.*** (*New York Times*, 31 August 2005)

Example 25: *A railway line has been ripped from the ground and **twisted vertically like a garden fence.*** (*Guardian*, 13 March 2011)

Such representations provide the natural phenomenon with immense power, which people lack, disrupting thus momentarily the Western Enlightenment ideology of domination of people over nature.

The frightening aspect of the natural phenomenon is revealed in eyewitness accounts of the events. They describe the noise that the natural phenomenon makes by the hyperbolic adjective *horrendous*, use repetition to intensify fear in the representation of their experience as *very, very frightening*, and several times portray the events as *something out of a horror film*. A color that is frequently ascribed to the natural phenomenon, mainly to the tsunamis both in the Indian Ocean and Japan, is black, as shown in Examples 26, 27 and 28. This color carries negative connotations and tends to be associated with fear. Hawkins (2001, 41) explains that *black*, as opposed to *white*, takes on a negative value because it is conceptually associated with the experience of death. The roots for the association are in our physical experience of sunlight and darkness: sunlight is a necessary element for life and if there is not enough of it, life forms tend to die. Therefore, “light and the corresponding color experience of WHITE take on the positive value of life, while darkness and the corresponding color of BLACK take on the negative value of death” (Hawkins 2001, 41). The association between black color and death is reinforced in the phrase ‘black death,’ referring to bubonic and pneumonic

plagues in the fourteenth-century Europe, which killed millions of people (Allan 2009, 627). Furthermore, as Allan (2009, 628) notes, the negative connotations of blackness can also be traced to the elites' negative attitudes towards field workers, whose skin was darkened because of the exposure to the sun, an attitude that prevailed in the West until the second half of the twentieth century. In Example 26, the frightening aspect of the natural phenomenon is intensified by the use of a vague expression, *thing*, to refer to the tsunami, implying that there does not exist a word to name such a phenomenon and thus presenting it as something mysterious and unknown. Similarly, the fear is further heightened by the modifying adjective *menacing* in Example 27, which conveys the picture of the ocean as hostile and threatening, and by a comparison of the tsunami to a specific monster – *Godzilla* in Example 28.

Example 26: *There was **this black thing** above us, high in the air.* (eyewitness account in *Globe and Mail*, 1 January 2005)

Example 27: [...] *the ocean's abruptly changing colors from green to a dark, **menacing black*** (*New York Times*, 31 December 2004)

Example 28: *It was **black, black** water. It was as if Godzilla had come and was trying to eat the people.* (eyewitness account in *The Globe and Mail*, 16 March 2011)

Another characteristic attributed to the natural phenomenon in newspaper discourse is violence and cruelty. The natural phenomenon is occasionally modified by the word 'violent,' as in *what the sea so **violently** ripped away it has now begun to return* and *the gridlock that followed the **violent** shaking*. Some articles explicitly refer to the natural phenomenon as *merciless*, portraying it as having no sympathy with people. Cruelty is also implied in numerous representations of the natural phenomenon as striking suddenly, giving no warning to people to prepare for the disaster: *then, **without warning**, the sea turned ferocious; it sent tsunamis across the Indian Ocean **without warning** on Boxing Day; **out of the blue**, a deadly wall of water*. Apart from suggesting the heartlessness of the Indian Ocean tsunami, such depictions conceal the fact that it was the government, officials and the media that did not warn the people, mainly because of the lack of a warning system in the Indian Ocean and the failure of technological communication (see subchapter 5.2). Rather than allowing people to accept the responsibility, the representations divert the blame onto nature. This is also the case of the representation of Hurricane Katrina, when, in spite of the fact that the hurricane was predicted to make landfall in New Orleans, the newspapers employ a motif of unexpectedness, which is revealed in the headline *With Few Warning Signs, an Unpredictable Behemoth Grew*. The discursive strategy to put blame on the natural phenomenon for not providing a warning to people functions to dramatize the events and heighten the cruelty of nature.

To summarize, the discursive devices employed by the newspapers depict the natural phenomenon as a giant, extraordinarily powerful, violent, frightening and cruel creature. The conceptual metaphor theme underlying such a representation is ‘the natural phenomenon as a MONSTER.’ Such a metaphor draws upon themes from mythology and has two main effects: it creates respect towards nature but also demonizes it.

7.1.3 *The natural phenomenon as a WARRIOR*

The third major metaphoric theme by which the newspapers conceptualize the natural catastrophe is representation of the natural phenomenon as a WARRIOR. The articles compare the disaster to a war (Example 29), often employing a simile (Examples 30 and 31). The function of such a representation is to compare the natural phenomenon to something that people are more familiar with, thus enabling easier comprehension of the event.

Example 29: *Battered Regions **Resemble War Zone*** (headline in *Globe and Mail*, 30 December 2004)

Example 30: *Almost every building has been leveled or gutted, **as if a bomb had exploded.*** (*Globe and Mail*, 30 December 2004)

Example 31: *It brought back **images of the war**, which I lived through as a boy. It looked like after **a heavy bombardment.*** (eyewitness account in *The Guardian*, 31 December 2004)

Apart from drawing upon comparisons, the newspapers also employ a categorization of the natural phenomenon as a warrior. In contrast to comparison, which points out resemblances between two phenomena, categorization implies that the two phenomena are not just similar but rather belong to the same category and thus share relevant features (Cacciari 1998, 135). One such feature that the natural phenomenon is constructed to share with a warrior is that it attacks people, as in *the onslaught from Katrina or the water separated, then it attacked*. The natural phenomenon is depicted as acting with volition, aiming to physically set upon people and choosing targets to attack, as shown in Examples 32, 33 and 34.

Example 32: *“We all immediately turned and ran towards the main road with **the water following us.**”* (eyewitness account in *The Guardian*, 27 December 2004)

Example 33: *“It took several hours in some cases on Sunday for the waves to build and **reach their targets.**”* (eyewitness account in *The New York Times*, 27 December 2004)

Example 34: *The hurricane **targeted** the heart of U.S. oil.* (*Globe and Mail*, 29 August 2005)

Instead of revealing that the waves move because of geophysical forces and the wind due to differences in atmospheric pressure, the newspapers portray the natural phenomena as having a desired goal, a target – to hurt and kill people and cause damage to their property. The natural phenomena are represented as hostile and aggressive, implying that they constitute a people’s enemy, which is explicitly stated in *the sea suddenly turned **enemy*** (*New York Times*, 27 December 2004).

Overall, the WAR metaphorical theme creates animosity against nature. It draws a division between people and nature by portraying the natural phenomenon as a people’s foe, thus reinforcing the Western dichotomy.

7.1.4 Other metaphorical themes

Apart from the three major metaphorical themes, the newspapers tend to intertextually draw upon a biblical motif. The landscape is depicted as *apocalyptic*, an eyewitness reveals that *the speed with which it all happened seemed **like a scene from the Bible*** (*Globe and Mail*, 27 December 2004) and *The Guardian* states: *Hurricane Katrina was billed as **a biblical storm** as it roared towards New Orleans from the Gulf of Mexico, and it prompted **an exodus of biblical proportions*** (30 August 2005). The biblical representation intensifies the magnitude of the disaster, portrays it as extraordinary, dramatizes it and implies that God was the instigator of the events.

Another metaphorical portrayal that is occasionally employed in the newspaper discourse is a representation of the natural phenomenon as a CRIMINAL. The articles depict the tsunami as a thief that *stole tens of thousands of lives* and identify the natural phenomenon as a ‘murderer,’ as in *the murderous surge* and *the killer wave*. Such a conceptualization portrays the natural phenomenon as a wrong-doer, ascribing negative characteristics to it.

In general, the newspaper discourse is abundant in the employment of similes to represent the natural phenomenon and the impact of the disaster: *walls of water running down skyscrapers like waterfalls; a noise like a ship’s engine; it came on Mississippi like a ton of bricks; it sounded like a jet plane; I went through like a rocket, a torpedo; only a few windowless buildings remain upright in the town centre, jutting up like tombstones*. This shows that people find the natural disaster overwhelming and hard to grasp, and therefore resort to a comparison to something that is more familiar.

7.1.5 *Origins of the metaphors*

The origins of the metaphorical representations of the natural phenomenon as an ANIMATE BEING and a MONSTER can be traced back to the mythology of Western culture. In ancient and aboriginal societies, myths portrayed nature, including the sea and wind, as animate (Larue 1975; Taylor 1994). Natural phenomena were bestowed with life and energy; they were depicted as primal beings that are granted with volition and mind (Taylor 1994, 9). The earth was represented as a Mother, which can be either beneficent or hostile, evil and punishing, with the world being full of demonic powers and forces that can take people's lives and bring destruction (Larue 1975; Taylor 1994).

The metaphorical portrayal of the tsunami has roots in one of the oldest stories in the world about a kingdom which is ravaged by a sea monster (Frye and Macpherson 2004, 84). The monster asks for a human victim for dinner every day, killing many people over time. The story ends with a human finally gaining domination over nature when a young hero kills the monster and saves the kingdom.

Concerning the hurricane, the word itself originally came from Native Americans, having the form "aracan", "huiravucan", "urican" and "huracan" (Beemer 2006, 323), with the original meaning of the word being "evil spirit and big wind" (Fitzpatrick 2006, 1). The metaphors of an ANIMATE BEING and a MONSTER are involved in the portrayal of hurricanes in Native American myths, according to which hurricanes were caused by a bird of a monumental size and power, called Thunderbird (Sheehan 1994). When the bird blinked, lightning appeared, and when it flapped its wings, thunder sounded.

The main function of the ancient mythology was, by introducing a human element into a world full of uncertainties and puzzles, to provide an explanation and make the phenomena intelligible to people (Grimal 1965). As Grimal (1965, 9) points out, myth is "an attempt to escape from the powerlessness that is our fate." In other words, myths gave people an illusion of being in control of the universe.

The analysis of the newspaper discourse on the natural catastrophes reveals that even in a modern era of scientific and technological progress, people adopt the same explanation of the unknown as thousands of years ago. The images of the myths employed in today's representation of natural disasters reveal the deepest fears of human beings (cf., Campbell 1986, 27). As Cassier (1946, 280) points out:

In all critical moments of man's social life, the rational forces that resist the rise of old mythical conceptions are no longer sure of themselves. In these moments the time for myth has come again. [...] [Myth] is always there, lurking in the dark and waiting for its hour and opportunity. This hour comes as soon as the other binding forces of man's social life, for one reason or another, lose their strength and are no longer able to combat the demonic mythical powers.

Natural disasters are an example of a critical moment in social life when people get overwhelmed by events and resort to mythical thinking.

As for the reasons for the employment of the conceptual domain of WARRIOR to be mapped to the domain of the natural phenomenon, a plausible answer is that it stands for a concept that people worldwide are more familiar with and understand more easily than natural catastrophes. As Lakoff and Johnson (1980, 61) point out, “fighting is found everywhere in the animal kingdom and nowhere so much as among human animals.” As a result, WAR often functions in English as a source domain to conceptualize aspects of our experience that involve danger and difficulties (Semino 2008). Many such metaphors were possibly created when wars were more common than now and people had direct experiences with them (cf., Dobrovolskij and Piirainen 2005, 140).

7.1.6 *Functions of the metaphorical themes*

All three newspapers in their articles on the studied natural disasters (except for the Haiti earthquake, which is discussed in the next subchapter), adopt the same conceptual metaphors to portray the natural phenomenon; moreover, they employ the same discursive devices to materialize the metaphors. As the metaphorical expressions occur in the articles over the fourteen-day period in both the representations of the events provided by journalists and in eyewitnesses' accounts, and because of their long tradition, they seem to be fully ingrained in our conceptual system.

The three major metaphorical themes build upon each other to provide a coherent world view of the natural phenomenon. They portray it as a large, angry, powerful, violent and cruel creature that chooses people and man-made objects as targets to attack. Such a metaphorical depiction serves a number of functions.

One of the primary functions of the metaphorical representation is cognitive. By mapping the structure of people's experiences from a concrete and more familiar conceptual domain to the unknown concept of the natural phenomenon, the metaphors make the natural phenomenon more comprehensible, intelligible and tangible for readers. As Radman (1997, 167) points out, metaphor “represents a cognitive shift from initial puzzlement to an articulated pattern.” This fulfills the basic human need to make sense of events in the world, which provides them with an illusion of being able to influence the world (Grimal 1965; Larue 1975). By categorizing the natural phenomenon, the metaphors bring order to the universe, without which people feel frustrated.

Another function that the metaphors fulfill is an evaluation of the natural phenomenon, since it is especially the connotations held by the source conceptual domain of the metaphor and the associations people have built around it that

are transferred to the target conceptual domain. As pointed out by Lakoff and Johnson (1980, 10), metaphor focuses only on certain aspects of the concept while it hides other aspects that are inconsistent with that metaphor. In the case of the portrayal of the natural phenomenon, the metaphors highlight mainly its negative aspects by adopting a mythical theme of the personification of evil and transforming the natural phenomenon into a demon. Any positive contributions of the natural phenomenon are hidden. For instance, in the case of the hurricane, the fact that hurricanes play an important role in the regional ecology of coastal areas by influencing water resources, agriculture, and some aspects of the bioecological chain (Simpson and Riehl 1981) is made invisible. Another benefit of the hurricane – “maintaining the orderliness of circulations in lower latitudes, serving as a kind of escape valve for the transport of accumulated heat and momentum from the warm tropics to the colder middle and higher latitudes” (Simpson and Riehl 1981, 17) – is omitted as well.

The negative evaluations of the natural phenomenon are materialized by the employment of emotionally-colored and hyperbolic lexis, and are therefore highly charged. The force of the evaluations is mostly amplified by two means (Martin and Rose 2007): the use of intensifiers, as in *an absolutely massive wave* and *it was very, very frightening*, and the employment of adjectives involving high degrees of intensity, for instance the tsunami is not just angry but *furious*, it is not just big, but *colossal*, and the noise that it makes is not just frightening, but *horrendous*.

Since the metaphors carry over connotations and associations from a source conceptual domain to a target one, they call forth emotion rather than reason. It might thus be expected that metaphorical expressions are used in the newspaper discourse mainly in the immediate aftermath of the catastrophe, which seems to be the most emotionally charged; yet, the analysis reveals that metaphors are employed throughout the fourteen-day period, which can be explained by their firm position in people’s conceptual system. The demonization of the natural phenomenon evokes feelings of respect towards nature, humbleness, but also fear. More specifically, the three metaphorical themes transfer the anxiety resulting from something unknown and ungraspable to the fear of something concrete – a constructed villain, a cruel monster. The metaphorical portrayal thus leads to a simplification of the complex issue of the natural catastrophe. As Radford (2003, 313) reveals, extreme emotions “blind people to important shades of gray in situations and problem-solving discussions.” The direct appeal to people’s emotions by the metaphors bypasses rational reasoning, which makes metaphors an important persuasive device (Conboy 2007, 40). Without rational questioning, readers automatically accept the constructed picture of the natural phenomenon provided by the metaphors. One of the benefits of the evocation of strong emotions in the portrayal of natural catastrophes is that it helps to encourage readers towards humanitarian action, such as financial aid and volunteer work in the areas affected by the disaster.

Other functions of the metaphors, connected with the arousal of emotions, are the dramatization and sensationalization of the event, a provision of an element of entertainment, and a contribution to the vividness of the representation. The metaphors can therefore be considered as discursive devices enhancing the newsworthiness of the articles.

Furthermore, metaphors work as an effective ideological weapon. As Kress (1985, 70) points out, the “metaphor is a potent factor in ideological contention, a means to bring an area into one rather than another ideological domain.” In spite of the fact that a tsunami, a hurricane and an earthquake are normal naturally-occurring phenomena, the three major metaphorical themes provide a conceptual framework that portrays them as abnormal, angry, monstrous creatures, the aim of which is to attack and harm people. Such a portrayal places the blame for the damage and destruction one-sidedly on the natural phenomenon, hiding the social, political and economic factors that contributed to the catastrophe. The natural disaster is wrongly depicted as something uncontrollable that could not have been avoided. As a result, the government, officials and the society in general are left blameless for the event.

As the major metaphorical themes do not provide alternative viewpoints but rather all draw upon the mythology of the demonization of the natural phenomenon, the constructed picture of the events becomes naturalized and viewed as commonsensical. The metaphors call forth unconscious associations and emotions, which often remain unquestioned. Their effectiveness stems from the fact that the portrayal that they provide tends to be taken for granted; as Fairclough (1989, 85) notes, “ideology is most effective when its workings are least visible.”

In their effect, the metaphors draw a sharp boundary between people and nature. Instead of pointing out that nature cannot be viewed as isolated from society, and socio-economic processes and structures cannot be divorced from a natural world, the metaphorical themes portray nature as the people’s enemy.

7.1.7 *Absence of a metaphorical representation of the Haiti earthquake*

The examination of the three newspapers reveals that no metaphorical conceptualization is employed with reference to the Haiti earthquake. In sharp contrast to the discourse on the Indian Ocean tsunami, Hurricane Katrina and the Tōhoku earthquake and tsunami, none of the three metaphor themes of an ANIMATE BEING, a MONSTER or a WARRIOR is materialized in the discourse on the Haiti earthquake. The natural phenomenon is not ascribed animate features, such as parts of a human body, animal sounds or emotions. Nor do the articles include a punishment motive. Although the earthquake is portrayed as large and powerful, e.g., *two days after the huge earthquake struck; the largest [quake] to hit Haiti in more*

than 200 years; the massive earthquake in Haiti; one of the most powerful earthquakes to ever hit the region, reference to cruelty or monstrosity is absent in the articles. The discourse lacks the portrayal of the earthquake as attacking people and acting with an aim to hurt them and cause damage.

Similarly to the other disasters, the newspaper discourse depicts the natural phenomenon as having a great destructive force and its own energy, and thus acting with no external agent. Such a portrayal is conveyed through a transitivity pattern of sentences where the natural phenomenon occupies the role of agent of material processes: *A powerful earthquake hit Haiti, toppling buildings in the capital Port-au-Prince, burying residents in rubble and sparking tsunami alerts in what is feared to be a major catastrophe* (Guardian, 13 January 2010). The destructive force of the earthquake is revealed in a commonly-employed characterization of the natural phenomenon as *devastating* and in predicates modifying the natural phenomenon: the earthquake *hits, strikes* and *ravages*. Yet, contrary to the other natural disasters, the newspaper discourse does not demonize the Haiti earthquake or personify it as evil.

One of the possible explanations for the absence of metaphors in the representation of the Haiti earthquake could be that only certain types of natural disasters, such as tsunamis and hurricanes, are conceptualized metaphorically. Yet, this explanation is contradicted by a presence of a metaphorical depiction of earthquakes in ancient mythology. Nur (2008, 73) points out that “the belief that one or more supernatural beings were responsible for natural cataclysms such as earthquakes, floods, volcanic eruptions, and hurricanes was intrinsic to every known society.” In Greek mythology, earthquakes are portrayed as being caused by Poseidon, who takes the form of a large bull that bellows and paws the ground (Harris and Platzner 2004). Similarly, in North American mythology, earthquakes are believed to be caused by the earth being shaken by anthropomorphic beings (McMillan and Hutchinson 2002).

The lack of metaphors in the representation of the Haiti earthquake seems to be rather ideological. From the very beginning of reporting, the articles on the Haiti earthquake ascribe the blame for the consequences of the disaster to a large extent to the nation itself, as pointed out in subchapter 6.5. Such a discursive representation would be in conflict with the metaphorical portrayal of the natural phenomenon, which shifts the blame for the catastrophe directly towards nature and diverts attention from man-made factors.

A racist ideology appears to be another reason for the exclusion of the metaphorical portrayal of the Haiti earthquake. A characteristic feature of the metaphorical depiction of the natural phenomenon in the discourse on the other three disasters is its emotional appeal, making readers sympathize with the sufferers. By constructing nature as evil and as a people’s enemy, the metaphors unite the readers with the victims of the catastrophe. In contrast, the reports with no metaphorical demonization of nature lack such an emotional identification of Western

readers with Haitians. The reason might be the existence of negative stereotypes of Haitians in the West (also due to their African origin), namely their depiction as drug-users, Satan-worshippers and AIDS-disseminators (Girard 2005, 136; Germain 2011), which hinders the evocation of sympathy. Some Christian missionaries even saw the earthquake as an opportunity to make Haitians convert to Christianity, blaming the natural catastrophe on Voodoo practitioners (Germain 2011).

7.2 Representations of the natural phenomenon in terms of van Leeuwen's categorization

This subchapter applies the set of categories for exploring the representation of social actors in discourse introduced by van Leeuwen (2008) to a depiction of the natural phenomenon. Van Leeuwen's categorization is based on a sociosemantic view of a representation, only secondarily paying attention to how the sociosemantic categories are realized formally (linguistically). His reason for the selection of such a method is the lack of a one-to-one correspondence between meaning and form in language.

A key category to be considered concerning a categorization of the natural phenomenon is inclusion/exclusion. Within the first three paragraphs of the articles, the natural phenomenon is included in reference to destructive processes in most of the articles – precise numbers are given in Table 1. By foregrounding the natural phenomenon in reference to the destruction, the newspapers assign responsibility to it, as in the lead of an article on the Indian Ocean tsunami in *The Globe and Mail* on 3 January 2005: *Aid trickled in to desperate survivors on devastated coasts around the Indian Ocean yesterday as a massive international effort finally gathered momentum, a full week after an earthquake and tsunamis brought death and destruction to Asia.* The reference to the natural phenomenon is thus in most cases included in a place containing the most important information (at the beginning of news articles); as Bell (1998, 97) explains: “Stories are routinely cut bottom up to fit into available space. The important information therefore comes as early as possible, and the story should be capable of ending at any sentence.”

	the Indian Ocean tsunami	Hurricane Katrina	The Haiti earthquake	the Tōhoku earthquake and tsunami
<i>Globe and Mail</i>	13	7	9	8
<i>Guardian</i>	14	9	9	11
<i>New York Times</i>	14	8	13	12

Table 1: The number of articles (out of 15) containing a reference to the natural phenomenon within the first three paragraphs of the article.

As Table 1 indicates, the numbers of articles with a reference to the natural phenomenon in the first three paragraphs of the report are a bit lower in the articles on Hurricane Katrina, which can be explained by the fact that, in the final phases of reporting, the discourse focuses on the discussion of social, political and economic factors that contributed to the disaster, with the natural phenomenon getting suppressed. Thus, while in the first half of reporting on Hurricane Katrina the blame for the destruction is discursively ascribed to the natural phenomenon, in the second half it is shifted to human beings. Concerning the discourse on the Haiti earthquake, the leads of the articles foreground not only the natural phenomenon but also the social and historical conditions of Haitians, as shown in Examples 35, 36 and 37. As a result, the consequences of the disaster are constructed as a joint effect of the earthquake and man-made factors.

Example 35: *A fierce earthquake struck Haiti late Tuesday afternoon, causing a crowded hospital to collapse, leveling countless **shantytown** dwellings and bringing even more suffering to **a nation that was already the hemisphere's poorest and most disaster-prone**.* (New York Times, 13 January 2010)

Example 36: *Haiti was a humanitarian disaster even before the earthquake hit. It is **the poorest country** in the western hemisphere; most of its buildings are badly constructed out of tin and cheap concrete with many slums perched on steep, bare hillsides which are particularly prone to landslides.* (Guardian, 13 January 2010)

Example 37: ***Impoverished nation** thrown into chaos as 7.0 quake hits **densely populated** capital, crushing presidential palace and a hospital.* (Globe and Mail, 13 January 2010)

Three syntactic means are used to ascribe responsibility for the destruction to the natural phenomenon:

1. the natural phenomenon occupies the role of the actor of destructive processes in active sentences
2. the natural phenomenon occupies the role of the actor of destructive processes in passive sentences by means of a by-agent
3. the destructive process is mentioned in the main clause with the natural phenomenon occupying the role of an agent in a subordinate time clause.

Examples 38, 39 and 40 illustrate the three means respectively; that the natural phenomenon is to blame for the disaster is clearly specified in the first two types of sentences and implied in the third.

Example 38: *The most powerful earthquake in its history strikes Japan, triggering a massive tsunami and an untold number of deaths.* (Globe and Mail, 12 March 2011)

Example 39: [...] *the centre of Gulfport, an area that was slammed at dawn by hurricane Katrina.* (*Globe and Mail*, 30 August 2005)

Example 40: *Thousands Die as Quake-Spawned Waves Crash onto Coastlines across Southern Asia* (headline in *New York Times*, 27 December 2004)

In certain instances in the articles, the natural phenomenon is excluded with reference to destructive processes. This happens in passive sentences with agent deletion: *Whole towns were inundated. Dozens of buildings were destroyed. Trees and power lines were toppled, bridges collapsed, communications were severed* (*New York Times*, 27 December 2004). Such a set of passive sentences is employed in the newspapers after one of the three types of the sentences with the natural phenomenon foregrounded has been used. Thus, although the natural phenomenon is not mentioned in relation to the activities, it is mentioned earlier in the text, and the responsibility is therefore already established.

Another of van Leeuwen's categories worth investigating is activation/passivation. When referring to the natural phenomenon, the newspapers employ activation, i.e., they represent the natural phenomenon as an active, dynamic force in activities. This has been shown in the three types of sentences previously mentioned. Apart from this, activation is also realized through 'possessivation' (van Leeuwen 2008, 33), as in *hundreds of victims of last Sunday's huge waves and the earthquake's debilitating blow*. Activation enables discursively assigning responsibility to the natural phenomenon.

Concerning the category of identification (belonging to a more general category of categorization), the newspaper discourse employs, apart from the metaphorical identification, a physical identification of the natural phenomenon, providing its measurements in numbers: *the 7.0-magnitude quake; a 10-metre tsunami; the 8.9 magnitude earthquake; Category 5 hurricane; winds of up to 265 kilometres an hour; a storm surge of nine metres; waves in excess of 6m; 145mph winds; 23-foot surge of water; waves surging as high as 16ft; [the waves were] as tall as a three-story house and a hundred miles wide*. In contrast to a metaphorical identification, which is emotionally loaded, a numerical identification provides the reports with rationality, precision and credibility. Yet, similarly to the metaphors, the numbers function to convey the shocking magnitude of the natural phenomenon.

A category that is missing in van Leeuwen's set but plays a significant role in the representation of social actors is an ascription of character attributes, labeled here as characterization. In addition to character attributes assigned to the natural phenomenon by the three major metaphor themes discussed in the previous subchapters, the newspaper discourse recurrently characterizes the tsunami, the earthquake and the hurricane as indiscriminate (i.e., affecting all people equally), as shown in Examples 41, 42 and 43. Such a portrayal of the natural phenomenon

creates a misconception. As revealed in chapter 5, natural catastrophes do not affect all people equally, but have the worst impact on those who are marginalized in the society since they are the most vulnerable. The fallacy that the newspapers create by portraying the natural phenomena as indiscriminate helps to hide social and historical factors contributing to the disaster.

Example 41: *The waves were gargantuan [...], the killing and destruction were brutal and **indiscriminate**.* (*New York Times*, 27 December 2004)

Example 42: *The storm was nothing if not **equal** opportunity in its misery.* (*New York Times*, 31 August 2005)

Example 43: *[The earthquake offered] an **egalitarian disaster** that struck rich and poor, politician and pauper, with **equal ferocity**.* (*Globe and Mail*, 19 January 2010)

7.3 Summary

The analysis reveals that all the newspaper articles, except for the reports on the Haiti earthquake, employ three major metaphorical themes to depict the natural phenomenon: ANIMATE BEING, MONSTER and WARRIOR. These major metaphor themes simultaneously fulfill three language functions (based on Halliday's classification 1980): ideational, interpersonal and textual. Concerning the ideational function, the metaphors provide a biased portrayal of the natural phenomenon as an angry monster attacking people, which in effect ascribes all the responsibility for the catastrophe to the natural phenomenon, exculpates people and reinforces the dichotomy between nature and society. Concerning the interpersonal function, the metaphors mainly appeal to people's emotions, evoking fear, which has an impact on the formation of people's attitudes towards nature, such as respect but also antipathy. Concerning the textual function, the systematic realizations of the metaphor themes by discursive devices provide the text with coherence.

The lack of the metaphorical representation of the natural phenomenon in the discourse on the Haiti earthquake seems to have ideological reasons. The reports foreground the responsibility of mankind for the catastrophe from the beginning of the reporting, which would clash with the ideological effect of the metaphors conveying a demonizing portrayal of nature. Another reason for the exclusion of a demonization of nature might be the existence of negative stereotypes of Haitians in the West, since the absence of the metaphors does not allow for the same degree of an emotional identification with victims as their inclusion.

The analysis based on van Leeuwen's system of categorization shows that the natural phenomenon is included at the beginning of most of the articles and

tends to be depicted as an active force of destructive processes, with responsibility clearly assigned to it. The articles often employ a physical identification of the natural phenomenon providing its measurements, which supplies the reports with a rational account and also serves to foreground the magnitude of the tsunami, the hurricane and the earthquake. The analysis also reveals that some articles falsely characterize the natural phenomena as indiscriminate, contributing thus to the role of the media as a myth-maker.