

# Natural Disaster Tourism as a Type of Dark Tourism

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**Abstract**—This theoretical paper combines the academic discourse regarding a specific part of dark tourism. Based on the literature analysis, distinction of natural disasters in thanatourism was investigated, which is connected with dynamic geographical conditions. Natural disasters used to play an important role in social life by their appearance in myths and religions. Nowadays, tourists pursuing natural hazards can be divided into three groups: Those interested in natural hazards themselves; those interested in landscape deformation and experiencing emotions shortly after extreme events - natural disasters - occur; and finally those interested in historic places long after an extreme event takes place. An important element of the natural disaster tourism is quick access to information on the location of a disaster and the destination of a potential excursion. Natural disaster tourism suits alternative tourism, yet it is opposed culture tourism, and sustainable tourism. The paper compares types and groups of tourists. It also considers the contradictions that describe dualism, which exists in dark tourism.

**Keywords**—Dark tourism, dualism, natural disasters, natural hazards, thanatourism.

## I. INTRODUCTION

**T**HIS theoretical paper joins the academic discourse regarding a specific part of dark tourism which is natural disaster tourism. Forms of tourism are not separate [1] and their subjective values [2] are usually divided into two groups: Environmental and anthropogenic [1], [3]. The study of the literature, however, shows that there is also some group of tourists who are interested in natural hazards and disasters, unlike those belonging to thanatourism. Both groups belong to dark tourism. According to Travel Industry Dictionary, dark tourism is a journey aimed at visiting and seeing a place of disaster. 'Dark tourism may be referred to as the act of travel to sites associated with death, suffering and the seemingly macabre.' The term 'dark' describes 'alludes to a sense of apparent disturbing practices and morbid products and experiences, within the tourism domain' [4, p. 146]. Natural disasters used to play an important role in a social life by their appearance in myths and religions, as well as in tourism and science. The existence of natural hazards and disaster tourism is created by travel agents, partly in response to the needs of tourists [5]. This tourism also creates specific human relationships. This form of tourism is shown as unique in the article. Furthermore, the author makes an attempt to classify those relationships. They are of a dualistic nature and touch upon ethics.

## II. MOTIVATION FOR TRAVELLING

Based on the Maslow's theory (1970) [6] the typology of motivation and decisions made by tourists which

are subject to evolution came into existence. Motivation for travelling includes some features such as: Learning (seeking new places, emotions or famous places) [7], push and pull factors as travel motivation [8], [9], anomie and ego-enhancement [10], self-centred or the need is directed at others [11], allocentric-psychocentric personality model of tourists [12]–[14]. The model based on the hypothesized association between personality types and destination preferences. Stimulating tourists to travel may take on a dimension of risk and safety of oneself or of others [11] and a concern about the safety of others might mean placing yourself at risk to help others, and is related to person's psychological maturity. The relationship between the safety and the choice of destination was mentioned by Cohen (1972) [7]. In his opinion - the safer the place the less unique tourism. He distinguished 4 groups of tourists: The organizational mass tourist, the individual mass tourist, the explorer, and the drifter.

An issue of natural disasters usually appear in the context of damage in tourism. The global value of damage arising out of natural disasters is huge. For example, in 2013 it cost US\$ 125bn [15]. Record losses of some US\$ 178bn were recorded in 1995, the year of the Kobe earthquake -equivalent to 0.7 per cent of the global GDP [16] and in 2011, the year of the Tohoku earthquake and tsunami, whereas in Japan they came to US\$ 210bn [15]. Natural disaster tourism occurs in the context of risk reduction: Assessment of losses, preparation of tourists for hazards, escape routes, and finally loss reduction in tourism [17]–[19]. As regards the interest in tourism, research shows that immediately after the natural disaster there is a decrease in an interest in the destination where an extreme event took place up to 2 years' time. Following the disaster, new burial grounds, memorials, and museums which commemorate victims and areas hit [20] come into existence. Those places visited in consecutive years are classified as so-called thanatourism, like in the case of the Ground Zero and others [21]–[23]. However, in the USA after Hurricane Katrina hit in Louisiana (in October 2005) and following tornadoes in Joplin, Missouri, as well as tsunami in Thailand (2004) and in Japan (2011) the arrival of tourists interested in areas of destruction and human trauma was noted. Similar interest was noted during extreme events (e.g. Eyjafjallajökull erupting in Iceland in 2010), as well as shortly after they hit (e.g. Chelyabinsk meteorite impact in Russia in 2013). The motivation for travelling in those cases was a willingness to get to places of extreme events.

## III. NATURAL DISASTERS IN HUMAN LIFE - MYTHS AND REALITY

Natural disasters used to play an important role in a social life by their appearance in myths and religions. Historical texts

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contain information on unusual events which caused huge destruction. They have preserved as myths or legends, also in religions of some regions, until now. Many of them were ignored by scientists for many years. Today the interest in those stories is back. New hypothesis are created and new natural facts are discovered. It lays the foundations for a new field - geomythology [24]–[27], and gives the opportunity to get to know the places of potential natural hazards. Extreme events preserved in cultures prove their uniqueness for the life of ancient communities. A good example is the a'yahos snake that lives in the ground. As far as we know it was a description of shaking and earth disturbances, which were concentrated in Puget Sound in the vicinity of the Seattle Fault in Washington state [28]. Another example is Volcano Fuji - the Holy Mountain for the followers of shintō [29] which is visited by around 300 thousand tourists per year. In Hawaii mythology goddesses (Pele, Hi'iaka, Laka) and gods (Kane, Lono, Ku) [30]–[32] are worshipped. The most know tourist attraction is so-called Pele's hair (or Pele's tears). Hawai'i Volcanoes National Park is visited by over 1.5 million tourists per year [33]. Other myths were a source of inspiration for research on adaptation to the climate change [34]. Cultural astronomy deals with symptoms of astronomical events in the culture of, for example, Aborigines [27], [35]–[37] and like geomythology draws the scientists' attention to natural objects and incidents known to ancient cultures. For example, volcanic craters of the following lakes: Eacham (Yidam), Barrine (Barany), Euramoo (Ngimun) in Queensland, which were formed more than 10 000 years ago, were known to the Aborigines. An oral history says that those volcanic lakes used to be covered with Eucalyptus scrub. A fossil pollen found in the volcanic silt of these craters showed that the Eucalyptus scrub covered this land before rainforests 7,600 years ago. This story was used by the Australian Heritage Commission on the Register of the National Estate and within Australia's World Heritage for the nomination of the wet tropical forests [38] as the human record of events dating back to the Pleistocene era.

As J. Krippendorf (1987) [39] said: The traveller has a mix of characteristics that are not simple to choose one category of them tourism motivation. The dark tourism associated with sites of death and disaster [40] is based on location, and the interest has been grown [41]. Tony Seaton uses a term thanatourism (1996) which is based on individual motivation, history, and culture [21]–[23]. The motivation is a need of emotions [40] and self-realization [39]. Another term used to describe the phenomenon is 'black spot', which describes grave sites and sites in which celebrities or large numbers of peoples have met with violent deaths [42]. According to Sharpley (2009) [23], the four shades of dark tourism are divided into four categories. There are generally the following aspects of the motivation: historical, cultural, educational, memory-related, the identification of the place, curiosity, location. The thanatourism includes visits to such places as: the Ground Zero and the 9/11 Memorial Museum in New York; John Fitzgerald Kennedy's murder in Dallas, Texas; Auschwitz, Nazi, German, concentration camp 'Auschwitz' based in the Polish City of Oświęcim in occupied Poland during World War II.

#### IV. DARK TOURISM OR THANATOURISM?

Visiting places of natural hazards and disasters is a unique form of tourism in which motivation is to feel emotions, risk, and the dynamics of natural hazards such as tornadoes, lightning, floods, and volcanic activity. It is not safety and comfort which are important in this kind of tourism but emotions felt when observing natural phenomena. What attracts tourists is also natural effects and tragedies. With this in mind, the natural disaster tourism can be classified into: (i) the soft tourism (individual programme decisions, an activity, physical and mental fitness); (ii) the qualified tourism (knowledge of the natural environment, the use of specialized equipment, physical and mental fitness); (iii) the alternative tourism (the opposite of mass tourism, its purpose - communing with unique nature, achieving the intended purpose in demanding natural conditions, as the dynamics of a natural phenomenon).

The motivation is: Nature and space, time (uniqueness and the transitory nature of phenomena) and feelings and emotions of people [20]. The nature - as we call it - should be understood as an area where some types of natural hazard occur, whereas the time - refers to the occurrence of natural hazard or the period of a natural disaster. Continuing the discussion on the term 'dark' by Stone [4] (dark tourism spectrum) and the subcategory 'shades' by Sharpley [23] (shades of darkness), the darkest in the case of the natural disaster tourism is to visit places within a very short period of time after the incident e.g. tsunamis in 2004 and 2011, a volcanic eruption and earthquakes in 2010 or participate in extreme phenomena. During this time, there are physical and mental changes visible in the community and the recent destruction of the landscape and property. What should be considered separately is the arrival of volunteers at the same time whose motivation is not to feel emotions and disasters but to help other people. Similarly, the coming of researchers in order to conduct observation and research.

The natural disaster tourism can be classified as the dark tourism. Places visited are directly related to the extreme natural events and their consequences. A part of them can also be classified as the thanatourism because of historical, and cultural issues, and as the black spot - because of the violent death of a large number of people (the tsunami in 2004 and the earthquake in Haiti - 300,000 people died in each case). The author intentionally applied the term 'dark tourism' due to the fact that visiting these places is closely related to the location of extreme natural phenomena, not human activity (as was in the case of: the Ground Zero in New York in 2001, the JFK trail in Dallas in 1964, Tunnel of the Pont de l'Alma and Memorial in Paris where the Princess of Wales, Diana died in 1997 and others as the Robben Island prison, where the leader Nelson Mandela was incarcerated, Auschwitz-Birkenau, located in Poland, Roman and British gladiatorial games). It is the dynamism of the phenomena or tragic consequences that is the motivation for this kind of trip. With this in mind, it is worth noting that the regions where natural hazards occur set new tourist destinations - the dark tourism destinations. They include areas in which volcanism,

earthquakes, hurricanes and typhoons, tornadoes, floods, and lightnings occur (individual trips or small group trips). In these cases, it is not an anthropogenic cause but a natural event which is an initiating force attracting tourists. A map of destinations is somewhat known and rather predictable, unlike thanatourism. It is the mass media which indirectly indicates the natural disaster destinations and directions of travelling informing about the location of natural disasters in a unique region or even in a particular place.

The natural disaster tourism is a niche within tourism, and dark tourism in general because it is not mass tourism. It requires from tourists strong motivation to observe and find destructed areas and people who experienced natural disasters as well as staying in the areas of risk. We may distinguish three periods of time in the course of or after an extreme event: a. Immediately during the extreme event or within a very short time after it - direct physical effects in the landscape and the physical and mental effects in people and staying in the area poses a risk for a traveller, e.g. another seismic shock (aftershock) or eruption may occur, there is a risk of epidemics - like after the earthquake in Haiti in 2010, or secondary factors, for example, radiation as a result of the destruction of the Fukushima Daiichi nuclear power plant - during the tsunami in Japan in 2011; b. in the longer period after the extreme event - the diversity of objects of observation of immediate effects of a disaster is smaller, and the presence in the area of the incident does not pose a great threat, though it does not eliminate the risk entirely - seismically active places with active volcanism, floodplains of old floods (under certain weather conditions the risk may reappear); c. in the distant past - the presence in the area of natural disasters in order to know e.g. the crater of ancient cosmic collisions, and visit memorials, places of religious cult, or museum - which may be classified as the thanatourism.

Travelling facts show that the interest of arrivals and trips to places of natural disasters lasts up to about 2 years, then it strongly decreases. For example, a decade after Hurricane Katrina hit, the interest became less frequent. One travel agency's offer "Post Katrina Tour" is still standing [43]. Two years - it is approximately the same period of time when the interest in mass tourism to disaster destinations decreases dramatically [20]. Later on, the nature of the places is changing. At the same time, there is a decrease in the interest in mass tourism and an increase in the activities of tourists who prefer dark tourism. In the case of the Kobe earthquake in 1995, modern infrastructure was built in five years after the extreme event happened, and the destruction remained in the documentation only. In 2002 the Earthquake Memorial Museum was opened and is used for education and the natural disaster risk reduction.

#### V. DUALISM AND ETHICS IN THE CONTEXT OF NATURAL DISASTERS AND TOURISM

Both in the case of natural disasters and tourism some signs of dualism may be noticed. From a geographical perspective, the natural disasters caused by strong natural phenomena always stirred up opposed emotions and behaviour: fear,

anxiety, the feeling of the threat of loss of life, health, property, causing the escape (the environment migration today or climate refugee); and the interest resulting from the desire to learn the new as well as use positive effects such as soil fertility of floodplains or volcanic tufa [20]. We may also observe the duality in tourism, which contributes to the economic development of a given area, using its values and creating tourist attractions, but sometimes at the cost of the change in the function of this area, often leading to the degradation of the environment - creating a local threat. The signs of duality may also be seen at the meeting of natural hazards and disaster tourism. Antagonistic relationships are observed between several groups of those who participate directly and indirectly in dark tourism.

- 1) Journalists - recipients of information and potential tourists relationships. A journalist is indirectly involved in dark tourism. Information serves as a warning, gives knowledge of the current situation, and is used to help and solve problems through the mass media. However, it is also a source of inspiration to travel, experience a thrill of dangerous phenomena-related emotions, and indicates a destination and the location of the event. Furthermore, there are cases of film coverage, e.g. during a hurricane, when a journalist struggles with the wind, and is so engaged that he/she does not care about his/her safety or intentionally takes a risk to gain a more dynamic picture. Such behaviour may provoke tourists (with a growing demand for emotions) to take up new challenges and inspire them to visit regions threatened.
- 2) Dark tourism organizer - tourist relationships (organizer participates directly or indirectly in achieving tourist's goal). A serious ethical problem appears at this point. The issue is that tourism organizers and those responsible for transport and hotels offer a journey or expedition to areas of risk with the intention of earning money by offering the service. Simultaneously, they positively respond to the tourists' demands and maintain or improve local employment and economy. Some tourists treat these trips as a way of education, which is disputable.
- 3) A journalist / photographer - the local community relationships (they are directly involved in the incident or afterwards). Documentation of extreme natural events and natural disasters result from professional passion, but also the willingness to obtain quality material for money or success. At the same time, it inflicts further suffering on victims who do not accept to be registered as victims or perceived as 'morbid products', or the opposite, those who are willing to participate in such documentation treating it as a possibility of expressing anticipation of assistance. The journalists are also the group which disseminates information about the need for assistance.
- 4) A tourist - the local community relationships (direct). A tourist through his/her presence, observation and taking photographs exposes victims to further suffering, humiliation which deepens the trauma. At the same time,

the tourist while staying there may help by paying and supporting the local economy or single persons.

- 5) Local authorities - the local community - tourists relationships (direct). The local community can use the presence of tourists to force local authorities to act in an appropriate way: reconstruction and risk reduction in the future. On the other hand, the Chinese authorities used the disaster area after the earthquake in Sichuan to lure tourists and raise funds [44]. We do not know how much money coming from natural disaster tourism which is, in fact, dark tourism went to the local communities in New Orleans (after Hurricane Katrina hit) and Sichuan. There are many examples of different countries with politicians who are taken pictures against a background of destruction.
- 6) Local communities - local communities relationships (direct). Residents out of work were willing to get jobs as drivers or trip assistants, because it was the only possibility of earning money. Tour operators also treated it as an opportunity to work because there was no possibility of a return to the state from before the extreme event (e.g. Hurricane Katrina). Some communities are for making contact with tourists - others are against it.

The relationships between people in dark tourism (journalists and photographers, tourism organisers, tourists, local authorities and community) show that there are moral problems in individual and social behaviour.

## VI. SUMMARY

The natural disaster tourism has some parts similar to other kinds of tourism. But some differences are visible, too. The specificity of this form of tourism shows some differences from other forms, which include the following:

- 1) It is opposite to other forms of tourism (it is not mass tourism and leisure tourism, safety and quality of services including comfort are of no significance; what is important is the natural environment (like in alternative tourism), but not in the context of a clean environment, where tourists spend time as in the case of sustainable tourism; it is the dynamics of nature and the presence in the area of risk). The natural disaster tourism suits alternative tourism, yet it is opposite to culture tourism, and sustainable tourism.
- 2) The formation of a new criterion of tourism destinations, destinations independent of the development and the quality of tourist services, but closely connected with the occurrence of natural hazards and the areas of risk (the dynamics of the natural environment as an extreme event and its impact).
- 3) It is different from thanatourism (e.g. tourists accompany tornado hunters, photograph lightning discharge, and stay in the area threatened with epidemics) and natural disaster tourism, within a short period of time after the extreme event. It is similar to the thanatourism only in the case of visiting destructed places (in the longer period of time after the disaster) such as memorials,

places of cult and museums - for cultural, religious or educational purposes.

- 4) Strong forms of dualism in the relationships between participants of dark tourism; behaviour arouse ethical conflict.
- 5) The positive aspects of the morally disputable 'values' of dark tourism - mainly in the area of contact with the local community which experiences trauma.
- 6) Time is of the essence - because of the transience of it (the phenomena and values).

In the natural disaster tourism and dark tourism we observe behaviours associated with the current of ethical relativism where good is of a relative nature. There is no clear stance on moral conduct and ethical principles, which affects the relativism of the moral evaluation of natural disaster tourism participants. The pragmatism of company representatives and politicians as well as contemporary behaviour grounded on Machiavellianism and postmodernism are, in the case of dark tourism, very severe for local communities. It should be emphasized that except for pragmatism we distinguish heroism and altruism.

Natural disaster tourism belongs to the dark tourism and has features of soft, qualified, and uniquely alternative tourism. The positive aspects of it are as follows: the dynamics of phenomena, the risk and the presence among injured local community suffering trauma. Tourists interested in natural disaster tourism, or 'natural dark tourism' - are explorers, drifters or tourists of small groups.

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