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# A STUDY OF DISASTER TOURISM IN BEICHUAN FOLLOWING THE SICHUAN EARTHQUAKE IN CHINA —FOCUSING ON DISASTER EDUCATION

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## Abstract

This research aims to clarify the reality of disaster education through disaster tourism. Literature was reviewed from the materials in Chinese, Japanese and English. We conducted interviews in Beichuan in June of 2014 and August of 2015 in addition to several visits to the areas over years since 2008. We have found that the disaster tourism there does not play the role of disaster education. There are two issues which hinder disaster tourism from playing this role. Firstly, tourists have a low level of disaster awareness. They do not have the intention to learn disaster education during the tour to disaster-affected areas. Secondly, disaster tourism exhibitions in Beichuan County do not resonate with the tourists visiting the museums, and do not improve disaster awareness of the visitors. The result of this research urge further discussion on how to make Beichuan County disaster tourism to resonate with the visitors.

Key words: Sichuan Earthquake, disaster tourism, disaster education

## 1. Introduction

On May 12th, 2008, a powerful earthquake with a magnitude of 8.0 hit the province of Sichuan in China. This earthquake was named the Sichuan Earthquake, and brought about devastating damage to the Beichuan Qiang Autonomous County (hereinafter referred to as “Beichuan County”) in Sichuan province. Assessing the condition of the affected area and the geographical status of the area, the Chinese government decided that the reconstruction of Qushan Town, the

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governmental capital of Beichuan County, was impossible. Instead, they preserved the area as “disaster ruins” without restoring it to its previous condition, and built the “Beichuan Earthquake Museum” to develop disaster tourism. The residents were relocated en masse to Yongchang Town, which is 20 km away. (In order to distinguish between Qushan Town and Yongchang Town, the settlers, media and tourists all refer to these locations as Old Beichuan and New Beichuan, respectively. In the same vein, this research will also use the terms Old Beichuan and New Beichuan.)

Disaster tourism is defined as tourism activities that provide tourists with disaster education through sightseeing and experiences of walkthroughs in affected sites or reenactments of the disaster conditions, as well as activities that restore the affected area’s economy, ecosystem, and social functions (Zou and Yuan, 2008). In this research, in order to clarify the reality of disaster education through disaster tourism, we visited Beichuan in June of 2014 and August of 2015 to conduct surveys regarding awareness of disaster tourism development, reason for sightseeing, and changes in disaster education awareness in the form of semi-structured interviews with residents living in areas adjacent to Old Beichuan, residents in New Beichuan, and tourists visiting Beichuan County.

## 2. Research on disaster tourism

Since entering the 20<sup>th</sup> century, areas that have experienced disasters such as earthquakes, volcanic eruptions, tsunamis, wars, and terrorism have drawn people’s attention as targets of tourism. Simultaneously, research on this new form of tourism emerged. Foley & Lennon were the first ones to name this type of tourism, and called it “dark tourism” (Foley & Lennon, 1996). They pointed out that the scope of dark tourism is set at commercialized areas with ties to deaths\*<sup>1</sup> (Foley & Lennon, 2000: 3). This became a trigger for widespread attention regarding research of new forms of tourism.

Stone conducted research on people’s motivations for participating in dark tourism, and pointed out that the “dark” in dark tourism possesses multilayered characteristics (Stone, 2006). According to him, the depth of the site’s darkness is not only influenced by politics or educational and entertainment value, but also by the temporal distance that the people have from the moment of the disaster’s onset. For example, while people’s memories are still fresh right after the incident involving the deaths, dark tourism makes it possible for tourists to experience said death in virtual reality; this becomes more difficult as the memory gradually fades with time. Stone concluded that, for this reason, the scope of the “darkness” expands, which means that these

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\*<sup>1</sup> Excerpt from the original “In labelling some of these phenomenon as dark tourism we intend to signify a fundamental shift in the way in which death, disaster and atrocity are being handled by those who offer associated tourism ‘products’. In particular, we aim to show that ‘dark tourism’ is both a product of the circumstances of the late modern world and a significant influence upon these circumstances.”

types of tourism resources are not simply established based on the depth of the “darkness.”

On the other hand, researchers have made definitions of this type of tourism from various angles. Seaton, for example, proposed the concept of “thanatourism” (Seaton, 1996). He defined thanatourism as sightseeing motivated by the act of facing symbolic deaths regardless of whether the death tourism is conducted partially or wholly. Blom proposed the concept of morbid tourism (Blom, 2000). He differentiated morbid tourism into two types of tourism activities: one conducted at spots related to deaths, and the other at simulated places. In other words, the definition made by Seaton focused on tourists’ motivation, while Blom made the definition based on the type of affected locations. Causevic & Lynch referred to tourism activity leading to economic development for the normalization of communities after political conflicts as “phoenix tourism” (Causevic & Lynch, 2011). After the 2011 Tohoku earthquake, the concept of “visiting affected areas aids the reconstruction of the site” was disseminated (Shimakawa, 2014). In 2011, a white paper on tourism by the Japan Tourism Agency in the Ministry of Land, Infrastructure, Transport and Tourism<sup>\*2</sup>, mentioned the role that tourism can play for the reconstruction of affected areas. During this period, Japanese researchers also offered their suggestions towards phoenix tourism for reconstructing the region (Yamashita, 2013). Yamashita examined the effort toward reconstruction after the 2011 Tohoku earthquake from the viewpoints of “volunteering,” “learning” and “connecting,” in order to clarify the structure of phoenix tourism (Yamashita, 2015). It can be said that phoenix tourism is defined based on the role that tourism activity plays post-disaster.

In China, research on this type of tourism is conducted based on theories and concepts from overseas research. Wei and Wu pointed out that disasters can be appropriately developed as tourism, and proposed the idea of “disaster tourism” for the first time (Wei and Wu, 1999). Li and Zheng discussed the concept of dark tourism, its current status, contents and future issues (Li and Zheng, 2006) Hu et al. discussed developments to dark tourism after distinguishing dark tourism, disaster tourism and red tourism<sup>\*3</sup>, which is unique to China (Hu et al., 2007). Meanwhile, Zou and Yuan stated their definition of disaster tourism as “tourism activities that provide tourists with disaster education through sightseeing and experiences of walkthroughs in affected sites or reenactments of the disaster conditions, as well as activities that restore the

<sup>\*2</sup> “2011, a white paper on tourism” by the Japan Tourism Agency in Ministry of Land, Infrastructure, Transport and Tourism (2012) ([http://www.wplit.go.jp/hakusyo/syoListDetailAction.do?syocd=npcc201101&dtailflg=M&first\\_page=3&t22\\_id=&searchFlg=off&ass\\_flag=true&seldspnm=&syoclsd=all&doclsd=all&keyw1=&keyw2=&keyw3=&keyw4=&operator1=AND&operator2=AND&operator3=AND&SYOname=&gengo\\_from=Y&nendo\\_from=&gengo\\_to=Y&nendo\\_to=&dispcount=10&cur\\_page=1&highlight\\_search\\_flag=off&newkeyw=](http://www.wplit.go.jp/hakusyo/syoListDetailAction.do?syocd=npcc201101&dtailflg=M&first_page=3&t22_id=&searchFlg=off&ass_flag=true&seldspnm=&syoclsd=all&doclsd=all&keyw1=&keyw2=&keyw3=&keyw4=&operator1=AND&operator2=AND&operator3=AND&SYOname=&gengo_from=Y&nendo_from=&gengo_to=Y&nendo_to=&dispcount=10&cur_page=1&highlight_search_flag=off&newkeyw=), Date of Access: November 2<sup>nd</sup>, 2015)

<sup>\*3</sup> According to “2004–2010 National Red Tourism Development Plan (translate by authors)” by Legislative Affairs Office of the State Council (<http://www.chinalaw.gov.cn/article/xwzx/szcx/2009/200502/20050200011948.shtml>, Date of Access: December 1<sup>st</sup>, 2015) Red tourism is tourism activities for learning about the revolutionary spirit as well as for receiving patriotic Chinese education through vehicles such as commemorative locations established on dates when the people’s revolutions or wars occurred, as well as symbolic events under the Chinese Communist Party to establish the People’s Republic of China.

affected area's economy, ecosystem, and social functions (translated by the authors)" (Zou and Yuan 2008).

As can be seen from the above, though these new types of tourism are being widely discussed, they seem not to be clearly defined yet; and in research conducted domestically in China, both terms are being used because the contents and scopes of dark tourism and disaster tourism mostly overlap with one another. However, Zou and Yuan pointed out that disaster tourism is better suited to the situation and customs in China than dark tourism (Zou and Yuan 2008). There are three reasons for this. To start, when considering the customs of Chinese language, words like "disaster" make comprehension easier. In China, there is a unique Chinese term known as "red tourism." Since "red" and "dark" in Chinese have conflicting meanings, there is a risk that dark tourism and red tourism will be perceived as complete opposites. However, when looking at the definitions for both of these terms, while both dark tourism and red tourism are different in concept, a good part of their tourism resources are shared. Using the term dark tourism might lead to confusion with respect to the two terms' overall concepts. For this reason, this research will use the term "disaster tourism" as defined by Zou and Yuan.

Sakamoto pointed out that it is crucial to pass along and retain the memory of disasters in order for them not to be forgotten due to the frequency of natural disaster occurrences, as well as to utilize lessons acquired from the event for reconstruction and prevention measures (Sakamoto, 2012). This is another way in which disaster tourism is significant.

Lu et al. stated that earthquake tourism resources could be categorized under "earthquake ruins" and "earthquake memorials" (Lu et al., 1989). Earthquake ruins are tourism locations that have been ravaged by earthquakes. Earthquake memorials are "records and memorials of earthquakes," which often refers to memorial halls or museums established to commemorate and record earthquake events. Earthquake disaster tourism is valuable to tourism, research, and education.

### **3. Preceding research on disaster education**

The definition of disaster education varies its concept from country to county. In Taiwan, the term "disaster prevention education" is used, which includes natural disasters, man-made disasters, and other safety education. In the UK, disaster education is considered to be a part of safety education. In the English language, various terms are used, such as disaster education, disaster prevention and mitigation education, and education for disaster reduction, etc. Japan places an emphasis on disaster education and disaster prevention education. Zhang et al. asserted that the term disaster education is more appropriate than disaster prevention education or safety education, and introduced the concept that disaster education cultivates people's disaster awareness and disaster prevention capability for preventing future disasters (Zhang et al., 2012). The RQ Disaster Education Center, a general incorporated association, defined disaster education

as “an effort towards by survivors, volunteers and visitors at the affected site to consider the altruistic behavior, the desire to contribute, and the empathy they felt when coming into contact with the affected site and the survivors as resources for cultivating personal character, and to position these resources in the educational system.” Hirose considered differentiating disaster prevention education, disaster practical education, and disaster education, and emphasized the necessity of conducting education on “the site” as defined in the disaster education by the RQ Disaster Education Center. He, as well, stated that disaster education is an idea which focuses on the potential for education existing in sites in the affected areas alongside people’s potential for learning, which are both characterized by the fact that strong altruistic behavior and the desire to make contributions emerge on these sites (Hirose, 2012). In other words, disaster education can be said to be visible education conducted at disaster sites. Since disaster tourism is also considered an act of tourism conducted on the affected site, this research will use the term “disaster education.”

Chen and Zhu pointed out that insufficient disaster education worsens the disaster damage (Chen and Zhu, 2001). Without disaster preparedness education, people will not know what to do when faced with disaster. Simultaneously, nobody will be aware of the concept of disaster prevention. Thus, Chen et al. stated that the purpose of disaster education is to improve disaster awareness and capability in disaster prevention skills (Chen and Zhu, 2001). Ui also stated the purpose of disaster education as a list of three points: to learn correct knowledge regarding disasters, to acknowledge the type of disaster which will most likely occur in your area, and to habitually heighten disaster awareness (Ui, 2002). From the above, it has become apparent that among the research pertaining to disaster education, there is more emphasis on the concept of disaster awareness.

#### **4. The Sichuan Earthquake and disaster tourism development in Beichuan County**

##### *(1) General overview of Sichuan province*

Sichuan province is located in southwest China, upstream of the Yangtze, and holds a population of 88 million. It has an area of 485 thousand square kilometers, making it the 5<sup>th</sup> largest region in China after Xinjiang, Tibet, the Inner Mongolia Autonomous Region, and Qinghai province. It governs 21 cities (including prefectures), 181 counties (including regions and county-level cities), and is the top province in west China in terms of population, resources, and economy. Chengdu city, the provincial capital, stands geographically in the center of Sichuan province, and since its establishment as a city 2,300 years ago, it has developed its history as the greatest city in China and the heart of Sichuan province’s government, economy, culture, education, traffic, and finance (Japan-China Economic Association, 2010: 3, 35). The majority of the Ganzi Tibetan Autonomous Prefecture, Aba Tibetan and Qiang Autonomous Prefecture, and Liangshan Yi Autonomous Prefecture, where minority races gather and live respectively in

the southwest part of this province, are mountainous areas which are low in population. The demographic ratio of minority races in the entirety of Sichuan province consists of only a few percent, and these minorities suffer from economic hardships compared to the Han people (Amemori, 2014). This contributes to the serious problem of economic gaps within Sichuan province.

Topographically speaking, Sichuan province can be divided into the mountainous plateau area, the Sichuan basin, and the highland area in the southwest. This complex landscape provides Sichuan province with the benefit of being a region with the most magnificent nature and beautiful scenery. On top of this, the province's blessed ecology was advantageous to the development of the Sichuan civilization, which was the most significant foundation for Chinese civilization. This means that Sichuan province's tourism resources include not only the natural scenery, but also a large portion of cultural elements. The province is home to five of the World's Cultural and Natural Heritages, which ranks second in China following Beijing. Giant Pandas, one of several centerpieces for tourism and the national treasure of China, inhabit Sichuan province. Sichuan cuisine is considered as one of four major dishes in China. The above are all of the tourism resources of Sichuan province (Japan-China Economic Association, 2010: 9, 206). In 2014, 535 million domestic tourists visited Sichuan province, which was a 10% growth in tourists compared to 2013. International tourists exceeded 2.4 million visitors (Sichuan Tourism Bureau's website)\*4.

## *(2) The Sichuan Earthquake and reconstruction overview after the disaster*

At 2:28 pm on May 12<sup>th</sup>, 2008, an earthquake of magnitude 8.0 hit Sichuan. This earthquake came to be known as the Sichuan Earthquake. The epicenter was located in Yingxiu of Wenchuan County, in the Aba Tibetan and Qiang Autonomous Prefecture, located approximately 70 km away from Chengdu City, and the depth of the hypocenter was approximately 10 to 20 km. It was a reverse fault earthquake due to the Longmenshan Fault, which runs from the northern to the western part of the Sichuan basin. This earthquake caused frequent secondary disasters which included sector collapses, damming of lakes, and flow of debris. The total number of casualties and the missing due to the Sichuan Earthquake was over 80 thousand. Areas which were seriously damaged by the earthquake spanned 130 thousand square kilometers. The economic loss reached 845.1 billion yuan (equivalent of about 11 trillion JPY in 2008). To the point that the geographic environment should be blamed for the serious damage, there was a rebuttal that there were also artificial factors as main causes of the damage from the Sichuan Earthquake (Wang, 2009; Miyairi, 2011; Otani, 2012). The huge damage from the Sichuan Earthquake revealed China's tendency towards undervaluing safety of their buildings, such as insufficient earthquake

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\*4 Sichuan province tourism bureau website: "Statistics of tourism condition in December, 2007" (<http://www.scta.gov.cn/sclyj/lytj/tjbb/system/2008/01/24/000204777.html>, Date of Access: September 21st, 2015)

resistance construction, carelessness in earthquake resistant design of buildings and rescue efforts, shoddy construction, and expense cut-downs in construction. From another perspective, it was pointed out that proper evacuation was not conducted due to the lack of disaster education.

With respect to the Sichuan Earthquake, the Chinese government designated the reconstruction business as a mega project to prove its national prestige. Prime Minister Wen Jiabao arrived at the affected area on May 12<sup>th</sup>, and created an earthquake task force headquarters on top of instructing rescue activities. A week after the earthquake hit, the construction of temporary housing began, and people started moving in 10 days later (Otani, 2009: 28). The government launched the “One-to-one support” policy in which each province was assigned to a certain affected area, and those provinces were made to compete over results of their aid efforts. In March of 2009, one year after the earthquake’s onset, Prime Minister Wen Jiabao, expressed his determination to change the completion period of the affected areas’ reconstruction to “within 2 years,” which was 1 year earlier than the original target of 3 years. He announced that China would make it possible for survivors to return to their comfortable lives as soon as possible. Consequently, the Chinese government later changed the original 3-year-construction plan to a 2-year basic completion plan, and in the end, they emphasized that they were able to achieve reconstruction after 2 and a half years (Otani, 2012 & 2014).

### *(3) Beichuan County’s disaster tourism development details*

Disaster tourism development that would take advantage of the “Sichuan Earthquake” was proposed by Mr. Wang Xin from the Sichuan Academy of Social Sciences, and a decision was made to act upon the proposal. This was the first attempt towards tourism development by China (Amemori, 2014).

Old Beichuan is located in the active fault zone of the Sichuan Earthquake, which was why the location was devastated by the earthquake. The end result was 15,645 deaths, 4,413 individuals missing, and an economic loss of 58.57 billion yuan (1 yuan was equal to approximately 14 JPY in 2008). On top of that, over 80% of the area’s buildings collapsed, and more than half the town was buried by landslides and the flow of debris from secondary disasters. Due to the fact that Old Beichuan was damaged so badly and exhibited various types of disaster damage and decimation of buildings, as well as many examples of rescue efforts, it was possible to observe the growth of research and education pertaining to earthquake disasters and secondary disasters as well as their contribution to patriotic education (Wu et al., 2009). Because Old Beichuan was fraught with geological risks, reconstruction was deemed to be difficult. The government decided to not to reconstruct Beichuan County, and decided, instead, to relocate the survivors collectively to a place 20 km away, in order to keep them safe.

The Beichuan National Earthquake Ruins Museum was built as earthquake ruins, and disaster tourism was developed. After the disaster, Beichuan County’s original tourism facility was badly damaged and their tourism products as well as productivity dropped to an extent where the



growth in the region's tourism industry almost stopped completely. However, the earthquake gathered widespread attention, which resulted in the visitation of 200 thousand of tourists a week to Beichuan County during the 2009 Chinese New Year. The governmental city of Mianyang saw this as an opportunity and began sightseeing tours related to the earthquake. This being said, because the preservation works on Old Beichuan's earthquake ruins hadn't been completed yet, and because the museum was still at the pre-construction stage, entrance into the ruin was not allowed (Sohu news, February 26<sup>th</sup>, 2009)<sup>\*5</sup>. The Beichuan National Earthquake Ruins Museum officially opened on October of 2011, and along with the Beichuan Qiang Folk Museum of Beichuan County and the New Beichuan County castle, became part of the Beichuan Qiang Tourism District for the development of disaster tourism. According to Mianyang's 2014 Yearbook<sup>\*6</sup>, the Beichuan Qiang Tourism District was certified as a "Grade AAAAA (5A) tourist site"<sup>\*7</sup>. Through disaster tourism, Beichuan County's tourism industry has rapidly recovered (Jia, 2009).

#### *(4) Overview of the Beichuan National Earthquake Ruins Museum*

According to Wu, et al. 2009, "Eternal Beichuan: Design of the Beichuan National Earthquake Ruins Museum (translated by the authors)," there were demands to divide the Beichuan National Earthquake Ruins Museum into 3 parts (the core area, control area, and adjustment area) so that the museum could serve the purposes of ruin preservation, scientific research, and advertising education. The core area was separated into the earthquake ruin preservation zone, the "Earthquake museum," the "Service center," and the "Secondary disaster and natural restoration zone." The Earthquake museum as mentioned above refers to both the Earthquake Commemoration Building and the Earthquake Science Experience Center. The Tangjiashan Lake is located in the "Secondary disaster and natural restoration zone." This museum was built for the purpose of showing respect towards the ruins in Beichuan County, for exhibiting the important social significance and scientific values of the earthquake, and preserving the ruins. The museum functions towards commemoration, exhibition, advertisement, education, and research. It allows for the exhibition of lessons and experiences obtained from a massive natural disaster, and it also provides education on how to handle natural disasters correctly through knowledge acquired from these exhibitions. Currently, the Beichuan National Earthquake Ruins Museum is the world's largest group of ruins that have been preserved under the most complete

<sup>\*5</sup> Sohu news, February 26<sup>th</sup>, 2009, "Tour of Old Beichuan Started Trial Operation at the end of February (translate by authors)" (<http://travel.sohu.com/20090226/n262504307.shtml.shtml>, Date of Access: December 20<sup>th</sup>, 2015)

<sup>\*6</sup> Government of Mianyang City, December 2<sup>nd</sup>, 2014, "Mianyang's 2014 Yearbook" (<http://www.mianyang.gov.cn/MYGOV/145812894158684160/20141202/1209638.html>, Date of Access: December 20<sup>th</sup>, 2015)

<sup>\*7</sup> The Chinese Grade A scenic views zone is a standard for tourism locations stipulated by the Tourism Bureau of China, which is based not only on the quality, but also accessibility of the location's tourism resources and the establishment and management condition of sanitary facilities and deployment of guides on sites. Evaluations are made in 5 ranks, starting from top to bottom: AAAAA (5As), AAAA (4As) to 1A.

conditions.

## 5. Survey on disaster education through disaster tourism of Beichuan County

### *(1) Overview of survey sites*

Beichuan County is located in the northwest part of the Sichuan basin, which spans over an area of 3,084 square kilometers. It is 130 km away from the provincial capital of Chengdu city. The population has reached 240 thousand by 2014. The county is dominated by the Han race (62.29%), and the rest is shared by approximately 30 minority races such as the Qiang, the Tibetans, and the Hui. Before the Sichuan Earthquake, the capital of the county was Qushan Town. In February of 2009, the Ministry of Civil Affairs of the People's Republic of China forced Anchang Town in An County, as well as 6 villages (Changle, Hongyan, Shunyi, Hongqi, Wenquan, Dongyu) in Yong'an Town and Huangtu Town, to transfer to Beichuan County. In the same year, these 6 villages (Changle, Hongyan, Shunyi, Hongqi, Wenquan, Dongyu) were merged to form the new capital called Yongchang Town (Beichuan County government website)<sup>\*8</sup>. When considering the information above, residents in New Beichuan consist not only of survivors from Old Beichuan but also quite a few people from the former lands of Anchang Town, Yong'an Town, and Huangtu Town.

### *(2) Survey methods, contents, and purposes*

Besides looking into related documents in newspapers and the Internet, we physically visited the sites and conducted observations and interviews in June of 2014 and August of 2015. We conducted our survey activities upon receiving permission to use the contents, materials, photos, etc. from the interviews, after explaining that we would respect our interviewee's privacy, as well as the purpose and contents of our survey. The contents of our survey included awareness towards disaster tourism, motivation for sightseeing, how the sightseeing changed disaster awareness, problem points, and a vision for the future. Through this survey, we elucidated whether or not disaster tourism successfully fulfilled the role of disaster education. As a reference, prior to this survey, we obtained permission from the research ethics committee of the Global Human Study of Graduate School of Human Sciences, Osaka University.

### *(3) Target of the survey*

The interview was conducted to residents in Leiguzhen and Renjiaping, which are adjacent to New Beichuan and Old Beichuan, as well as the Beichuan Earthquake Ruins Museum personnel and tourists in New Beichuan and Old Beichuan.

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<sup>\*8</sup> Beichuan County website (<http://www.beichuan.gov.cn/index.php?m=content&c=index&a=lists&catid=259>, <http://www.beichuan.gov.cn/html/zjbc/bcgl/xzqh/>Date of Access: August 15<sup>th</sup>, 2015)

Since this survey was conducted in order to elucidate the effectiveness of disaster education which utilizes disaster tourism in Beichuan County, interviews targeted two categories of interviewees: Sichuan Earthquake experiencers and non-experiencers. These interviews were then analyzed. The specific profiles of these interviewees are as show below in Table 1 and Table 2.

TABLE 1. Sichuan Earthquake non-experiencers

<i>Targets</i>	<i>Age</i>	<i>Gender</i>	<i>Occupation</i>	<i>Residence area</i>	<i>Notes</i>
A	20's	Female	Student	Guangdong province	
B	20's	Female	Hotel staff	New Beichuan	Out of Sichuan province during the onset
C	40's	Female	Hotel staff	New Beichuan	Out of Sichuan province during the onset
D	20's	Male	Student	Beijing city	
E	20's	Female	Student	Shanxi province	
F	50's	Female	House wife	Jiangsu province	Group sightseeing
G	60's	Male	Self-employed	Jiangsu province	Group sightseeing
H	30's	Male	Office worker	Anhui province	
I	60's	Male	Retired	Anhui province	
J	30's	Female	Volunteer	New Beichuan	Not from Sichuan
K	20's	Male	Volunteer	New Beichuan	Out of Sichuan province during the onset
L	30's	Male	Office worker	Hebei province	
M	10's	Female	Student	Chengdu city	Not from Sichuan
N	20's	Male	Student	Chengdu city	Not from Sichuan

(Created by the authors)

TABLE 2. Sichuan Earthquake experiencers

<i>Targets</i>	<i>Age</i>	<i>Gender</i>	<i>Occupation</i>	<i>Residence area</i>	<i>Notes</i>
O	40's	Male	Museum personnel	Old Beichuan neighborhood	
P	20's	Female	Museum personnel	Old Beichuan neighborhood	
Q	20's	Female	Museum personnel	New Beichuan	
R	30's	Female	Self-employed	Old Beichuan neighborhood	
S	20's	Female	Part timer	New Beichuan	
T	40's	Female	Part timer	New Beichuan	
U	30's	Female	Part timer	New Beichuan	
V	30's	Female	Self-employed	New Beichuan	Old Beichuan native
W	40's	Male	Self-employed	Old Beichuan neighborhood	
X	30's	Female	Self-employed	New Beichuan	Old Beichuan native, never been to the ruins

(Created by the authors)

## 6. Survey results and analysis

### *(1) The Beichuan National Earthquake Ruins Museum's actual status*

Traces of disaster such as land subsidence, landslides, and ground fissures have been preserved within the ruin preservation zone, and many remains such as destroyed cars and furniture on both sides of the road have undergone centralization and management. Remnants of government structures, such as county offices and police stations, as well as other remnants including stores and banks, have been preserved in their original states while being kept from collapsing through protective barriers. Experts periodically inspect the safety of all structural remnants. Many walls are marked with the word “sterilized,” which is a proof that sterilizing work has been conducted in order to prevent the proliferation of contagious diseases after the disaster. Explanatory items such as multilingual signboards, images of disaster and reconstruction, and electronic bulletin boards have been installed. Signboards in front of structural remnants display disaster information, including photos of pre-disaster states, the area of the affected site, number of victims, and some names of victims. The centralized graveyard is located on the foot of hill where the Beichuan Junior High School used to be. Before the earthquake, the ground there had been dug up for the purpose of constructing a building base. After the disaster, this location was chosen to be a cemetery so that bodies could be swiftly dealt with for the purpose of preventing post-disaster contagious diseases. Collapsing hillsides and falling rocks in conjunction with the earthquake destroyed the entirety of the Beichuan Junior High School. Because of this, only the students who were outside on the schoolyard for PE class at the moment of the earthquake survived. In the outer area is the well-known Beichuan hotel. From there, the residential area was visible from the other side. However, more than the half of said area was buried under the debris flow in 2008 and 2010.

The Earthquake Commemoration Building can be visited free of charge. The museum is a two story building, and the first floor exhibits photos of the condition of the disaster and the subsequent rescue activities, as well as actual objects from the disaster. Most of the second floor is exhibitions of the post-earthquake reconstruction policy, the reconstruction process, and reconstruction results by the Chinese government. One-to-one support for Beichuan County was provided by Shandong province, and many photos and explanations indicating how Beichuan County was reconstructed through the support are exhibited. The final section of the second floor's exhibition expresses post-disaster gratitude towards the support and relief aid given from all over China, as well as gratitude towards the nation of China and the Chinese Communist Party.

The Earthquake Science Experience Center is located next to the Earthquake Commemoration Building. Unlike the Earthquake Commemoration Building or the ruins, the Earthquake Science Experience Center charges 50 yuan per visitor (approximately 1,000 JPY at current value) for its admission which includes a fee for exhibition guidance. The Earthquake Science Experience Center focuses on the diffusion of knowledge of the earthquake, and operates on the theme of

“Feel the earthquake, learn about it, and love life (translated by the authors).” Disaster education is part of its objective. The building has six sections which consist of the “time tunnel,” “affected sites,” “explanation of earthquakes,” “fault transversal,” “disaster prevention preparation,” and “evacuation/rescue.” In the affected sites section, simulated scenes of the disaster are displayed to convey the feeling of how it was at the time of the earthquake. In the section for explanation of earthquakes, 10 of the largest earthquakes in the world are introduced, and explanations on the mechanism of earthquakes are exhibited. Based on this explanation, there is an analysis of causes of the Sichuan Earthquake, and some simple knowledge on ground deformation when an earthquake occurs, earthquake waves, faults, and premonitory symptoms of an earthquake are introduced. The exhibition regarding disaster prevention preparation begins with knowledge on earthquake-proofing construction and models. The final section, which is the evacuation/rescue section, provides exhibitions in various forms including 4D movies, quizzes using computers, and exhibition of emergency supplies.

Through the field work, we saw that signboards and panels installed in the Old Beichuan ruins and the Earthquake Commemoration Building had writings conveying respect and commemoration for the deceased, gratitude toward China and the Chinese Communist Party, and confidence for reconstruction. These writings were full of positive emotions such as “we will never give in to natural disasters.” We also felt that there were far less tourists in the Earthquake Science Experience Center than in the ruins and the Earthquake Commemoration Building. I assumed that this is due to the fact that there is an admission fee to visit the Earthquake Science Experience Center. Also, since the in-house guide moves fairly quickly, the explanations of the exhibits are abbreviated; in particular, the disaster prevention preparation and evacuation/rescue sections were fairly brief. For the reasons above, questions were raised on the effectiveness of disaster education.

## *(2) Content of the interviews*

### *1) Do you support preservation of the earthquake ruins and the development of disaster tourism in Beichuan County?*

Most of the interview targets supported the development of disaster tourism, especially with respect to preservation of earthquake ruins. In particular, Sichuan Earthquake non-experiencers answered that it was a good experience to have seen the scenery of the earthquake at the ruins and to have been able to feel the earthquake up close. Residents from New Beichuan will be said that they can pray for the victims when visiting Old Beichuan during our interview. Only two targets had negative opinions of disaster tourism.

A: I really hate disaster tourism. However, I am reluctantly visiting Beichuan County because my research theme is related to this area. I honor the deceased from where I live, through our customs and religion. I strongly believe that developing the affected area for tourism is disrespectful towards the victims.

J: I truly believe that not preserving the site is for the better. People can see only see how the earthquake affected the area, I think there isn't any other significant meaning. It is very heartless for the survivors from Old Beichuan. According to my experiences from my volunteering activities, I always consider how these survivors must feel when they see these ruins, because I know their wounded heart will never heal.

Sichuan Earthquake experiencers said that they are able to understand that Old Beichuan must be preserved due to the significant damage that the earthquake left. Many of the interview targets from the area adjacent to Old Beichuan responded that their "area is also uninhabitable and. can not be reconstructed." With regard to the significance of preservation, many targets said something similar to "it might become a serious experience for non-experiencers to visit the area."

X: I have never been back there (referring to Old Beichuan) since it was preserved. To tell you the truth, I don't want to go back. Old Beichuan doesn't mean anything to me. But visiting there means a lot to people like you who have never experienced a destructive earthquake. You might be able to see what we went through, there.

On the other hand, there were those that weren't convinced of the preservation efforts for Old Beichuan at the time the government decided upon them, but some of them have a deep understanding of them at present.

P: At the onset of the earthquake, I was still in primary school. I didn't really understand the reason for preserving this place. At the time, I couldn't imagine the concept of welcoming tourists here, either. Why would the government decide upon something like this? However, as I got older, my way of thinking gradually shifted. Preserving Old Beichuan has truly played a great role for the research of earthquakes, I think. Especially since I started working here, I have felt that way.

Both Target K, who is working as a volunteer, as well as Target Q, who is working at the museum, answered that preserving the ruins has proven to be greatly valuable for research.

Among the targets in this survey, not very many of them felt strongly against the disaster tourism in Beichuan County. Those who expressed resistance towards disaster tourism also explained their opinions from an ethical perspective. In any cases, the significance of preserving ruin is mostly superficially such as "people can see the situation" or "people can experience it."

2) *What made you visit Old Beichuan for sightseeing? What was the purpose of your sightseeing?*

There were two types of tourists who visited Old Beichuan: those who visited Old Beichuan as their primary destination of tourism, and those who visited only to stop by. For example, Targets F and G, who were participating in tour groups, said that they were "brought to Old Beichuan as part of a group tour, just as a stopover during the course of the tour route." Target

B answered that “Because I lost my relatives in the earthquake, I came to Old Beichuan to console their spirits. While I was there, I wanted to know what else there was to see. I might not be able to call this sightseeing in the strictest sense.” However, regardless of the reason for their visit, these targets mostly ended up saying that they “wanted to see the earthquake situation.” According to targets who were also museum staff members, targets P, Q and O, their everyday experience with interacting with tourists confirmed that tourists who come because they want to see what the earthquake was really like were definitely the majority. There were only 2 answers stating a desire to receive disaster education.

A: I have never experienced earthquakes, so I thought I could acquire knowledge regarding earthquakes through this visit.

M: Because I am at potential risk of experiencing this kind of disaster, I visited to learn disaster prevention knowledge.

### *3) Did you gain new perceptions of earthquakes through tourism?*

A lot of the targets’ answers with respect to their perception of earthquakes were: “earthquakes are too scary,” or “humans are ultimately powerless.” At the same time, regardless of whether or not the targets have experienced earthquakes, we heard many people express a “this is fate” type of opinion during interviews.

C: If you ever encounter a massive earthquake like this, just leave it to fate.

I: You shouldn’t worry about it because this kind of huge disaster only happens once every few decades.

S: If I ever have to experience a mega earthquake like this, I must be really unlucky.

U: Experiencing one earthquake like this is enough for one lifetime. There won’t be a second time.

From these responses, we understood that many targets felt deep fear regarding earthquakes. We then posed the following question.

### *4) Did you acquire any knowledge of earthquakes or disaster prevention methods through tourism?*

There were only two targets who answered yes to this question. They were targets A and M, who expressed their desire to undergo disaster education to the question 2) above. Targets other than A, M, the museum personnel, and the volunteers concluded that knowledge of earthquake and disaster prevention methods are ultimately useless because they feel that whether one encounters earthquakes or not is completely up to fate. They answered that they would live in the way that they had lived before, and wouldn’t bother to conduct disaster prevention preparation, etc.

B: Disaster prevention won’t do any good for these types of mega earthquakes.

S: I survived the Sichuan Earthquake without conducting disaster prevention, so I don’t have

to acquire knowledge of earthquakes or disaster prevention methods.

F: Observing the situation is enough. I don't believe that I will come across an earthquake like this, so there is no need to study.

Targets O and P, described tourists they have met during their duties as follows.

O: In the Earthquake Science Experience Center, there are not many visitors who seriously play the quizzes regarding disaster knowledge or observe the disaster prevention goods. Because kids are interested in the 4D films in the experience center, many families bring their children to see them. Over all, those who only watch 4D films are the majority.

P: Nobody pays attention to me even when I am explaining the cause of buildings collapsing. They are just taking photos.

From the observations above, it is fair to say that many targets—in particular, tourists who do not possess disaster awareness and do not desire to acquire earthquake knowledge or disaster prevention methods through tourism—have not improved their disaster awareness through tourism.

*5) Do you have any opinions regarding disaster tourism in Beichuan County?*

M: I was able to learn some things, but it was insufficient. Despite the great effort to preserve the earthquake ruins for the purpose of exhibiting the disaster scenery, there are no educational exhibitions. The Earthquake Science Experience Center should provide exhibitions that are easier to understand and more interesting.

O: Many explanations are in the vein of “this building was originally some stories tall, but after the earthquake, only some amount of stories remains,” or “this building collapsed this way.” I feel little disappointed. I wanted more information on causes and preventive knowledge such as “the best way to evacuate in this case.” Blending the preventive quizzes and exhibition of the disaster scenes together and letting tourists interact with earthquake knowledge would be more helpful for tourists to learn about earthquake knowledge.

As a conclusion, it can be seen from the above that the exhibitions used in disaster tourism in Beichuan County do not resonate with in tourists.

## 7. Conclusion

This research discussed disaster tourism in Beichuan County, and analyzed the actual status of disaster education.

The authors felt overwhelming hopelessness when we visited the exhibitions at the Old Beichuan ruins. The ruins can be described as a devastating view which is unique to disaster tourism. From the outcome of our interviews, we can assume that tourists felt a similar sense of hopelessness. This exhibition can be said to be something which delivers memories of the time



of the disaster as well as memories of times directly after the disaster to visiting tourists. Additionally, our interviews with the tourists showed that tourists primarily fell into a deep sorrow, and felt fear for these massive earthquakes. We were also able to confirm the empathetic feelings that the tourists felt towards the survivors. However, despite interacting with these memories, tourists are not yet opening their eyes to disaster awareness such as the importance of disaster prevention. A majority of the exhibitions were dominated by reconstruction achievements post-disaster, as well as future outlook. Exhibitions regarding what caused the earthquake damage were nonexistent. We believe that it is not appropriate to attribute all the severe damage from the earthquake as a result of a “natural disaster.” The Sichuan Earthquake involved a multitude of human errors, including the insufficiency of earthquake resistance for buildings, carelessness of rescue efforts, and lack of disaster education as Wang and Otani have mentioned (Wang, 2009 & 2012). From this point of view, displays of causes due to human errors, as well as displays that examine and reflect upon these human errors were largely missing in the exhibitions. Following this logic, it is natural to consider that tourists were led to be convinced that rescue and reconstruction efforts are the most important disaster measures to take after the onset of “natural disasters.” On the flip side, the mindset that it is essential to address and take measures for earthquakes to reduce damage before their onset is not conveyed to these tourists. This might result in tourists adopting a state of mind in which they feel fatalistic about earthquakes, as was indicated by the interviews.

A large portion of earthquake non-experiencers do not understand that disaster tourism in Beichuan County plays the role of disaster education. This survey elucidated that very few tourists visited Beichuan County for sightseeing with a sense of disaster awareness. In other words, it is fair to say that disaster tourism can be something for tourists to participate in for the purpose of observing the actual site post-earthquake and to feel the sorrow caused by said earthquakes. From the perspective of the tourists, however, it can be said that their intentions for participating in disaster tourism is to fulfill their own curiosity. For non-experiencers of the earthquake, there are differences between disaster tourism and ordinary tourism, but this difference is no more than just a difference in scenery. When touring ruins, non-experiencers were able to feel the post-earthquake memories, but they were not aware of the lack of memories pertaining to disaster preventative measures which were brought about from these memories. In short, these non-experiencers were not aware of their lack of awareness with respect to disasters. In the end, they accepted the reason for the disaster as “fate.” Moreover, since non-experiencers already possessed a lack of awareness toward disaster from the start, they did not show much interest in exhibitions related to earthquake disasters or preventive disaster knowledge in the Earthquake Science Experience Center. For these non-experiencers, what they experienced at the Earthquake Science Experience Center was considered as something “fun.” In other words, non-experiencers were not aware that the Earthquake Science Experience Center was a place of learning. However, the survey revealed that non-experiencers of the earthquake who originally

possessed disaster awareness improved their awareness through disaster tourism.

Earthquake experiencers visit the Beichuan Earthquake Ruins Museum for various reasons. This research elucidated the fact that visiting the Beichuan Earthquake Ruins Museum leads to disaster tourism. Those traces, ruins, and remains are directly linked to the memories of sorrow and pain. Therefore, disaster tourism conjures these memories of pain and sorrow again for earthquake experiencers. This forces the experiencers to reconfirm their own pain, and which in turn magnifies the sorrows brought about by disaster tourism. According to the interviews, experiencers seem not to be able to let go of their memories, and are resigned to live with them as lifelong memories. While they appreciated the government for its massive rescue policies and successful reconstruction policies, they were not aware of the fact that human errors caused disaster damage at the time of the interviews. Consequently, the memories of earthquake experiencers that were brought back through disaster tourism will only be remembered as the memories at the time of onset and right after the earthquake, and their consciousness related to prevention will not be proliferated at all. Disaster awareness has not drastically improved compared to awareness before the earthquake. As mentioned, since the earthquake experiencers lack disaster awareness, though they vaguely recall emotions of the disaster when they participate in disaster tourism, they are more motivated by the government's propaganda towards patriotic education and neglect to reflect on their own conduct.

When considering the survey as described above, there are still many issues to be addressed regarding disaster education as a result of disaster tourism in Beichuan County. It is fair to say that the disaster tourism there does not play the role of disaster education. There are two issues which hinder disaster tourism from playing this role. Firstly, tourists have a low level of disaster awareness, or they do not have the intention of learning disaster education during disaster tourism. Secondly, disaster tourism exhibitions in Beichuan County do not resonate with tourists, and do not improve disaster awareness.

Since this survey was conducted only twice and in short visitations, and because the targets were limited, it is difficult to say that it was sufficient. There were not many targets who were natives of Old Beichuan, nor were there interviews conducted with higher-level officials of the Beichuan Earthquake Ruins Museum. In the future, it is necessary to conduct surveys that target a much broader variety of individuals using a more objective method compared to this one.

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