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Disaster Memories in Museums and Disaster Recovery -Disaster Reduction Institute and 1995 Hanshin-Awaji Earthquake Recovery -

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Abstract

This paper discusses the role museums play in disaster recovery, particularly how they collect, preserve, and share disaster memories. Natural disasters occur suddenly, and have the power to destroy cities and leave tremendous physical damages. In the case of an earthquake, cities are covered with collapsed buildings or debris immediately after the event. However, no matter how severe damages are, damaged buildings are removed, new buildings are constructed, and physical damages disappear little by little. As recovery goes on, the physical remnants of the disaster disappear and people who have experienced the disaster start to forget what happened.

In order not to forget disaster memories, disaster museums collect disaster-related artifacts to preserve and share disaster memories. In Japan, there are more than 60 disaster museums, and some also perform research on disasters. However, the establishment of such museums create controversy; some people want to preserve disaster memories because they consider the event they have experienced was historically important, while others prefer to forget such tragedies. This makes the process difficult. The act of collecting and preserving memories also involves selecting and reconstructing the meanings or values of objects related to the disaster, a process which is influenced by dominant groups such as a state governments that may use its power to exclude some objects.

This paper reviews the concept of disaster memories and the existing literature on such memories. It then analyzes the establishment process for disaster museums, focusing on the establishment of the Hanshin-Awaji Memorial Disaster Reduction Institute (DRI) which was created after the 1995 Hanshin-Awaji Earthquake, Kobe, Japan. The DRI was established in 2002, seven years after the earthquake, by the Hyogo prefectural government and the national government of Japan. Currently, it has 190,323 artifacts of the Hanshin-Awaji earthquake and about 500,000 visitors visit per year, making it one of the largest and most important disaster museums in the world. Finally, the paper discusses characteristics of disaster memories in DRI and its role in the disaster recovery process.

Keywords: disaster museum; disaster memories; collective memory; Hanshin-Awaji Earthquake

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1. Introduction

This paper discusses how disaster memories are collected, preserved, and communicated in disaster museums, and the role museums play in disaster recovery. Natural disasters occur suddenly, destroying cities and causing tremendous physical damage. When a disaster such as a mega earthquake occurs, many people living in the area experience it. Although these people experience the same event, people's memories of it differ. Some may remember their fear of the sudden and tremendous shaking of the earth, while others remember harsh living conditions in evacuation shelters or the difficulties they faced in reconstructing housing.

Immediately after an earthquake, a city is covered with collapsed buildings and debris. This scenery changes as time passes; debris is removed and collapsed building are reconstructed. As recovery continues, the physical remains of the disaster disappear, and people who have experienced the disaster start to forget what has happened.

For this reason, disaster museums have been established to assist with the recall and sharing of such memories. In Japan, there are more than 60 disaster museums which collect, preserve, exhibit, and conduct research on disaster memories. At the same time, the establishment of disaster museums has caused some controversy; some people want to preserve disaster memories because they believe such events have historical importance, while others prefer to forget such tragedies. Collecting and preserving memories also involves selecting and reconstructing the meanings or values attached to the disaster, which may be influenced by dominant groups, such as a state government that wishes to use its power on the proper objects.

This paper examines the formation and inheritance of disaster memories by focusing on the role of disaster museums. Disasters are transient events, and even if they cause great damage, memories of them gradually fade over time. It has long been a practice in Japan to preserve memories of disasters through representations such as texts, monuments, anniversaries, memorial ceremonies, and historical materials, and disaster museums are the latest mode of representation in this tradition.

2. Realms of Memory

Disasters are impermanent events. No matter how grave damages were, people who experienced a disaster get older year by year, and more people who did not experience it are born. Collapsed buildings are reconstructed, debris is removed, and it becomes difficult to see visible traces of the damage. Even people who experienced the disaster forget about it. Time only travels forward. In order to remember a disaster, people build monuments with the engraved names of disaster victims or messages communicating the lessons learned from disasters.

One influential study in the field of memory is Pierre Nora's a *lieux de mémoire* (sites of memory) [1]. The study focuses on the places in which memory is crystallized; monuments, museums, novels, photographs, movies, anniversaries, or memorial event. According to Nora, "*lieux de mémoire* exist because there are no longer any *milieux de mémoire*, settings in which memory is a real part of everyday experience[1]". *Lieux de mémoire* arise out of a sense that there is no spontaneous memory, so that people must create archives, mark anniversaries, organize celebrations, pronounce eulogies and authenticate documents. Nora traces French History through *lieux de mémoire*, distinguishing "memory" from "history." Memories exist in living people, and thus they always change naturally. On the other hand, history tries to reconstruct what does not exist anymore, when these memories disappear completely. There is a transition from the first, immediate form of memory to the second, in direct form. The transition from memory to history requires every social group to redefine its identity by dredging up its past. Nora writes three aspects of sites of embodied memory: the physical, the symbolic, and the functional. Morimura elaborates on these ideas by stating, "a site of memory is where collective memories are, and it has strong connections with the formulation of the identities of people who experience those memories[2]." If the group that creates a site of memory is large, such as a

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nation, memories preserved at that site may be abstract and diverse. The site of memory created by a nation tends to create memories intentionally, connecting memories with that nation's identity.

With all this in mind, what are the sites of disaster memory? Japan has a history of disasters, and there is a large number of disaster monuments, books, archives. Nankei Tachibana, a medical doctor and novelist, wrote about one such monument. 80 years after the 1707 Houei earthquake/tsunami, he visited the Bukkoji Temple and there he found a monument with a plaque that read: "Due to tsunami, the town of Nagashima and the neighboring towns were flooded. Many people drowned. In case of a big earthquake, run away to the top of the mountain[3]." Tachibana wrote in his novel that this message is easy to understand, and if we want to communicate knowledge, it is important to use easy-to-understand language. Unfortunately, the town later suffered the 1854 Ansei Tounankai earthquake/tsunami as well, and another monument enshrining the evidence of the tsunami was built. This shows that constructing monuments or engraving messages on monuments is not enough to mitigate further disaster damage, if it does not function as a site of memory.

After the 1933 Sanriku earthquake/tsunami, occurred in East Japan (Tohoku), the famous Japanese physicist Torahiko Terada wrote an article about the Sanriku tsunami monument. He had heard from his friend who visited the tsunami-damaged area that a monument built after an 1896 tsunami had broken into pieces, and it was impossible to read the engraved messages. Of this, Terada said, "Some may insist on building monuments to engrave eternal messages of warning. However, those monuments are initially installed at good places, but gradually the location changes due to nearby road construction or city planning, and under rainfall or heavy winds, writing is erased and finally buried under bushes. At that time, an elderly person may warn that a disaster should be prepared for, referring to past disaster experience; however, maybe few people will care about those messages. Probably around that time, the next disaster hits[4]."As Terada observes, building monuments and engraving messages for future generations does not always prevent memories from being forgotten.

These two cases show that, historically, efforts to transfer past disaster experience were made by building monuments or engraving messages. However, engraved messages were not communicated effectively because they did not function as sites of memory. Function is thus a requirement for memory transference. *Lieux de mémoire* are created by the interaction between memory and history. To make a sites function, it is important to establish communication among people who hold memories of something and the people who do not.

3. Disaster Memory Collection after the 1995 Hanshin-Awaji Earthquake

3.1 Activities for the collection and preservation of disaster memories

If memories are diverse and ever-changing, what memory can represent a disaster? This section discusses the activities related to disaster memory collection and preservation that took place after the 1995 Hanshin-Awaji earthquake, and discusses the characteristics of the disaster memories collected.

At 5:46 am on January 17, 1995, a strong earthquake struck the Hanshin area stretching from the Awaji Island and coastal area of Hyogo Prefecture to Osaka in central Japan. The earthquake killed 6,434 people and injured 43,792. The magnitude was 7.3, with a maximum seismic intensity of 7. The Japan Meteorological Agency named the earthquake the "Hyogoken Nanbu earthquake," but the government named the disaster "The Great Hanshin-Awaji Earthquake," after a decision by the Cabinet on February 14, 1995.

The tremendous power of nature and the fact that many people were killed in a sudden earthquake impacted the citizens greatly. Some believed that this disaster would have historical importance, so it was therefore important to preserve memories. Several memory collection activities were begun immediately after the earthquake by local government, university, and volunteer institutions.

The Hyogo prefectural government began to prepare the "Document and Memories of Earthquake and Reconstruction" archive, in October 1995, and they made a contract with the Hyogo Earthquake Memorial

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21st Century Research Institute for this task. Books, pamphlets, personal notes, personal narratives, leaflets and flyers, wall newspapers and notes from evacuation shelters, and notes from community centers were collected [5].

The Kobe University Library also started to collect a variety of materials in April 1995, four months after the earthquake. Materials such as flyers, posters, resumes, newsletters, photos, videos, and recordings were collected. Later, more materials were created by the employees [6].

Additionally, the Great Hanshin Earthquake NGO Relief Liaison Committee, which was coordinating the volunteer groups gathered in Kobe from all over Japan, set up a library to keep records of the activities related to the disaster [7].

Finally, schools and monuments with the names of victims engraved on the surfaces were built in various parts of the city to commemorate these victims. As of 2001, 158 monuments had been built [8]. An "Earthquake Monument Map," which summarizes the information engraved on these monuments, has been created, and a "memorial walk" tour of a series of monuments has been created.

Those activities focused on the collection of various items that considered to represent disaster memories, without attaching any specific meaning to them. These collections were started during the process of disaster response and recovery, so at the time it may have been difficult to conceptualize the meaning of such items.

3.2 Establishment of the Disaster Reduction Institution

The Hyogo prefectural government began to discuss the creation of a disaster memorial center immediately after the earthquake. During an International Forum on Hanshin-Awaji Region Recovery which was held September 14th, 1995, the Director of the Institute of Public Administration, New York, David Mammen pointed out that like the Society for Tokyo Policy Research was established after the 1923 Kanto earthquake to research recovery policy, he recommended the creation of a new, similar research institute for the Hanshin-Awaji earthquake [9]. Like the Smithsonian Institution, which aims for "the increase and diffusion of knowledge," this new institution would not only collect, preserve, and educate using artifacts from the Hanshin-Awaji earthquake, but also research and communicate knowledge about disaster-related studies. The "Hanshin-Awaji Earthquake Memorial Project" started in 1995. The proposal for the creation of new memorial institution was approved in 1999 by the National Diet, and the institute was inaugurated in April, 2002, funded by the national government and the Hyogo prefectural government.

The new institute was named the "Hanshin-Awaji Earthquake Memorial, Disaster Reduction and Human Renovation Institution" (DRI). The original proposed name was the "Hanshin-Awaji Earthquake Memorial Center," but the national government pointed out that this name was too region-specific for an institution expected to contribute nationwide disaster research [9]. For this reason, the Hyogo prefectural government conducted a public poll to decide the name. The name was chosen with 7,612 votes; the word "Human" represents the importance of human lives and the joy of living, and "Disaster Reduction" represents the common, agreed-upon responsibility obtained through the experiences of the Hanshin-Awaji earthquake.

The creation of this new institution incited arguments about the exhibition of materials. First, there was disagreement about whether to integrate a film that reproduced the moment the earthquake occurred. One of board members of the Exhibition Preparation Committee mentioned, "I am sure it is not a real tremor. However, I am afraid to have the same experiences again." National government staff also had negative opinions of such a film. During an open forum for the preparation of a DRI exhibition, one participant commented, "I am a storyteller regarding the earthquake. No matter how precisely I talk about earthquake, it is difficult for children to understand the event as real. It is important to experience the tremor again. If they experience that tremor, then they might listen to our story." This comment was one impetus that led to the eventual integration of this film into the exhibition [9].

However, there were discussions regarding to the objective of preserving memories. Norie Kimura, the representative of the Archives for People in Kobe, wrote an article titled "Memorial and Disaster Prevention"

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in the organization's seasonal newsletter "Namazu" (or "catfish"), saying, "DRI betrays people's expectations and hopes. Memorial means remembering or commemorating. Since the beginning of the project, we considered the institution is aimed to collect memories or documents of disasters. However, the new official name gives the impression that there was a strong focus on disaster risk reduction, which means not only has the name changed but our expectations as well" [8].

The Archives for People in Kobe tried to find "true" disaster memories, and they started a new research project "Forum on memory, history and expression" to think about how to exhibit them. They started an exhibition named "someday, for somebody, a museum to share Hanshin-Awaji Earthquake disaster memory." Kasahara, a core member of the research team, wrote, "It is already difficult for those who experienced the disaster to experience the event again. Everybody is concerned about such people" [10]. He tried to find ways to share such a memory, which meant to sharing an un-shareable memory. The exhibit intended to share individual memories, different for each person, through an installation by trying to create personal attachments to these memories.

On the other hand, Yoshiteru Murosaki, a board member for the establishment of the Disaster Reduction Institution, insisted on the importance of communicating the severe reality for disaster memory transference[11]. Disasters are a tragedy. They are very cruel, and that is why they must be prevented. Disasters provide an opportunity to realize how vulnerable a people and society are. The Hiroshima Peace Memorial Museum, for example, shows the cruelty of war and atomic bombs, which provoke an adverse effect: the opposition to war. It is difficult for the victims' families to be forced to relive past disaster experiences, but it is important to face this difficulty and maintain disaster museums in order to protect future generations. Disaster museums are important to foster the determination necessary to reduce disaster risk.

These discussions demonstrate the differences among citizens' feelings about disaster memory. There were people who intended to collect individual memories without attaching a meaning to the memories. However, the memories exhibited in DRI were subsumed for the purpose of disaster risk reduction.

4. Exhibits in the Disaster Reduction Institution

DRI opened in April 2002. The building was designed like a crystal cube floating on water (Fig.1). The building's architecture has various meanings. The four sides of a building are covered with glass film, which aim to reflect surrounding scenery of the recovering town, hiding the building itself; this expresses the importance of uniting and helping each other [9]. The glass cube represents an ever-changing crystal, with steps extending from the center to the outside.



Fig. 1 – Disaster Reduction and Human Renovation Institution

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The building is floating in a basin to show the importance of water, as people suffered from lack of water during the disaster. Water in the basin circulates to the fountain located on the fifth floor, where there is a small patio serving as a space for commemoration. At the center of the water basin that surrounds the building, there is a monument displaying the text "5:46," the time the earthquake occurred. A list with the name of the earthquake victims is buried under this monument.

The building has seven floors, and the first to fourth floors comprise the Hanshin-Awaji earthquake exhibition space. Entering the buildings, visitors are guided to the fourth floor, then descend to see the exhibits on the lower floors. On the fourth floor, there are two theaters showing two different films. The first reproduces imagery of the moment the Hanshin-Awaji earthquake occurred. The second tells the story of a junior high school student who was rescued from under the debris but lost her sister. The story follows her life recovery process and the parallels with the recovery of Kobe. The exhibition space for significant objects from the disaster is on the third floor, the "Earthquake Memory Floor." Here, approximately 800 objects selected from 190,323 primary materials, including materials collected by the Hyogo prefectural government immediately after the earthquake and materials provided by citizens, are displayed on a wall of the room (Fig.2). Visitors are also able to see objects stored in a storage room behind the exhibition via a computer database.



Fig. 2 – The Earthquake Memory Floor in DRI

Some of displayed objects such as coins melted by the heat of the fire caused by the earthquake, a broken clock beneath a collapsed house, fragments of a collapsed building, notes on emergency supplies delivered to evacuation shelters, wooden benches from evacuation shelters, and music instruments made by broken pipes were likely to be thrown away during the reconstruction process. Although they were not worth as much money as the famous paintings or treasures conserved in other museums, every object here communicates a different disaster memory. By looking at them, visitors may see glimpses of the lives of other people: what they were doing and thinking at the time of the disaster. This is what makes the DRI a disaster memory museum.

Take, for example, the flute exhibit. It displays a flute that was bent, though the case was not damaged (Fig.3). The caption writes "result in such a tragedy. The father survived but the daughter died." It tells us that the flute belonged to 24 years-old daughter, who was a member of her junior high school's drum team and it was her favorite. Visitors can read more details about this flute using a provided tablet. The daughter loved the flute very much and always brought it with her. Her parents were divorced and the daughter lived with her father, but she was on good terms with her mother. She slept next to the flute on the day of earthquake. The flute was donated by a mother.

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Fig. 3 – "result in such a tragedy"

This example shows that there are memories attached to an object. Visitors who see the objects may recall such hidden memories by reading a story about the object, or touching it. Those who have similar memories may generate personal attachments to the objects; for example, parents with children who participate in the brass club or who play the flute may experience the Great Hanshin-Awaji Earthquake by referring to their own memories. However, such a memory does not appear automatically by looking at objects. In order to know attached memory, people have to read a tablet, or find ways to access it.

According to Halbwachs, a French sociologist who researched collective memory, there are two types of memories: internal memories in which the people who actually experienced the event recall it, and memories which are generated through contact with the outside world [12]. Objects in museums thus function as a medium to generate the latter type of memory.

In order to use objects to recall memory, the display method is a critical consideration. Regarding the display method of artifacts in museums, Yasuda uses the terms "retrospective" and "prospective," which are commonly used in the History of Thought [13]. Retrospective means to look upon it with today's perspective, while prospective means to look upon it as if one encountered it in the past. Although the balance between retrospective and prospective is important in memory-based exhibitions, they are mainly retrospective exhibitions. On the other hand, a prospective exhibition is one that recreates the moment as a whole, using as many objects as possible to reproduce the moment people lived in detail. Museums are making various efforts to preserve and communicate memories in this fashion. According to Crane, modern museum displays tended to "freeze time" achieving "a state beyond time" through the permanent display of the objects [14]. As for the DRI display, objects are arranged under certain titles, which means exhibits are retrospective and make it difficult to communicate memories.

On a message board in the DRI that displays comments from visitors, there was a comment from a nine-year-old girl that read, "I was born after the Hanshin-Awaji earthquake and do not know about the disaster but I found that people at that time made a great effort to survive. I will probably experience a Nankai Trough earthquake in the future, so I have to prepare for that." This message illustrates interesting points about people's sense of time. Those who have seen the DRI exhibition now know about the Hanshin-Awaji earthquake that occurred in the past, and may think about a disaster that might happen to them in the future. The exhibition thus not only brings a past memory into the present, but connects this past memory to the future. The museum intentionally demarcated specific moments, but the memories that each individual comes away with are not fixed to that time.

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5. The Role of the DRI after 25 years

Twenty-five years has passed since the Hanshin-Awaji earthquake occurred, and one-third of Kobe citizens are people who did not experience it. Moreover, seventeen years have passed since the DRI opened. With all this in mind, this section discusses the role that the DRI has played in this time.

During the past twenty-five years of recovery, collapsed buildings have been removed and new city developments have occurred. The DRI has become one of the few sites in Kobe city where one is able to trace disaster memories. Apart from the DRI, there is a part of Kobe Earthquake Memorial Park that contains physical objects such as a damaged embankment, bent lamp posts, and buckled piers. There are also the Hokudan Earthquake Memorial Park, the Nojima Fault Preservation Museum, which preserves the active fault, the fire wall that protected Nagata Ward, Kobe buildings that were relocated due to fire, and an earthquake damaged house next to the fault.

Being one of few sites for earthquake memory, the DRI attracts many visitors, an average of 500,000 per year. This number decreased in 2009 due to the bird flu pandemic, and increased after the 2011 Great East Japan Earthquake. Though it does not discuss the tsunami that ensued, there are many visitors who want to learn about disaster mitigation. On average, 67% of visitors are school students, of a young generation that was born after the earthquake, and do not know about the disaster. Looking at the motives for visiting the museum, the most common response is "I want to know about the Great Hanshin-Awaji Earthquake" (22%), followed by "it was part of a field trip" (10%).

The DRI has also become a core facility for Hanshin-Awaji earthquake memorial events and disaster risk reduction activities. An annual commemoration ceremony for the Hanshin-Awaji earthquake takes place in front of the DRI building on January 17th every year. At the ceremony, the Minister for Disaster Prevention and the Governor of Hyogo Prefecture participates with local people in a commemoration of the victims of the Hanshin-Awaji earthquake, and assures the importance of disaster risk reduction and mitigation. The name "Earthquake Commemoration Ceremony" was changed to "Hyogo Safety Day Gathering" in 2008, but the event continues as before. Moreover, the "1.17 Hyogo Memory Walks," a walking tour of earthquake-related monuments and city recovered set whose endpoint in the front of the DRI. There are many exhibition stands are also installed at the park next to the DRI. The "Kobe Disaster Memorial Observance" is another event which takes place at the DRI. It started immediately after the 1995 earthquake, and during the first ten years (1996-2005) focused on transferring the memories and lessons of the people who experienced the Hanshin-Awaji earthquake. It then changed its scope to transferring memories of subsequent disasters for the next ten years (2006-2015). Currently, it focuses on what actions need to be taken now based on the Hanshin-Awaji earthquake, and representatives from high schools and universities gather to discuss what actions they took back then.

The DRI is also known for capacity development for disaster management public officials. The "Disaster Management Training Course" is conducted twice a year by DRI researchers, and more than 10,000 public officials have completed this training course. The DRI has thus become an institution that not only collects, preserves, and exhibits artifacts from the Hanshin-Awaji earthquake, but researches and communicates knowledge through disaster-related activities and capacity development.

All of these shows that disaster museum function is not just to transfer disaster memories, but also to create a site to connect the past disaster event to the present memory. The DRI is now used as a core facility for several events related to Hanshin-Awaji earthquake, and the communication among people who hold memories of it and the people who do not provide an opportunity to create another disaster memory.

6. Disaster Memory and museum

This paper has discussed the role of disaster museum focusing on concept of memories of the Great Hanshin-Awaji Earthquake. The following characteristics of disaster museums can be seen through this study.

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First, the long history of disasters in Japan shows that there are many monuments, engraved names of victims, and displays of important lessons intended to communicate disaster memories. However, constructing monuments does not communicate memories if the monument itself is forgotten. In order to make the monument function as a site of memory, communication between the person who has the memory and the generation who does not have the memory of the disaster is important. The disaster museum also attempts to share memories through objects, but to do this it is important to find ways to use sentences or narratives to display objects in a prospective way. Creating this personal attachment to the objects for visitors is an opportunity to generate new disaster memories in this way.

Second, the disaster memory collection of the Great Hanshin-Awaji Earthquake was started right after the earthquake by those who thought the event was of historical importance. At first, people collected all kinds of objects without considering their specific meanings, as they considered this meaning too difficult to label. The establishment of the DRI was an attempt by the government to form a collective memory, with the end goal of reducing disaster risk. It tried to communicate the severe damage caused by the earthquake, in order to prevent it from happening again. However, this created a gap between citizens' conception of the event and the DRI. At first, the people from the community who experienced the disaster did not visit the museum because they did not want to re-experience such a horrible event. However, as time passed, public opinion has changed and it has become an important facility for education about the disaster. People not only from Kobe city but from all over the world visit the museum. It has become a facility to share the memories of the local community with people who do not know about the disaster.

Third, a disaster museum functions not just to raise public awareness through exhibits, but also to create a space for a variety of activities. The DRI is now used as a core facility for several events related to disaster risk reduction and the preservation and sharing of disaster experiences.

There are many disaster museums that are established during the disaster recovery process as a symbol of recovery. We must remember that the collection and preservation of painful and sad memories is difficult for disaster victims, but as time goes on less and less people will know about a given disaster. Those post-disaster generations must learn about the disaster through exhibits that share disaster memories with them, and disaster museums must therefore become sites of memory. Disaster memories are in this way a social phenomenon, formed by the people who make up a society, and this means it is up to all of us to reduce future risks.

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