

Chapter 31

Archival Science

Field of expertise: Disaster Archiving

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Summary

Before the Great East Japan Earthquake, there were no established methods for collecting, organizing, copyrighting, and publishing earthquake disaster records. There was also no environment in which disaster records could be used freely. However, 2011, which is the year the Great East Japan Earthquake hit, is said to be the beginning of disaster digital archiving. It initiated a big change in the handling of earthquake records, creating an environment in which many people can use the records.

Keywords: disaster records, disaster digital archives, copyright, disclosure method, utilization, oral tradition

Introduction

Efforts to preserve records of natural hazard induced disasters, such as photographs, videos, testimonies, and writings, had been done before the Great East Japan Earthquake, but there was no systematization or unified standards for collection methods, copyright processing, organization, and disclosure methods. In the aftermath of the Great East Japan Earthquake, a number of organizations collaborated to systematize and establish disaster digital archives.

1: Problems Revealed by the Great East Japan Earthquake

What happened?

The Great East Japan Earthquake caused seismic damage in the entire eastern part of Japan, and a huge tsunami swept through the coastal areas, washing away all the buildings and other structures. The landscape that we knew was lost. In addition, the accident at the Fukushima Daiichi Nuclear Power Plant caused widespread radiation damage, forcing people to leave the places they knew and evacuate to different prefectures. More than 20,000 people, including direct deaths, related deaths, and missing persons, were killed in this disaster. All of these factors combined to prompt individuals and organizations to start collecting records with various purposes, including preserving lost memories and landscapes, accurately communicating the reality of the

damage, preserving the lessons that made the difference between life and death as well as the records of recovery and reconstruction. Furthermore, on May 10, 2011, the Great East Japan Earthquake Reconstruction Design Council announced a proposal for the seven principles of the reconstruction initiative. Principle 1 proposed that "records of the earthquake should be preserved forever, analyzed scientifically by a wide range of academics, and the lessons we learn from these should be passed on to the next generation and disseminated both domestically and internationally" (Cabinet Secretariat, n.d.). This recommendation has rapidly accelerated record-keeping activities. Articles 7, 46, and 47-2 of the Basic Act on Disaster Management, which was amended in 2012, stipulates that "in order to raise the public's awareness of disaster prevention, it is the responsibility of residents to pass on the lessons learned from disasters, and that the national government, local governments, and disaster prevention organizations, including private businesses, are obligated to make efforts to provide disaster prevention education" (Disaster Management Cabinet Office, n.d.). This is related to the fact that each and every citizen is responsible for handing down the lessons learned from disasters.

The reality

After the Great East Japan Earthquake, various organizations such as local governments, research institutes, disaster mitigation organizations, companies, and libraries started collecting disaster records simultaneously. One month after the earthquake, the private company Yahoo! Japan Corporation launched the "Great East Japan Earthquake Photo Preservation Project" and began soliciting photos related to the disaster from the general public, which were published on the web in June 2011. In the same month, Google launched "Memories for the Future" to publish satellite photos taken before and after the disaster, and the site also began publishing photos provided by the general public. In the disaster-stricken areas of Miyagi Prefecture, the Miyagi Prefecture Lifelong Learning Facility, Sendai Mediatheque, launched the "Center for Remembering 3/11" three months after the disaster, and began collecting records of the disaster and provided support through video editing. Six months after the disaster, Tohoku University started the Great East Japan Earthquake Archive Project "Michinoku Shinrokuden" and started collecting photos taken by researchers immediately after the disaster. One year later, the Japan Broadcasting Corporation (NHK) released the "NHK Great East Japan Earthquake Archives," the first public release of news footage and recorded testimonies. In March 2014, Tagajo City, Miyagi Prefecture, became the first municipality to build a digital archive of the disaster. During this time, many other organizations, including the National Diet Library, Iwate Prefecture, Miyagi Prefecture, and Harvard University, set up digital archives of the Great East Japan Earthquake as well. More than 50 websites have been constructed, and in total, more than 4 million records of the earthquake have been made public.

2: Paradigms Destroyed by the Earthquake

Common knowledge of the past

Even before the Great East Japan Earthquake, there were problems with the disclosure and utilization of natural hazard records. The first is the issue of how to disclose disaster records, and the second is the issue of copyright. Before the earthquake, disaster records were rarely made available on the Internet, and only the bibliographic information of books and academic papers were generally made available. The only way to access this bibliographic information was to visit a library yourself or order a copy of the records. The original records of past disasters, such as

photographs, videos, testimonies, and writings, were often collected for individual purposes and published in the form of edited academic papers, journals, and testimonial collections. However, these original records were only processed with rights limited to individual purposes, making it difficult for others to use the records for other reasons. In order to use these records, it is necessary to present a new purpose to the copyright holder and process the rights again. In this way, disaster records were not freely available for use. Only individuals or groups who collected them, or the copyright holders themselves, could use these records.

Thus, before the earthquake, even if someone wanted to use the disaster records for disaster education in schools, it required a lot of effort and they were not easy to use.

3: A New Approach

The Great East Japan Earthquake changed the way we think about handling disaster records. The major trigger for this change was the start of the "Great East Japan Earthquake Archive", an infrastructure construction project by the Ministry of Internal Affairs and Communications in September 2012. This project involved establishing guidelines based on the results of the demonstration experiments for the construction of the Great East Japan Earthquake Digital Archive. Five organizations from four prefectures (Aomori, Iwate, Miyagi, and Fukushima) participated in the experiment. Aomori Prefecture implemented the "Aomori Digital Archive System" (later integrated with the "Aomori Earthquake Archive"), Iwate Prefecture implemented the "Rikuzentakata Earthquake Archive NAVI" (later transferred to the "National Diet Library"), Miyagi Prefecture implemented the "Michinoku Shinrokuden" of Tohoku University and the "Kahoku Shimpō Earthquake Archive" of Kahoku Shimpō, and Fukushima Prefecture implemented the "East Japan Earthquake Archive Fukushima [sic]". The digital archives were opened to the public on their respective websites in March 2013. The methods of collection, organization, copyright processing, and publication obtained from this demonstration experiment were made into guidelines (Ministry of Internal Affairs and Communications, 2013), and had a great influence on the subsequent earthquake digital archives. In particular, the earthquake records were open data so that anyone could freely browse them on the Internet, and that they can be used for non-commercial purposes, including for educational purposes.

In this project, the Great East Japan Earthquake Archive of the National Diet Library (nicknamed "Hinagiku") was opened to the public, and a portal site connecting the disaster digital archives of various organizations was opened to the public. In addition, the Edwin O. Reischauer Institute for Japanese Studies at Harvard University is the first overseas institution to release the "2011 Great East Japan Earthquake Digital Archive" (renamed the "Japan Disasters Digital Archive" in 2017), which, like Hinagiku, is also available as a portal site. The creation of a website that allows cross-searching on other sites, in addition to being published on a single website, has opened the door for users to access a variety of disaster records.

4. Achievements and Future

Since the Great East Japan Earthquake, there has been a major paradigm shift in the handling of disaster records, so much so that it has been called the first year of disaster digital archives. However, continuing more than 50 digital archive websites has been a major issue. Currently, some of the websites have been closed because of the challenge to maintain them. Digital archives require costs for maintenance and hardware updates. We must take these costs into consideration. In order to prevent records from disappearing with the closure of these

websites, the National Diet Library and Tohoku University are preparing a system to transfer these disaster records.

Digital archives of the Great East Japan Earthquake have influenced the current practice of keeping records of disasters, including the construction of digital archives of the Kumamoto Earthquake in 2016 and wind and flood disasters in the past and recent years.

Conclusion - from the author

It is important to accurately understand the reality of the Great East Japan Earthquake in order to pass on the stories and lessons of the disaster. In order to do so, it is necessary to see the actual records of the disaster and interpret them independently. We hope that Disaster Digital Archives will provide opportunities to do this.

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