Chapter 7

Rescue Simulation: Action Plan

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Introduction

Disasters occur annually across Japan, and the number of damaged cultural properties is endless. Sometimes, disasters directly damage cultural properties, such as destruction or defacement; at other times, facilities storing or containing cultural properties get damaged, even if not directly. In any case, we must rescue the materials as soon as possible. The risk of loss or damage if left unattended during a disaster is high; thus, it is necessary to move them to a relatively safe location at some point after a disaster occurs. It is essential here for the people who are to take on the rescue in a certain area to know when they should perform the work and what kind of personnel and equipment preparations are necessary.

Modern administrative policies include regional disaster prevention plans as well as other plans and manuals addressing various natural disaster risks, and administrators modify them according to the situation—for example, "hazard maps" created from the perspective of damage forecast and disaster risk reduction; "evacuation planning" establishing evacuation actions such as identifying evacuation routes and sites; an "evacuation shelter management guidebook/manual" defining the process from preparation to closure of the shelters; "disaster waste disposal plans" for the disposal of waste generated during a disaster; and a "memorabilia handling manual" aiming to return the victims' cherished possessions to them instead of disposing as waste. These have been developed to examine many issues that have arisen in past disasters and to make it possible to respond to similar situations in the future.

In the field of museum and cultural property protection, in some cases, actions in a disaster are still limited to confirming the condition of designated cultural properties; in other cases, a BCP (Business Continuity Plan) is unavailable, partly due to the limited number of staff responsible for disaster management. Although municipalities that have experienced major disasters usually have manuals, handbooks, guidelines, and the like in place in preparation for high risks in various areas of their administrative measures, they must also anticipate cases where the staff will not pass on know-how due to a change in personnel over time and other similar situations.

Hence, it is vital to continuously build and examine operational plans for disaster preparation in museums and cultural property protection. In this chapter, we examine activities that aim to establish disaster prevention and risk reduction management in municipalities, particularly at the city, town, or village levels, and to build consensus among related institutions, such as municipalities and private organizations, through simulations related to materials rescue in anticipation of a disaster.

1. Disaster Preparation Simulation

The plans and manuals prepared for a disaster often may not be followed exactly as described when a disaster occurs. However, the only way to react is, even if not perfect, through the process of exploring and developing the best possible actions by assuming possible conditions. This is why local governments responsible for disaster management activities, schools and companies that have long continued disaster prevention education, and community disaster prevention organizations develop such manuals.

It is necessary for us to "prepare", even in positions involved in the preservation of museums and cultural properties (both government and private).

The Aichi Prefectural Museum of Art holds "simulation meetings" for practical responses to expected situations in a disaster, and they repeatedly revise the response policy[1].

The Kanagawa Prefecture Museum Association holds "Comprehensive Disaster Prevention Planning Activities" every year; these include remote information transmission drills to consolidate information in multiple block units within

Kanagawa, and they set other conditions, such as the establishment of a system to enable backups if the pre-determined representative museum suffer from an accident[2]. In addition, they established a system to ensure that the staff can pass on know-how through continuous disaster prevention training, changing the personnel in charge.

In addition to museums, the administration of cultural property protection has widely started similar practices with the release of the "Cultural Property Preservation and Utilization Guidelines" in each prefecture. In fact, Gunma Prefecture has a section in its [Cultural Properties Disaster Prevention Guidelines] entitled "Disaster Preparedness Efforts: Creating a Disaster Prevention Plan" that states to "create a timeline in a disaster." The timeline is formulated by the Ministry of Land, Infrastructure, Transport, and Tourism and other ministries as a disaster prevention action plan related to disaster prevention and risk reduction actions[3], but Gunma Prefecture encourages cultural property owners and management organizations to formulate own timelines based on the flowchart, like *My Timeline*, an action plan for each resident.

In Kagoshima Prefecture, "Disaster Prevention, Crime Prevention, and Disaster Response" in its [Cultural Property Preservation and Utilization Guidelines] includes a section entitled "Providing Information in Online Workshops on Learning Skills and Knowledge for Materials Rescue in the Event of Flood Damage." They have held many workshops on disaster prevention of cultural properties and handling materials damaged by disasters. Now that the world is online, holding these workshops between remote locations has become more common.

Cities, towns, and villages that are directly involved in disasters need to ponder certain issues in recent years when dealing with disaster response for cultural properties, such as the possible inability to pass on knowledge and skills due to workforce shortages and transfers, including generational changes, caused by staff reduction and declining staff ratio. Sometimes, small municipalities cannot fill professional staff positions and instead assign their relevant tasks to the general administrative staff. Concerns arise about the decline of professional work not only in disaster response but also in museums and cultural property protection. Coordination in a wide regional area among municipalities and with private organizations such as Shiryo-Networks and Heritage Manager is also essential. Although, in many cases, municipalities take charge of both museums and

cultural property protection, the conditions for rescue activities are different for museums, which are specified public facilities, and for cultural properties, which are widely distributed throughout the local community; thus, individual response for each case is necessary. Moreover, local history research groups are shrinking due to the ageing population, and schoolteachers have become increasingly busy and are more frequently transferred, which makes it difficult for them to deal with local materials; therefore, we need to develop and nurture new citizen volunteers who can help in the local scene.

In this sense, we must explore various activities for rescuing cultural properties and materials during disasters— "protection of cultural properties" in general— to build consensus among government officials and the groups involved in such activities.

Thus, the Miyazaki/Kagoshima Shiryo Networks hold DIG (Disaster Imagination Game), a simulation training that anticipates disaster, as a workshop for understanding the know-how of information, personnel, and equipment that changes on a timeline, the maintenance of facilities for evacuation of materials, coordination with external organizations, and safety management, in anticipation of the materials rescue in museum and cultural property protection [Fig. DIG of materials rescue in a disaster]. We originally designed this as an operational training exercise for coordination among local Shiryo-Networks, where labor-force

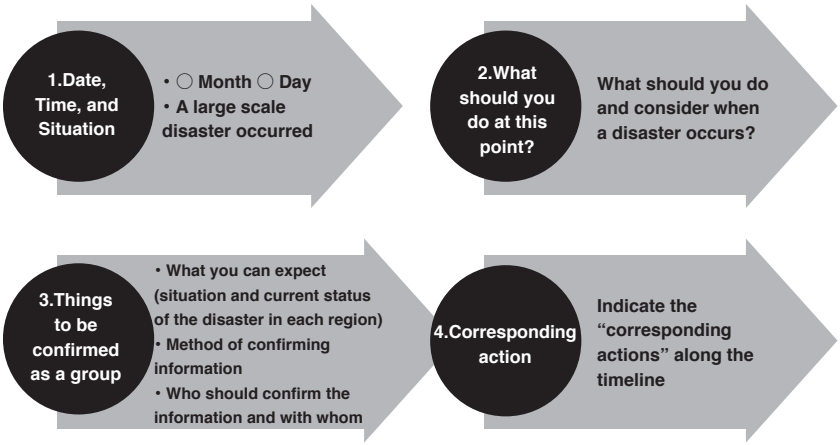

Fig.

shortages are common. However, in checking with persons in charge in municipalities from preparation to implementation and assessment, we found it easy for all parties concerned to grasp, understand, and share the necessary systems and issues in a disaster in the municipalities in question. Participants have confirmed their understanding of the “lack of preparation for disasters” and the “importance of cooperation from diverse standpoints,” and they have identified issues connected to manageing cultural properties in a disaster.

1.1. Attempting DIG

DIG was initially developed by the (then) Defense Agency’s National Institute for Defense Studies and Mie Prefecture in 1997 as a simulation of a municipality in a disaster, based on a command post exercise conducted by the Self-Defense Forces[4].

The objective is to prepare for disasters by examining methods of responding to one at a certain point in time and according to ever-changing situations. It has a wide range of applications, and currently, they often implement disaster prevention training for municipalities, volunteer groups, and other civic organizations all over Japan. The authors have applied this program to cultural property rescue with the advice of meteorologists and disaster prevention experts and have improved the program. Although we started it to confirm and strengthen the cooperative relationship between the two neighbouring prefectures of Miyazaki and Kagoshima in southern Kyushu in a disaster, we have extended it to municipalities protecting cultural properties, museum curators, lifelong learning institution staff.

Our DIG consists of three major phases: <preparation>, <implementation>, and <assessment>. Below are the specific steps for each phase.

1.2. Preparation

In the preparation phase, we decide the workshop's purpose, implementation timing, target, and the type of disaster targeted and prepare accordingly. Our workshop's mission is simple: "to transport materials from the disaster-stricken area to a safe place," we can change this to any other mission. It would be more effective to plan the timing of the workshop based on the season when weather disasters are most likely to occur and when earthquakes and tsunamis have oc-

curred in the past.

The setting assumes the largest disaster that has ever occurred in the target municipality or region. Participants should, of course, use hazard maps and other topographic maps as references, but to establish a timeline, they must understand the progress on the disaster's time axis [Table]. In the case of weather disasters and earthquakes, the Japan Meteorological Agency discloses the chronology of the disaster since its occurrence. Information related to the maintenance of class A rivers is available at each region's river and national highway office affiliated with the Regional Development Bureau of the MLIT, where we can check the location of past disasters, records of rising water levels, and direct causes of disasters. Moreover, it is beneficial to read municipality magazines and disaster record magazines (if published) as resources for municipality information. With the cooperation of the crisis management division, these magazines can provide information on timelines documenting the municipality's response to disasters. Municipalities have fewer records of disasters from older periods, such as the Showa period (1926–1989), but we can utilize information from public information in the past and newspapers of that time. However, regarding a Nankai Trough earthquake, records that meet modern standards are limited; we need to pay attention to writing scenarios. Although records can help us understand not only the occurrence of disasters but also how municipalities and communities responded to them, when setting up a timeline as a scenario, since old disaster responses are different from the modern administrative countermeasures, we should modify the contents in the light of the current situation, even if only partially.

We examine a material rescue system along with the timeline. This includes checking the location of materials at high risk of being damaged, securing human resources, establishing a communication system, and setting up temporary storage after transportation. At this stage, we reaffirm the extent to which the relevant local material rescue system is organized. In particular, after the Great Heisei Mergers, even in the same municipality today, differences remain in the sense of land and understanding of the local communities, such as between the main office and branches of the former municipality, and we are often reminded of the need to confirm the conditions related to the materials rescue.

Table　Rescue timeline of materials based on past typhoon disasters
(from a case study in Takanabe Town, Miyazaki Prefecture)

[Premise]

On 19 September 1983, a weak tropical cyclone formed over Chuuk Lagoon and developed while moving west-northwestward, becoming Typhoon Forrest over the ocean south-southwest of Guam on 21 September. It rapidly developed into a ferocious typhoon with a central pressure of 885 hpa and maximum wind speed of 55 m/s over the ocean 1,000 km southeast of Okinawa on 23 September. Its direction changed from north to east in the northern East China Sea from the 26–27, gradually weakening as it moved eastward and making landfall near Nagasaki City at around 10:20 am on the 28. After making landfall on Kyushu, it accelerated its speed and moved eastward, crossing central Kyushu, and becoming an extratropical cyclone near Sukumo City, Kochi Prefecture on the 28. This low-pressure area then increased its speed and moved eastward over the southern sea of Honshu, and at 9 am on the 29, it advanced to a location about 450 km east of the Kanto region.

A fall rain front that had stalled over the southern Sea of Japan as the typhoon moved northward became active on the 25, and strong rains began to fall mainly over the Pacific Ocean side of the Kyushu-Kanto region. Heavy rains fell mainly in Kyushu and Shikoku from the 26-27, and the passage of the typhoon caused widespread heavy rains from Shikoku to Kanto. "Linear rainbands," as they are called in current meteorological terms, may have occurred in many areas.

This typhoon caused damage in 38 prefectures, and in addition to flooding and landslides from mountains and cliffs, notable drowning accidents occurred involving schoolchildren due to rising water levels. Many large and small rivers rose or were flooded, and considerable damage was made to transportation facilities.

[Damage]

The Miyazaki area was initially hit by the typhoon.

Torrential rains hit Nichinan City and Kushima City on the 26, and on the 27, small and medium-sized rivers overflowed one after another, mainly in Miyazaki City and Koyu district, causing a series of flood damage. In Takanabe Town, 85 mm of heavy rain fell between 3 and 4 am on the same day, causing the river to overflow in areas along the Miyata River. Floodwaters spread toward the Shiota River, which branches off from the Shiota sluice gate on the left bank of the Miyata River. The closing of the flood gates caused the water in the Shiota River to come to a standstill, making it flow back into irrigation canals and drains, flooding the center of town. In areas such as Matsubara-cho, Asahi-dori, Tokamachi, and Ikada district, 136 households were flooded above floor level and 445 households below floor level, and three households were partially damaged. The rainfall from the time it began on the 25 until 6 am on the 28 amounted to 494 mm.

Water from the Miyata River often flows back toward the Shiota River, causing the city area to flood, which also occurred with Typhoon Trami in September 2018.

Dates	Time	Timeline based on 1983 weather conditions	Situation	What should you do at this point?	What should be confirmed as a group	Reference materials to be prepared
25-28 Sep		Rain continues from midnight throughout Miyazaki Prefecture due to the approach of the huge typhoon from the 25	In areas such as Matsubara-cho, Asahi-dori, Tokamachi, and Ikada district, 136 households were flooded above floor level and 445 households below floor level, and three households were partially damaged.			
		Heavy rains in Kushima and Nichinan City on the 26				
		Torrential rains mainly on Miyazaki City and Koyu District on the 27				
		The typhoon passes through after making landfall near Nagasaki City				
		The total rainfall in Takanabe from the 25–28 reaches 472mm				

		A disaster response headquarters was established for precautionary measures.				
		The Nippo Line was closed early in the morning, and many trains were suspended. Both inbound and outbound lanes of the Kyushu and Miyazaki Expressways were closed to traffic.				
29 Sep		Many public institutions were suspended. According to JR Kyushu, all lines in Kagoshima Prefecture were suspended—particularly the Nippo Line, which had been cut off by landslides and other issues. This was expected to affect a total of 80,000 people in all prefectures on both the 6 and 7.	The typhoon passed through, and the full extent of the damage came to light. Inland flooding occurred due to the closing of the flood gates from Miyata River to Shiota River. Since there was information that several historic buildings and public facilities in the city are being flooded, the City Cultural Properties Division staff went to confirm. ⇒ Two warehouses, including the former Meirin-do library on library grounds, and a historical building managed by the Council of Social Welfare (the old SUZUKI Masaya villa, a registered tangible cultural property) were found to be submerged in water/it was speculated that the historical materials in these places may have been damaged.	• What should you implement when confirming the situation and communicating information? • What should you prepare and expect during this period?	• What should be the methods and objects when confirming the situation, and how should you handle correspondence with the agencies concerned? • To which groups of people should you send the information on the whereabouts of the materials? • How should you consolidate information at this stage? • How should you secure and allocate the personnel and materials? (Which groups of people? What is necessary?)	• Flood Hazard Map and Landslide Disaster Prevention Map
30 Sep		Start of acceptance of bulky garbage due to disasters	With the start of the acceptance of bulky garbage due to disasters and the establishment of volunteer centers, cleanup work begins simultaneously in the affected areas.			
		Establishment of volunteer centers				

1 Oct			Municipal employees were given priority in managing evacuation centers; thus, work on cultural assets was postponed to a later date. However, since the Council of Social Welfare had jurisdiction over the old Masaya Suzuki villa, they offered to coordinate its cleanup with the Board of Education as it was a registered tangible cultural property. The Council of Social Welfare requested that the building be cleaned as soon as possible, especially with the removal of tatami mats and the removal and drying of sludge that had accumulated under the eaves.			
3 Oct			A plan was made to remove the materials from the affected areas. The materials were to be moved to the general gymnasium archery field.			
5 Oct		**JR Kyushu suspended all train service until the morning of 5 October. Power and phone outages remained in some areas of the prefecture. Some sections of the Kyushu Expressway and national roads also remained closed. Many major roads, including prefectural roads, were closed or have only one side of traffic open.**	Ascertain damage information while determining the timing of on-site materials rescue		● How should you confirm the safety of the site? ● How should you confirm the travel route? ● What precautions should you take for the staff? ● Shouldn't you reconsider the travel route?	● A travel route map to Kagoshima, Miyazaki, Nobeoka, and around Koyu District would be useful.
			The library staff kept the doors of the warehouse open during the hours when they were able manage the collection and dry out the room. Water damage to the materials was confirmed during this time.			

6 Oct			The Council of Social Welfare contacted the Social Education Division about the condition of the interiors of the old SUZUKI Masaya villa, confirming that the fusuma was partially damaged by water and that a piece of paper with words written in them was affixed to it.			
			Preparations were made for the treatment of waterlogged materials.			
			Coordination with the Miyazaki Prefectural Board of Education and the Miyazaki Shiryo-Network for technical and material support was ensured.			
8 Oct	8:00		Town staff and Miyazaki Prefecture/Shiryo Network Members who could participate in rescue activities gathered in front of the Takanabe Town History Museum. Everyone moved to the site after role assignments were confirmed (car and pull cart).	● What should you do when travelling to the site and after arriving?		
	9:00		Rescue activities begin. Water damage to materials is greater than expected.	● What do you need during record keeping? ● What should you do when the work ends, during transportation and storage?		
	10:30		● Records were created if possible, then the materials are moved out. If creating records is difficult, photographs of the situation are taken, and the materials are moved out. ● The condition of the materials varies, with some identified as partially muddied and others as relatively lightly muddied.			

			⇒ Checked for items that have begun to dry with mud stuck on them, or records (photos, etc.) that have begun to deteriorate due to foul odors, mold, or bacteria. • Difficulties were observed in moving and temporarily packing materials from the site, and by 3pm, workers were fatigued. The removed materials were taken to the parking lot. Workers temporarily packed and loaded materials into vehicles in the parking lot.			
	16:00		Work ends at the site.			
	17:00		Materials are transported and placed in temporary storage.			

1.3. Implementation

The reasonable number of participants in the workshop would be 4–7 per group. Groups unfamiliar with the workshop may not know the procedure, in which case, a table facilitator[5] can facilitate the process.

The organizers prepare a map of the target area (enlarged to A1 size), a hazard map (about A3 size), records of past disasters, pens (water-based and oil-based fine-point ones that can write clear letters), sticky notes (square, preferably with solid adhesive, at least two colours), thick mounting paper (A3 size) to attach sticky notes printed (see below), transparent sheets for writing (writing sheets or a whiteboard), a projector, and a PC. The projector projects the timeline created with PowerPoint on one side of the screen and a hazard map (MLIT's "overlapping hazard map" is helpful but needs a network connection) with targeted points on the other. Desks are arranged, and the enlarged map, hazard map, and sticky notes are placed on top. Having a transparent sheet to write on overlaid on the map is functional. Moreover, the timeline should be tabulated and distributed to each table for easy reconfirmation of the participants.

Along with the primary facilitator who oversees the entire process, having an expert in conservation science or conservation and restoration as an advisor can provide a broader knowledge of material preservation and more persuasive ex-

planations. At this time, the organizers should be ready to present helmets, masks (DS2/N95 or their equivalent), dust-proof glasses, and nitrile gloves, which will be required during the rescue.

The primary facilitator explains the workshop's content and develops scenarios according to the timeline. In addition to confirming the situation during the disaster, the damage and response, and the restoration status of the affected areas and roads, the facilitator states that materials were damaged and need to be rescued; moreover, they talk about the process from preparation for implementation and the actual rescue of materials to moving them out and setting them in a temporary storage area.

The organizers ask questions now, and the authors have chosen the following three questions.

Question 1: What should you implement when confirming the situation and communicating information?
What should you prepare and expect during this period?
Question 2: What should you do when travelling to the site and after arriving?
Question 3: What do you need during record keeping?
What should you do when the work ends, during transportation and storage?

In this way, we ask participants to examine the "actions they should take, their response behaviours," to describe them on the sticky notes, and then paste them onto the A3-sized questionnaire [Photo.1: Ideas written on sticky notes are pasted onto the mount]. We can modify the questions if necessary. For each question, participants have 15 minutes to think and write down their ideas on a sticky note; during this time, they must write one text per sticky note as, if they list multiple items on one, it will be difficult to classify them later. Each participant is responsible for writing on a sticky note. Next, they classify these sticky notes as a group according to their contents and place them back on the mount. Through this activity, they exchange opinions and reconfirm their ideas. After the prescribed 15 minutes, the advisor explains each question. If an expert in conservation science is not available, the primary facilitator explains; however, it would be best to obtain advice from an expert beforehand in this case as well. During the explana-

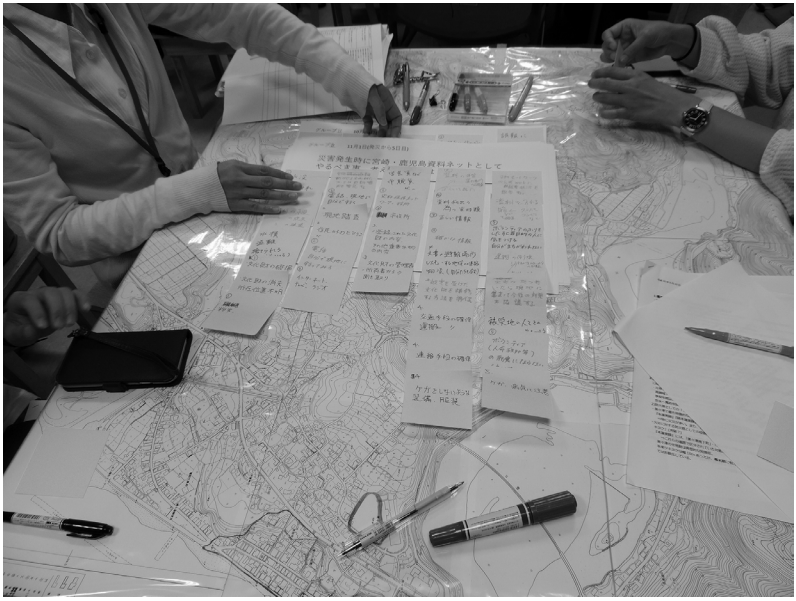

Photo.1

tion, it should be noted that no “right answers” exist and that presenting diverse ideas is the goal.

After completing the timeline, each group makes a presentation; this allows participants to reflect on the workshop and consolidate what they have learned. The time required to reach this point is approximately 2.5–3 hours from the start, with breaks in between. We can hold such programs online; in these cases, it would be practical to use online whiteboards such as "miro." Holding them online allows a broader range of audiences across regional locations to participate.

1.4. Assessment

After the workshop, the organizers ask participants to fill out a questionnaire. They list what they understood through the workshop and what they think should be issued and receive feedback on the results.

Below are some examples of the questions.

- What did you understand the most from this workshop? Select only one.

The process of materials preservation activities / What preparations are necessary for materials preservation activities, and what preparations you did or did not do/ Knowledge and skills necessary for materials preservation/ The current state of local communities, such as declining population, ageing population, and an increasing number of vacant houses/ The difficulties and importance of collaboration among private organizations (here activities related to materials preservation) and with the government

- What did you find most confusing about the content of the workshop?
  I did not understand the methods to anticipate damage and what information I should collect/ I did not understand the procedures for materials preservation/ I did not understand what equipment and tools are necessary for materials preservation / I did not picture the geographical image in my head because I am unfamiliar with the area/ I did not sense anything particularly difficult.
- What were you able to sense the most regarding the significance of this workshop? Select up to two from the following eight options.
  Protecting cultural properties and museum materials from disasters leads to the maintenance and sustainment of local communities/ Protecting cultural properties and museum materials from disasters leads to preparation for future large-scale disasters/ In many cases, materials are held not only by museums and other institutions but also by individuals, and it is important for the owners and the local communities to protect them/ Cooperation among people in various positions is necessary to preserve a community's history and culture / Collaboration among neighbouring communities is extremely important in a disaster/ To prepare for future disasters, the younger generation should get involved/ Although I could somewhat understand the significance of the activity, in terms of the details of the work or the relevant roles, I did not understand well / I did not understand the significance of the activity or the importance of the various roles at all.

2. Future Development

Municipalities across Japan are formulating the "Regional Plan for the Conservation and Utilization of Cultural Properties," and in many cases, they include

Photo.2

the preservation of cultural properties in disasters. Next, although an implementation plan to address this issue is necessary, it is crucial to establish disaster management and disaster prevention in advance, and simulation is a process for establishing such management [Photo.2: Workshop in Takanabe Town, Miyazaki Prefecture]. Moreover, we can improve the simulation mentioned here by adding an activity that involves handling actual disaster-damaged materials after the simulation.

One of the lessons learned from the Great East Japan Earthquake disaster response was the phrase "the only thing that was useful was what had been prepared," and "only being prepared was insufficient."[6] We need activities that enable a certain level of reaction to disasters, even if imperfect.

Notes

1 SOEDA Kazuho. "Shumireishon miitingu to bousaikunren [Simulation Meetings and Disaster Drills]", in: *Report on "Museums for Everyone," a project to support the creative activities in art and history museums in collaboration with local communities FY2014*, "Museums for Everyone" Project Executive Committee, 2015, pp.169-173.

2 Kanagawa Prefectural Museum Association Comprehensive Disaster Management Plan Promotion Committee. “Kanagawa-ken hakubutsukankyokai sogobosaikeikaku katsudohokoku [Kanagawa Prefectural Museum Association Comprehensive Disaster Prevention Plan Activity Report”, in: *Kanagawa Prefectural Museum Association Bulletin*, No, 88, 2017, pp.62-79.

3 The definition of timeline includes the following: “A plan that organizes disaster prevention actions and their implementation entities in chronological order, focusing on the ‘when,’ ‘who,’ and ‘what’ will be done based on the premise that a disaster will occur and on the assumption that disaster prevention-related organizations will work together to anticipate and share the situations that will occur in the event of a disaster.” (MLIT Disaster Prevention and Disaster Risk Prevention Headquarters for Water-Related Disasters Working Group for Disaster Prevention Action Plan, *Timeline (Disaster Prevention Action Plan) Development and Utilization Guidelines*)

4 HIRANO Atsushi. "Saigaikyuuenji ni okeru atarashii borantia no arikata to saigaizuzyoukunren-DIG [New Methods of Volunteerism in Disaster Relief and the Disaster Simulation Training DIG]", in: *Modern Firefighting*, 36-3, 1998, pp.148-152.
Mie Prefecture Fire and Disaster Prevention Division, Promotion Department. “Shiminkeihatsugata no saigaizuzyoukunren-DIG no gaiyou to kadai [Overview and Issues of Citizen Awareness Disaster Simulation Training DIG]”, in: *Fire Science and Information*, No.63, 2001, pp.44-48.
KOMURA Takashi. “DIG (Disaster Imagination Game)”, in: *Fire and Disaster Prevention*, Fall 2004, 2004, pp.92-102.

5 The types of facilitators are two: floor facilitators who oversee the entire workshop venue, and table facilitators who work together to facilitate small groups (“squads”); in particular, to “create the venue” as well as the “atmosphere” for the workshop is considered the table facilitator’s main job. (The Great Hanshin-Awaji Earthquake Memorial Disaster Reduction and Human Renovation Institution, *Saigaiboranthia jissen wakushoppu gaido* [Disaster Volunteer Practice Workshop Guide], 2006, p.19.

6 The Tohoku Regional Development Bureau, MLIT. *Higashinihondaishinsai no jittaiken ni motozuku saigaishodoki shikikokoroe* [Disaster Initial Response Command Guidelines Based on Actual Experiences during the Great East Japan Earthquake]. (2013)