

For the Sustainability of Museums

New Arrangements and the Roles of Specialists and Institutions in the Process of Reopening after Disaster

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1. A Vision of the Future: Accelerated Reconstruction and the Possibility of a Museum Network

More than three years have passed since the Great East Japan Earthquake and Tsunami of March 11, 2011. During fiscal year 2012, most public cultural institutions reopened, many being used and visited as much as they were before the disaster. As for museums within the large, damaged coastal area, the Ishinomori Manga Museum in Ishinomaki, Miyagi, which was inundated by the tsunami, underwent a second round of repair in March 2013. It finally has had a full-scale reopening. In April of the same year, the Rias Ark Museum of Art in Kesennuma underwent a total remodeling, including its permanent collection. Activity there has completely resumed. On the surface, it appears that many public museums in the tsunami-affected area have gradually returned to normal.

However, even now, not a few places remain closed, such as archives in small-scale municipalities. Furthermore, many concrete organization plans are still in development for facilities slated to be closed or demolished due to tsunami inundation and other factors.

Refocusing our gaze on the bigger picture, in local municipalities in the tsunami-affected area, we see decisions being made in rapid succession on matters including the start of construction work to raise tide embankments, usage plans for low-lying land, consensus building about relocation to high ground, and plans to build public housing. Rather than discussing visions of the region's future, budgetary estimates of schedule restraints and other considerations have allowed for the accelerated implementation of different plans, and a framework for the future of the tsunami-affected area has gradually become set. In addition, the amount of work in disaster-struck municipalities has reached a substantial level. For example, comparing orders of materials for construction before and after the disaster, it is said that this has increased many times over, close to tenfold. This provides support in a situation that accelerates the difficulties of grasping problems and examining things in detail.

Since the disaster of March 11, a variety of culture-related support activities have been developing. Together with activities intended to restore lost cultural places, activities that are centered on various networks, symbolized by the efforts to rescue cultural assets mentioned below, have an important role in recovery.

In the shape of future regional recovery, the activities of these networks can become an important factor in creating towns that have diverse value. Moreover, these activities must also be ranked as necessary as a foundation for support during normal times, and not merely for museums during times of crisis.

Against this backdrop, this paper will sort through the issues that arise from an investigation by the current Sendai Miyagi Museum Alliance (hereafter SMMA) of the processes that take place at museums going from disaster to recovery, as well as the significance of these networks. Since the disaster, the writer has engaged in a variety of inquiries, apart from the current investigation, as well as supported repair work in the disaster area. From these and other projects, he has had opportunities to exchange ideas with a variety of cultural groups and close to 50 public cultural institutions, such as public halls and public museums. Taking this knowledge and experience into consideration, this investigation posits, as a tentative argument, the way public museums should be in the future of the disaster-affected communities.

2. Summary of Damage to Museums in the Great East Japan Earthquake and Tsunami

First, in order to grasp the condition, particularly those of museums, caused by the Great East Japan Earthquake and Tsunami, we shall look at Figure 1, which has organized matters with a focus on the Tohoku region. This table shows the number of public institutions in Tohoku that were damaged by the 2011 disaster. The top row gathers the number of disaster events that occurred at public cultural institutions (including public educational and athletic facilities); the bottom row shows those for museums (with the total number of museums, damaged or not, shown in brackets). In the entire country, greater than 1000 public cultural institutions were damaged. In addition, many had to suspend service for a long period of time, as they were established as refuge shelters. There were also delays in repair work. We see here the great impact on regional life and cultural activities.

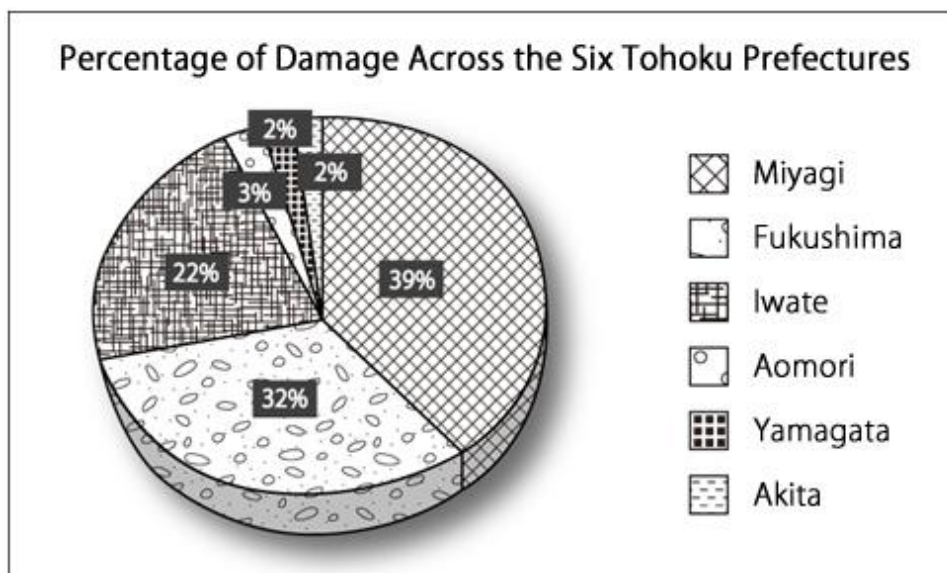
Figure 1 shows the post-disaster conditions of public cultural institutions in the Tohoku region. The number affected that were connected to Tohoku museums surpassed 400. The highest percentage of museums damaged within each prefecture relative to the total number of museums (also within each prefecture) is Iwate, at 84%, while Miyagi is at 81%, and Fukushima at 74%, showing that the damage covered all areas of the concerned prefectures. Figure 2 shows the percentage of institutions (not only museums) affected in each prefecture relative to the total number of institutions across all six Tohoku prefectures. Looking at this Figure, we can see the amount of disaster-related damage in the three prefectures of Miyagi (at 39%), Fukushima (32%), and Iwate (22%), indicating that those three prefectures suffered greater damage than others.

Figure 1: Post-Disaster Conditions of Public Cultural Institutions in the Tohoku Region

	Aomori	Akita	Yamagata	Iwate	Miyagi	Fukushima
Public Cultural Institutions	41	24	40	372	654	530
Museums	0 [125]	1 [115]	2 [124]	133 [158]	140 [173]	142 [192]

(Source) Ministry of Education, Culture, Sports, Science and Technology in Japan, “Conditions of Social and Educational Institutions in the Tohoku Region at the Time of the Great East Japan Earthquake and Tsunami” (as of October 13, 2011)

Figure 2: Percentage of Damage Across the Six Tohoku Prefectures



(Source) Ministry of Education, Culture, Sports, Science and Technology in Japan, “Conditions of Social and Educational Institutions in the Tohoku Region at the Time of the Great East Japan Earthquake and Tsunami” (as of October 13, 2011)

3. The Recovery Process after the Great East Japan Earthquake and the Importance of Process in Disaster.

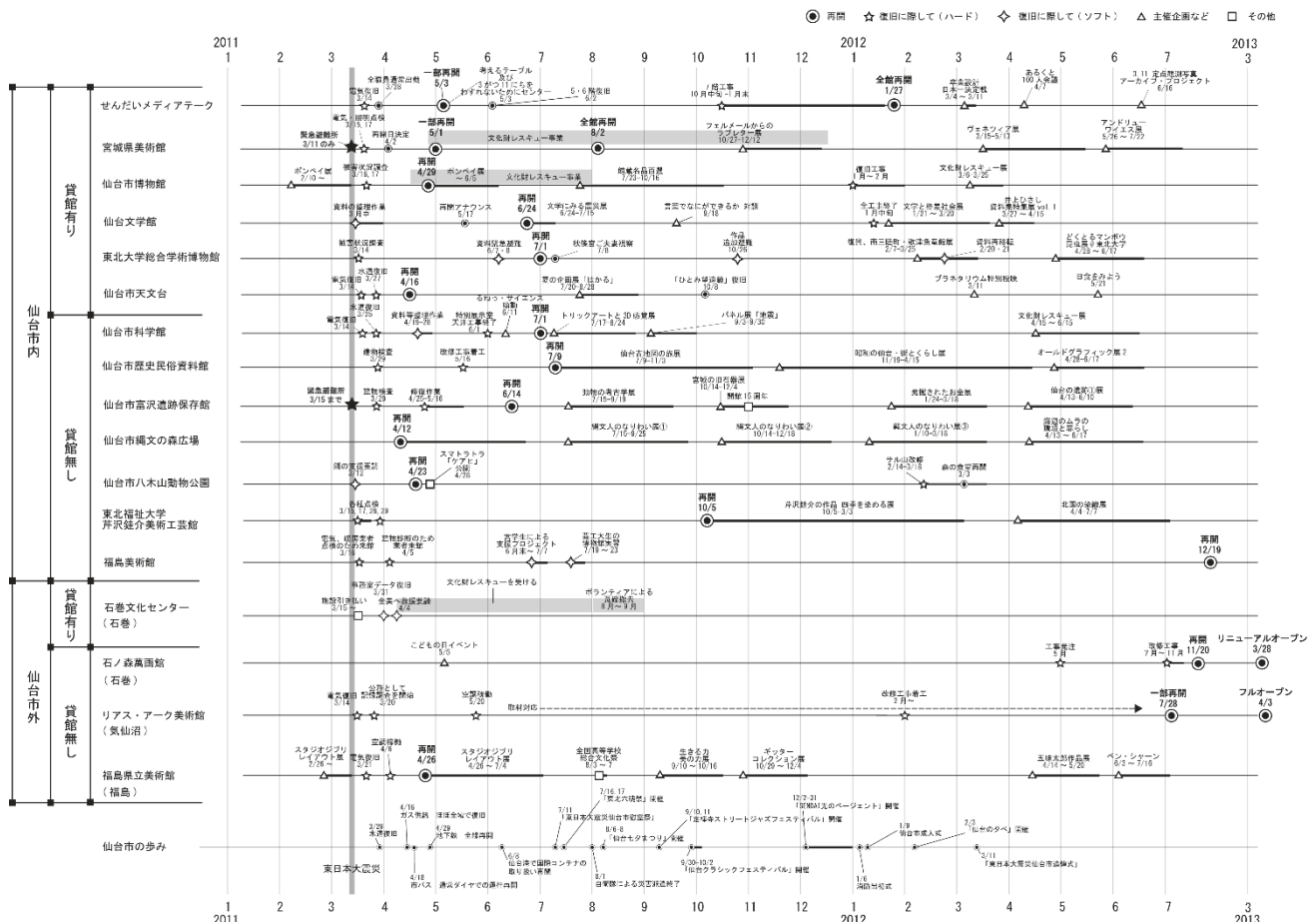
3.1 Disaster Depends on the Process

From the overall conditions during disaster, we now will focus on the issues involved in reopening museums after disaster.

As Gregory Bateson shows, disaster depends on a system's construction, and its shape gets set in accordance with that system's process. That is, a process that asks about disaster recovery, "In what way should we recover?" together with, "In what way can we advance recovery?" has important meanings. From that aspect, we can say that the process of museums recovering from disaster, particularly public museums, is one in which questions are asked about the role of museums and the meaning of their existence: "What parts do museums play in the region?" and, "Why is it necessary for museums to reopen?"

From this, we now focus on museums and turn our attention to the process of disaster recovery of public cultural institutions. In what way can we move forward and achieve reopening? We will also try to organize the discussion focusing on topics regarding the process of achieving concrete reopening and interviews that took place during each investigation into what problems arise after reopening.

Figure 3: A Chronology of the Recovery Process for Each Museum



3.2 The Earthquake and Its Immediate Aftermath

Generally, museums in Sendai had little structural damage. Among the primary tangible reasons for this were site conditions and the earthquake proofing of facilities. However, there were several other important factors to consider that contributed to a relatively good situation and helped to prevent secondary damage over and above that caused directly by the earthquake and tsunami: the disaster occurred on a weekday afternoon; there were few people using each facility at the time; prior to the disaster, facilities had known about the possibility of an earthquake off the coast of Miyagi, which raised disaster awareness, which in turn resulted in steps implemented to deal with such an eventuality; and onsite staff providing proper guidance to emergency exits.

Nevertheless, the ceiling of the 7th floor of the sendai mediatheque collapsed, the surfaces of the walls at the Sendai City Museum of History and Folklore were damaged, and at the Sendai Literature Museum, the stilts of the lower ceiling collapsed. There are many such examples of structural

damage. In this way, in addition to damaging facilities, we can add that these different things are related to the use of these facilities. As a result of all of this, each place ended up taking different actions to cope with the situation in the aftermath of the disaster.

Figure 4. The 7th floor of the sendai mediatheque after the disaster.



We will now look at some concrete examples.

At the Miyagi Museum of Art, about 40 people were present at the time of the disaster, including staff and 10 visitors. Immediately after the earthquake, they temporarily evacuated down a path, with staff returning after to check whether there had been any damage. Those who were able to return home, because they had not been injured, were allowed to do so. Employees who remained further confirmed light damage and removed works of art to safety, while the security officers stayed at the museum. Because there was a private generator, there was electricity, and so for a brief time the facilities became a refuge center for people who lived in the vicinity of the museum.

On the other hand, museums located in areas that were heavily damaged by the tsunami naturally present a different picture. At the Ishinomaki Cultural Center, which is located on the coast in the city of Ishinomaki, the tsunami was anticipated due to the official tsunami warning, as well as actions of staff members. Thus, people were evacuated quickly. To maintain security in the midst of the catastrophic damage, staff members alternated staying at a 24-hour camp set up at the museum, an unavoidable part of dealing with the situation in the immediate aftermath of the disaster. Likewise, at the nearby Ishinomori Manga Museum, the first floor was inundated with water, causing visitors and staff to seek temporary refuge on the 3rd floor. Because items in the museum collection were on the top floor, they avoided damage. Afterward, works were moved to art museums and educational institutions that were connected to the museum, with an eye on recovery and repair.

As for facilities at which large scale repair was necessary, in addition to needing to be checked in detail for damage, make budget requests, and order material for the repair process, construction materials and available workers in the tsunami-affected area were, post-disaster, insufficient. Under these conditions, it became difficult to settle on a schedule for receiving materials and carrying out work, influencing the construction schedule as well as the reopening date.

Many local municipalities had to prepare documents for the national government, in order to make budgetary requests for repair work. The time-consuming demands of this process also exerted a primary influence on the reopening schedule.

Even in cases of facilities that suffered relatively light damage, a quick reopening could not always take place. In instances in which small municipalities and private entities were the managing bodies, such activities as re-preparing collections and coordinating matters for wide-ranging projects made it difficult to establish the goal of a speedy reopening. For both building repair and addressing operational and similar issues, if things cannot be put in order, reopening cannot be achieved. In particular, this is a strong tendency among institutions that have large collections, as well as museums that are in small municipalities.

Furthermore, as for deciding which day to reopen, an organizing body's administrative judgment is the basis, but this standard determines not only questions of safety and the conditions of recovery of facilities, but such other matters as the conditions of the region's restoration became important.

3.3 The Regional Environment Associated with Cultural Disaster and Institutional Closings

Since the disaster, the architectural critic Taro Igarashi, of Tohoku University, has maintained communication regarding cultural activities. He captures the difficulty to see condition of the tsunami-affected area with the phrase, "Cultural Disaster". The current situation of cultural disaster, in which facilities are closed, together form a mountain of different problems.

For the operation of institutions that are closed, there is corresponding business (scheduled projects [exhibitions], cessation of business, readjustment),

as well as cancellation of rental hall spaces. In the former case, in particular, there are matters to coordinate as well as complex cases, which become a burden for facility staff. Furthermore, in all of these business matters, the shared consciousness within the internal administration of government is a difficult aspect. Finally, within cultural groups in the region there are many cases in which it has become difficult to continue everyday activities because of the loss of places to do so.

Regarding the Sendai Science Museum, because it was closed for an extended period, the institution's mission of running science classes and other activities to educate elementary school students in the city became difficult, while the post-disaster cancellation of field trips to the Sendai Planetarium, which had been scheduled prior to the earthquake, damaged not only the management of the institution but also the regional economy.

This kind of extended closure results not only in fewer chances to appreciate art and science, but also influences a variety of activities in the region.

In the large area that suffered damage from the disaster, the closure of facilities for long periods was unavoidable. In the process of partial reopening, we can see a variety of issues and activities. For example, let us briefly look at the Rias Ark Museum in Kesennuma, a city that sustained enormous damage throughout its entirety. After the disaster and subsequent closure of the museum, the curators took up residence in the museum, continuing to shoulder the burden of administering the facility. Functioning of the administration also suffered greatly; in addition to this, the staff was mobilized to help in reconstruction work around the city and to resolve a variety of problems. The museum was unable to take concrete action toward reopening the museum.

However, in the case of the Rias Ark Museum, with the curators taking the lead, a team engaged in such activities as energetically recording the post-disaster situations around the city. Thereafter, overcoming many hardships and working to repair things, the museum partially reopened in July 2012. Together with a permanent exhibit, centered on the records of tsunami damage that the group had accumulated, the entire museum reopened in April 2013, more than two years after the disaster.

As for private museums, the conditions of management bodies, as well as their decision-making, hugely influence the schedule for their reopening. For example, at one private art museum in Sendai, because of difficulties in maintaining relationships with all support networks and the fact that it is a private museum, there were delays in undertaking concrete plans to reopen facilities. This inevitably led to the museum, notwithstanding that it sustained only light damage, being closed for a prolonged period.

3.4 How Museums Dealt with the Accident at Fukushima Dai-ichi Nuclear Power Plant

As one of the characteristics of the March 2011 disaster was the accident at the Fukushima Dai-ichi Nuclear Power Plant, effects included not only having to deal with damage, but also the ground-shaking matter of in what form museums should continue existing, if at all.

From late March into April 2011, because there was no solution in sight to the accident at the nuclear plant, museums in the disaster area were worried about the environment in which they would be from there on. In addition to distress about such matters as post-disaster reopening and declining numbers of visitors as a direct result of the disaster, museums close to the plant also now faced trouble borrowing works from overseas museums. In some cases, changes to the content of planning and holding exhibitions had also become difficult.

In particular, for those museums that were relatively close to the plant, as it was a worst-case scenario, there were curators who assumed that the contents of the entire museum would be evacuated. As for museums that closed for a short period, there were instances in which concrete plans were asked for. These plans addressed the eventuality of another accident at the nuclear plant before exhibition plans were implemented. At the time of evacuation, such issues as the classification of works and determining where to seek refuge were difficult to resolve. This means that requests were made for support from networks and links outside the area (outside the prefecture).

Later, a stable resolution to the accident could be seen, and such anxieties happily did not become reality. However, it was a crucial moment in which questions had to be asked about what specialists can do to secure the expertise of existing facilities.

3.5 The Relationship between Museums and Communities

In many respects a disaster is an opportunity to bring the relationship between communities and museums to the fore. In particular, the March 2011 disaster became a chance to reconstruct the relations between communities and such museums as those that handle natural history and folklore material.

Prior to the disaster, the Sendai City Museum, while working to compile the city's history, also engaged in activities to safeguard and examine a treasure trove of cultural assets possessed by the city's old families, temples, and shrines. It is believed there could possibly be over 1000 places with such assets, primarily within city limits. However, in the case of this disaster, the curators were not able to go around to check everything. Splitting into groups, they checked the condition of things at about 280 places. On the one hand, at the time of these investigations there were voices calling out in expectation of such visits, but there were also examples of people who did not realize the value of the assets they had in their possession. The rescue and preservation of cultural assets demonstrated the necessity of sharing information and understanding the location and condition of common cultural assets, and became an opportunity to recognize anew and publicize the value of folk assets in the region.

Although these ties, between communities and institutions, are often dependent on an individual curator's personal connections, there are also

matters concerning how these ties can be inherited as a system. Realistically speaking, in museum management, works that revolve around regional history and the inheritance of it depend upon a curator's know-how. However, it represents an issue concerning how a museum as an organization can continue such work. Even within Miyagi Prefecture, some point out that only a few curators are able to share their knowledge of these cultural assets' genealogy. The disaster is an opportunity to build a system able to inherit memories; because museums are a base for, and have a role in, collecting regional information, this is a point that should be discussed.

4. Network-oriented Support and New Development

Within the process of recovery from the March 2011 disaster, one thing that has played a big role is the variety of support and action centered on specialists from outside institutions. A particular characteristic of such support is a diversity of networks and activity based on cross-field cooperation. In addition to supporting and having relationships with organizing bodies, might not the functioning of these networks for the purpose of reopening institutions become a clue for thinking about the conditions of museums focused on the public? Below, we will examine the conditions of activities, and the roles of specialists in the disaster area, based on studying cases of such network support.

4.1 Activities of Related Groups

Naturally, information about conditions of all facilities after the disaster was shared in local municipalities. However, in some of these places, there was great damage to administrative functioning itself, and so it was difficult for this shared information to spread among concerned parties. On the one hand, among the diverse public cultural institutions, there existed those that transcended local municipal establishments; these were networks of institutions and participating associations. However, each kind of facility and association, depending on the kind of organization it was, responded in diverse ways depending on the different ways they collected and shared information.

The Japanese Association of Zoos and Aquariums, during the disaster, engaged in the transportation of emergency food for animals (furnished by animal feed companies and participating zoos and aquariums throughout the country), as well as helping with the emergency transport of zoo animals, thus saving them.

As for Japanese Council of Art Museums, an organization of participating art museums within the country, it has a record of participating in efforts to rescue works of art and cultural assets at risk from natural disasters since the 1995 Hanshin-Awaji Earthquake (also known as the Kobe Earthquake). From an early stage, immediately after the March 11 disaster, they participated in such support activities as checking situations and supplying information. Compared to public halls, about which the current author is a specialist, we can say that museums were relatively functional in quickly ascertaining the damage of the initial shock and sharing information. Despite this, there were also ways in which direct help from the outside did not work out well. Going forward, it is certainly a task to set up a structure for problem management and plan design, from the first shock of a disaster that affects a wide area.

4.2 The Rescue of Cultural Treasures

Next, we turn our attention to recovery support of museums along the coast. We will look at concrete actions of rescuing cultural assets as one kind of example of network support models, using interviews with staff members of such institutions as Sendai City Museum and related materials.

Immediately after the March 11 disaster, based on information from various places, there were hypotheses about the various main causes of damage, including flood damage, things carried away by flooding during the tsunami, as well as the throwing away of documents detailing the process of restoration. Thus far, from among city history compilation projects and examination of materials, owners of materials have been listed in publications such as "The History of Akiu" and "The History of Miyagimachi," and they have organized pieces of information that indicated candidates for rescue. Immediately after the disaster occurred, in cooperation with the NPO, Miyagi Shiryō Net, they verified actions being made to salvage material. Cooperating also with the Miyagi Prefecture Cultural Assets Public Assistance Division and the City of Sendai Cultural Assets Public Assistance Division, we began sharing information about matters such as the condition of materials within Sendai following the disaster, regardless of whether they were designated as cultural assets or not, individually-owned or belonging to an institution. On April 15, 2011, led by the Agency for Cultural Affairs and the National Institutes for Cultural Heritage, the "Committee for Salvaging Cultural Properties Affected by the 2011 Earthquake off the Pacific Coast of Tohoku and Related Disasters" was inaugurated. The scope of the rescue work done by this same committee included rescue from sites, emergency procedures, and temporary safekeeping. This concerned cultural assets that were personal property for which they made an appeal, as well as works of art, again irrespective of whether or not they were officially designated as a cultural asset.

Miyagi Prefectural administration was established at Sendai City Museum from April 18 to July 30. After that, with the museum as a base, they engaged in rescue work around the prefecture.

Rescue work was done for the Ishinomaki Cultural Center, in the coastal disaster area, owing to a Sendai City Museum team led by curators and staff from the City History Office. Because of the inflow of rubble and mud caused by the tsunami, they removed debris that included historical, artistic,

antique, and folk materials that had been damaged, as well as sediment deposits. They also salvaged materials. After doing this, natural history and art museums from outside the prefecture, as well as universities, charitably allowed their spaces to act as temporary emergency warehouses. Within the prefecture as well, this was one of the largest rescue efforts.

5. Overcoming Disaster

Based on these investigations, with the next disaster in mind, we have organized the following 3 points as a draft plan.

First, there are issues related to systems centered around the public-ness on which museums are established, and issues of the museums' social foundations. Second, issues regarding whether administrations will endure, and disaster countermeasures, concerning both tangible and intangible aspects, at separate facilities. After March 11, this gave rise to a third issue in the process of reopening after the disaster, situated between those related to social foundations and organizations on the one side, and separate facilities on the other, and which independent facilities could not deal with because of the greatness of the damage.

That is, in the reopening process, there was a bottleneck. As a way of opening this up, the process suggests the effectiveness of diverse networks linking facilities and curators.

5.1 Issue 1: Toward the Creation of a Foundation for Museums

When discussing and investigating the conditions of museums from now on, we should bear in mind not just ways of coping with disaster, but also the established foundations of museums in a society that is shrinking. This is because the established foundations of facilities are distinct. Furthermore, times of disaster expose the frailness of the foundations themselves. In addition, we are led to expect that there are connections between discussions about future plans and new actions of support.

Now, we will try to get a handle on the next two issues. The first is that of legal basis.

Regarding the establishment of public facilities in Japan, one more thing related to the basic laws (acts for establishment) concerning facility use and management, such as in the Museum Law, is Article 244 of the Local Autonomy Law. The definition of "public facilities" therein has become the foundation of the establishment of facilities. The system for appointing administrators is also stipulated in this definition, and the difference between "facility" and "management" is distinguished. Furthermore, these also establish different schemes for the restoration of management and the restoration of physical facilities, one main cause of the difficulties in general recovery support. On the other hand, in cases of schools and hospitals restored under the same kind of basic law, although the content of public service that should be supplied there is associated with physical repair and the matter of restoration, there are many instances that have been investigated on the basis of one support scheme. In order to secure the expertise and quality of service of public museums, it is necessary to have a plan for a system to investigate restoration under strong and intense links between management and facility.

The current writer is not a specialist in law, and thus will avoid any more discussion of legal matters beyond this. However, it is necessary to record the influence of the ambiguousness of these basic laws written in normal times, during the recovery process in times of crisis.

The other issue is that of creating a mechanism for, and the continuity of, activities at facilities.

Nagasawa, et al., who have been doing research on institutions for many years (note 1 below), write "The specialization of institutions corresponds to the specialization of both space and staff, and secures specialization." However, a certain kind of incompleteness exists in the division made in current jurisprudence between facility and management. Many local municipalities in the disaster area have been facing declining birthrate, an aging population, and depopulation since prior to the disaster. Added to this, within the context of future population outflow and further depopulation, they have found it necessary to consider the structures that support the continuation of services in the future. In the arguments about the continuation of such structures, is there not a possibility of restructuring the foundation of public cultural institutions from a system to a mechanism?

We can see with our own eyes the process of reconstruction at a variety of institutions. Within this, there is a clue for thinking about a new structure. Institution and person, institution and specialist, institution and activities, institution and institution, institution and region: we can consider these different networks.

5.2 Issue 2: Toward Museums that Stand Strong Against Tangible and Intangible Aspects of Disaster

As noted, the issues and challenges of reopening change over time. Accordingly, taking these issues as a series of processes, we will organize each step. At the same time, by investigating those associated with these processes in their entirety, we can share more concretely the issues that arise from both tangible and intangible aspects of the problem.

1) Tangible Problems

■ Areas to be used for storage and exhibitions.

- The preservation of works on exhibition and works in storage, as well as platforms for seismic isolation to avoid damage to works, varieties of piping,

display items, the clearance of display cases: these kinds of plans for architectural frames, as well as conformity to plans for display and storage.

Storage facilities, etc.

- In addition to fire- and earthquake-proofing, assuming that an area will be inundated by a tsunami, and a plan for storage facility that keeps tsunami height in mind.

- Imagining disaster and drawing up countermeasures.

- In cases of museums that are located in urban areas, even in instances in which a place is not assumed to be a fixed refuge area, there will be times when a place will be established as a refuge center in accordance with the decision of someone at the institution. On the other hand, there will be situations in which zoning investigations clearly divide repository areas from refuge places

- At times when museums are in localities that neighbor nuclear power plants, there will be cases of requests made to move everything in the museum out of the area. Imagine, and then secure, a process to move works, as well as a refuge for them.

2) Intangible Issues

- Organizing the issues of disaster countermeasures according to the process of reopening after a disaster occurs.

- Predicting the occurrence of a disaster over a large area, simulations of first response and physical evacuation, establishment of refuge areas, coordination of the rescue of collected and exhibited works and various project proposals for restoration, creation of a step-by-step schedule and process for methods for sorting out damage and construction repair and support for ordering of materials.

- Implementation of disaster countermeasures from written reports concerning such disasters as the Hanshin-Awaji (Kobe) Earthquake and the March 11 disaster.

- Storage of packing materials used at such times as when collected works are transported.

- Strengthening the relationship between museums communities.

- Creation of archives and sharing of community resources (such as cultural assets, topography, and historical genealogy).

- Human resource development and the creation of a base for museums over a large area in order to restore cultural assets damaged by disaster.

5.3 Issue 3: Toward Sustainability of Museums Brought Forth from Various Network Structures

In looking at the March 11 disaster, we can say that, together with various networks within the region, mutual networks of separate institutions that transcended their local foundations, or groups of institutions, were very effective over a large disaster area. Below, we indicate some concrete items.

As we have hereto indicated, for those various networks that functioned in this March 11 disaster, it was important that they were either hypothesized, structured or started before the disaster, indicating that it is essential to strategically design and construct various networks during ordinary times.

- Sharing networks of institutions by all staff

Visualize and allow sharing, by all institutional staff, of networks of independent institutions formed from project proposals and the existing formal networks of various participating associations.

- Creation of different routes of support for independent institutions in cases of extreme damage to local authorities.

- Creation of networks that transcend local administrative institutions on the assumption of complete evacuation of museums as well as a wide area of evacuation.

- Creation of opportunities to realize and strengthen various networks.

- Organization of role-sharing and simulations of restoration support for public museums based on assumptions of diverse kinds of damage.

6. Toward the Creation of a New relationship Between Specialists and Museums

Previously mentioned issues that stand out during the process of reopening are not only about direct and quick guidelines for dealing with a disaster. If we move around the actual places where the many diverse restoration activities happen, we find not only disaster countermeasures but also problems related to the basic establishment of museums come into view, asking for solutions.

Lastly, we will conclude by presenting three points and the issues, going forward, directed at the creation of relationships and new structures.

First, activity schemes of disaster support take a community viewpoint, not one of separate institutions. The restoration of public museums supports all community activity. This kind of support is a natural goal. However, there are many cases in which there is no sharing between members of support groups and of support schemes.

For example, cultural asset rescue work was one activity that was highly effective in support of recovery from the March 11 disaster, utilizing broad networks. However, at the outset of this work, there were actions led by historians with a sense of impending crisis about not just cultural assets and the restoration of collected items, but also the outflow, scattering, and disappearance of community cultural assets and resources. These circumstances, this

opportunity, gives us a clue about thinking essentially about the restoration of institutions and the restoration of community cultural activities as one.

That is to say, in order to grasp the relationship between communities and institutions in times of crisis and think about new structures, it has become necessary first to arrange the relationships of everyday activities inside and outside institutions and to investigate what shape they should take. Based on that, it is necessary for specialists inside and outside institutions to create networks that transcend inside/outside, and, while continuing activities that are based in these networks during normal times as well, to give shape to them. These networks, regardless of whether it is a time of crisis or of normality, become more broadly shared as infrastructure for increasing the sustainability of community cultural activities, clarifying discussions about plan design.

The second point concerns the creation and public opening of archives to which traces of the events, together with the trajectory of thoughts about them, are added. What is meant here by trajectory of thoughts is that there were things that fortunately did not occur, but those who were concerned, at one point, imagined as realistic possibility..

In addition to the accumulation of records that occurred during various processes of reopening, or after they have occurred, increased sharing of archives developed at disaster sites, which include trajectories of thought, is highly significant, leading up to the creation of opportunities and systems through which they are inherited by the next generation.

Regarding those museums referred to above that are centered in Fukushima, since the nuclear power plant accident, it has become difficult to receive works on loan both from outside the country and from other parts of the country. There are also cases in which traveling exhibitions called off their exhibitions in Fukushima. The diverse trajectories of thought, above all those of curators encountered at these places, regarding separate institutions, suggest the existence of a condition in which it is impossible to find a resolution, as well as the importance of networks that cover a wide area and transcend local institutions. Led by the commitment of specialists at various locations, it is important to set up opportunities and spaces in which those trajectories of thoughts are shared and verbalized.

The third and final point concerns the creation of a strategy for the sustainability of public museums that takes a long-term point of view. The management of the many museums in the disaster area has a high possibility in the not so distant future of encountering a very severe situation.

With the precipitous decline of the population and the aging of many of the localities in the disaster area, it is assumed that matters will be studied and implemented concerning the maintenance, and obsolescence, of public cultural facilities. Of course, objective judgments that put value on the efficiency of reducing the burden of future costs, things that need to be utilized, and activity, are indispensable. The 50 years that will have passed between the opening of public cultural institutions organized in the first half of the 1980s and the 2030s act as a turning point, and we anticipate that institutional and financial issues will arise related to such matters as large scale repair and rebuilding.

We should think about not only efficient guidelines for dealing as much as possible with merely this condition, but also about a strategy that implements a process that includes various standards of value, while also looking steadily at this period that we expect to come soon.

In making this strategy, what we particularly want to point out is the persistent connection of specialists in the community.

When closing and doing away with these institutions, these specialists who are concerned with management will disappear from the communities. This means that a considerable reduction of related opportunities for artists (specialists) there. That is, one important role of museums in communities is that they are a platform for a variety of networks that mediate between specialists, the activities, and cultural resources of these communities. In that respect, the SMMA network is one subject for thinking about such a platform, which becomes a first step toward a concrete strategy for museum sustainability.

The process of recovery is one that has kept asking, what do experts at respective locations think, what do they study, what kind of relationships should be constructed? Now it will be asked, how will the first step forward be taken, a step toward creating museums, born of this accumulation of first-hand experience, that can flexibly deal with disaster.

Lastly, we would like to express our gratitude to all those involved who cooperated in support activities and in the diverse investigations that have taken place from the disaster until now.

References:

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