Modern Textiles and International Cooperation in Conservation at the Tokyo National Institute for Cultural Properties

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Introduction

Tokyo National Research Institute for Cultural Properties carries out research surveys on the preservation and conservation of modern textiles. I wish to talk about a research survey today, which first began with a plan to transfer Goryosha (imperial carriage) No. 1 (Fig. 1, 2), which has been designated as an Important Cultural Property, from the Transportation Museum that previously existed in Kanda to the Railway Museum that newly opened in Omiya (2017). However, Goryosha No. 1 was in no condition to be readily transferred as it was. Not only was the body of the carriage in fragile condition, but the textiles of the interior décor and furnishings of the carriage were in such a state of deterioration that even a slight touch was enough to cause their fibers to disintegrate. Fearing that transferring the carriage would aggravate the current extent of damage to the textiles, East Japan Railway Company, the owner of the carriage, decided to apply protective measures that would allow the textiles to withstand the travel and requested Dr. Mie Ishii, presently at Saga University, to implement measures that included using a net covering. For those of us at Tokyo National Research Institute for Cultural Properties who had not paid much attention to textiles until then, it was an occasion that opened our eyes to the extent of their deterioration and to the difficulty of conserving textiles. Thereafter, we learned much about the present situation of textiles in Japan and various related issues through our association with Dr. Ishii.

Diverse types of textiles have survived the years. In particular, various items of clothing, such as *noh* costumes, *kosode* kimonos, *obi* sashes and *jinbaori* surcoats; textiles with embroidered Buddha images called *shubutsu*; and sacred treasures have so far been designated as National Treasures and Important Cultural Properties. Many other textiles have also been preserved and conserved. Additionally, a large number of textiles are included among items regarded as modern cultural heritage and range from Western clothes to architectural adornments such as wall coverings, curtains, rugs, and textiles that were used in furnishings that graced the *goryosha* carriages I mentioned earlier. With respect to the preservation and conservation of such textiles included within the scope of modern cultural heritage, I would like to present the findings of our study with reference to surveys we have conducted overseas.

Textiles among our Modern Cultural Heritage

Let us look at what specific types of items are being preserved as modern cultural heritage. What first comes to mind are probably Western dresses and full-dress uniforms that were introduced to Meiji Period (1868-1912) Japan accompanying the Westernization of lifestyles (Fig. 3), followed by textiles used in furnishings preserved in buildings (Fig. 4) and the aforementioned textiles used in *goryosha* carriages, which themselves are regarded as the "finest in moving art." Aside from Western clothes, furnishings had essentially long been forgotten and abandoned with nothing that could have possibly be done to conserve them even if one had wanted to. For this reason, they displayed severe deterioration and were hardly in preferable condition.

Here, I shall describe the present state of some of the most representative *goryosha* carriages.

(1) Goryosha No. 1 (first generation)

Goryosha No. 1 was manufactured at a plant in Kobe in 1876 under the supervision of an Englishman. The axle, bearings and underframe are British made, but the carriage interior and exterior were made in Japan. The carriage as a whole is made in the British style, but its patterns and designs are distinctly Japanese. The walls are upholstered with a glossy, amber-colored silk satin tufted with deep-blue fabric-covered buttons. The trimmings around the walls, doors, and windows have a running pattern of clouds in circles and *koaoi* hollyhocks woven using deep blue and gold threads, and the ceiling is lined with an amber-colored fabric with a woven pattern of chrysanthemums and maple leaves. The curtains are patterned with a combination of phoenix and pigeons and of chrysanthemums and arabesque shapes. The door to the next compartment on the left side of the imperial seat depicts a cherry tree and sparrows, and the door to the next compartment on the right side depicts a *tachibana* orange tree and sparrows. The flowers, fruits, parts of the branches, and sparrows are embroidered. Today, the carriage is exhibited at the Railway Museum as a nationally designated Important Cultural Property.

(2) Goryosha No. 2 (first generation)

A private railway company called Kyushu Railway purchased a carriage from a German company in 1891 and assembled it at a plant in Kokura as a carriage for distinguished guests. Thereafter, it was refurbished as a *goryosha* on occasion of an annual military exercise demonstration held in Kumamoto in 1902. This *Goryosha* No. 2 is the only German import among all *goryosha* carriages. On the whole, it has a more Western flair than *Goryosha* No. 1, but the patterns used throughout are also distinctly Japanese. The walls are decorated with golden-brown velvet, and amber-colored curtains are patterned with the traditional *kumo-tatewaku* design of clouds rising between steams and chrysanthemums. When the railway company was nationalized in 1907, the carriage was also transferred to the possession of the national railway company. Today, it is exhibited at the Railway Museum. (Photo 5) (3) *Goryosha* No. 5

Goryosha No. 5 is a wooden two-axis bogey carriage made at a plant in Shimbashi in 1902 as an

imperial carriage for Empress Shoken (1849-1914). It is the first *goryosha* made exclusively for an empress, and its interior décor, in particular, is said to be a work of exquisite artistic value born from the most advanced technologies during the Meiji Period. The ceiling depicts a painting of "kigan raien" (wild geese returning, swallows coming) by artist Kawabata Gyokusho (1842-1913). Today, the carriage is preserved and exhibited at The Museum Meijimura. (Fig. 6)

The state of deterioration and conservation of the upholstery of these *goryosha* carriages can be summarized as follows.

As mentioned in the description of each *goryosha* carriage, décor of high artistic value embellishes the carriages. These include the paintings depicted on the walls, ceiling and doors and the textiles adorning the walls, not to mention the exceptional upholstery of the furnishings.

However, as a whole century has passed since most of the carriages were completed, the furnishings and wall textiles have begun to show marked deterioration. Serious deterioration is particularly evident in the seats and backs of the sofas and chairs and in the armrests, which were originally made by pulling the textile taut. In these places, the threads have severed, and the fabric has torn open, exposing the filling and springs inside (Fig. 7). The curtains have long been left hanging, so dust has accumulated and hardened such that, coupled with the natural ageing of the fiber, the fabric no longer even looks like fabric in many places. The only possible way to conserve such deteriorated textiles at present is to remove (dismantle) them, apply a backing support to the fabric, and re-upholster them. However, little could be done to conserve textiles that are deteriorated to the point that no underlay could possibly be applied, except to cover them inconspicuously with a polyester net dyed to an obscure color to delay further deterioration (Fig. 8).

Preservation and Conservation Overseas

Tokyo National Research Institute for Cultural Properties has conducted a survey of how textiles, and particularly those that are regarded as modern cultural heritage, are preserved and conserved overseas. The survey is briefly introduced below.

We visited the following institutions overseas to carry out our survey.

- The British Museum, U.K. Textile study and storage facility
- The British Museum, U.K. Organic conservation department
- · Victoria and Albert Museum, U.K. Textile conservation department
- · Victoria and Albert Museum, U.K. Storage facility and conservation studio
- The National Maritime Museum, U.K. Textile preservation and conservation department
- The Fleet Air Arm Museum, U.K. Conservation studio and storage facility
- Abegg Foundation, Switzerland Museum and textile conservation studio
- Chevalier Conservation, France Conservation studio

These institutions have their own preservation and conservation principles cultivated through their

long history and engage in the preservation and conservation of textiles by making creative efforts within their limited budget and personnel.

Their storage environments are diverse, but each institution fundamentally endeavors to realize flat storage. However, when this is not possible due to space restrictions, efforts are made to roll textiles around a core for storage in racks or to hang them on a hanger.

At the British Museum and Victoria and Albert Museum, we had the opportunity to study the preservation and conservation process in detail, from the treatment of textiles that are first brought to the museum, to the methods of record keeping and organizing, the washing of artifacts, their storage methods, and measures and methods for their display. In undertaking this series of tasks for their large collection of objects ranging from ancient to modern times, both museums emphasized their difficulty in having to manage with a limited number of personnel. They also shared their hardships in dealing with the increasingly diverse materials that are now being used in modern textiles. At Victoria and Albert Museum, we were introduced to a program where visitors are invited to try on ancient costumes reproduced in digital print. (Fig. 9-15)

The National Maritime Museum is characterized by its large collection of maritime artifacts. Here we learned about the conservation work that was done on undergarments said to belong to Admiral Horatio Nelson (1758-1806) and a flag that he used in the Battle of the Nile (1798). (Fig. 16)

The Royal Navy Fleet Air Arm Museum has a large collection of army uniforms donated by former military officers and combat uniforms that were worn in actual battle. It also houses a collection of aircraft and equipment and has a storage for textiles and related items inside a facility resembling a large hangar. Interestingly, the military uniforms are each covered with Tyvek® (non-woven polyester), and the type of uniform and details of its damage are written in pen on the cover. I thought it was a rather good idea. (Fig. 17, 18)

At Abegg Foundation, we learned about the training program that it administers every year under systematic rules that govern the acceptance of trainees, the content of the program, and other such aspects of the program. The well-equipped training facility was worthy of admiration. (Photo 19)

Lastly, at Chevalier Conservation, an institution which undertakes the conservation of tapestries and carpets from around the country, we saw that a dedicated system has been installed to accommodate even large-sized textiles. (Photos 20, 21)

All the institutions we visited were excellent and provided us with valuable reference that helped make our survey extremely fruitful. We consequently strengthened our resolve to somehow engage in the preservation and conservation of Western textiles, and the conservation of tapestries and carpets that have survived the generations in Japan, by contriving creative measures in our own way, despite any facility restrictions we may have.

International Cooperation Activities

Lastly, I would like to introduce a couple of international cooperation activities of Tokyo National Research Institute for Cultural Properties, namely two international training programs that are being implemented at present.

- "Workshops on Conservation of Japanese Textile"—International workshops conducted jointly with the Research Center for Conservation of Cultural Relics at National Taiwan Normal University
- "Textile Art and Conservation: Knotting the Past and the Present"—A workshop for the
 preservation and conservation of the cultural heritage of textile art based on an agreement with
 the Ministry of Culture in the Republic of Armenia

The programs were implemented as follows in fiscal 2017.

The international training program conducted jointly with National Taiwan Normal University was held at the university according to the schedule below.

Aug. 9 – 11: Basic workshop

Lecture on basic knowledge of Japanese yarns

Practical session for observing material characteristics and weaving techniques

Practical session for understanding the structure of the kimono using paper models

Other

Aug. 14 – 18: Advanced workshop

Lecture on display and preservation methods

Lecture on deterioration/damage and cleaning

Practical session for acquiring basic knowledge of handling dyes and chemicals

Practical session for distinguishing dyes

Practical sessions on the processes of conserving textiles

Lecture on case examples of textile conservation

Other

The Basic workshop was attended by 10 participants (from Australia, Taiwan, South Korea, the United States, Singapore, Philippines, Thailand, Serbia, etc.), and the Advanced workshop by 6 participants (from Australia, the United States, Taiwan, Singapore, Thailand, Serbia). Most of them are engaged in the conservation of textiles.

They commented that:

- The knowledge and technique of identifying fibers and materials were useful;
- · Learning about conservation methods in Japan was beneficial; and that
- · It was helpful to learn about methods for discriminating dyes.

They also expressed a wish for workshops that delve more deeply into the conservation of textiles.

The textile workshop in Armenia was implemented as follows.

Sept. 11 – 15 (at the Scientific Research Center for Historical and Cultural Heritage)

Lecture on an overview of textile conservation and the acquisition of basic knowledge

Lecture on the basic knowledge of dyes and tools

Lecture and practical session on dyeing techniques using dyes

Sept. 19 - 20 (at the Museum of the Mother See of Holy Etchmiadzin)

Practical session on the conservation of items in the museum's collection

A total of 13 Armenian participants attended the workshop in full. They were mostly affiliated with museums and research institutions for archaeology, folklore or the preservation and conservation of wall paintings in Armenia, and included those who regularly engage in the conservation of works of art, archaeological artifacts or wall paintings or who engage in studies related to archaeology.

They responded positively to the workshop with comments that:

- It provided professional and practical knowledge;
- · It set the environment for interactions with Japanese experts; and
- It provided knowledge that will be useful in the future.

However, the majority of them noted that the length of the workshop was short.

Furthermore, there were many voices that requested advanced workshops on a wider scope of conservation topics, such as workshops on various other materials that include earthenware, metals, and wall paintings, for example.

By holding these workshops, we became aware that people in conservation overseas desire to acquire the knowledge of how to handle, preserve and conserve Japanese kimonos. Thus, Tokyo National Research Institute for Cultural Properties hopes to cooperate by holding workshops and conducting overseas surveys to grasp and respond to their needs. However, we must bear in mind that we should in no way impose our views on them. As I have mentioned earlier, there are diverse preservation and display methods in Japan alone, and there is no single "correct answer." Therefore, transferring our knowledge to overseas people by saying "this is the correct answer" could mean transferring incorrect information, in a sense. We must pay careful attention not to let that happen.

We at Tokyo National Research Institute for Cultural Properties hope to continue implementing activities that would benefit everyone concerned in even the slightest way.



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8



Fig. 9



Fig. 10



Fig. 11



Fig. 12



Fig. 13



Fig. 14



Fig. 15



Fig. 16



Fig. 17



Fig. 18



Fig. 19 © Abegg-Stiftung, CH-3132 Riggisberg, 2014;(photo: Christoph von Viràg)



Fig. 20



Fig. 21