
10. 折枝散蒔絵喇叭

10. *Trumpet with Design of Sprays in Makie*

ライデン国立民族博物館（オランダ王国）所蔵
Museum Volkenkunde (Kingdam of the Netherlands)

10.1. 修復報告

松本 達弥

10.1.1. 名称等

名称	折枝散蒔絵喇叭
時代	江戸時代 19 世紀
所蔵者	ライデン国立民俗学博物館（オランダ王国）
登録番号	1-3613

10.1.2. 工期及び施工者等

工期	平成 22 年 10 月 19 日～平成 22 年 11 月 13 日
施工場所	ケルン東洋美術館（ドイツ連邦共和国）内修復アトリエ
修復担当者	松本 達弥

10.1.3. 修復前の状態

- 塗膜表面や蒔絵部分には、ヨーロッパの修復材料であるシェラック等の塗料が塗られていた。
- 漆塗膜は、経年変化や紫外線の影響で劣化し、艶が無くなっていた。
- 漆塗膜の欠損部分には素地の金属が露出し、周辺塗膜は剥離していた。
- 各所に打損による塗膜の欠損が数多く見られ、吹口部分の朱漆の塗膜がかなり剥落していた。
- 喇叭の中心棒が変形していた。
- 擦損により蒔絵粉が一部で失われていた。
- 中心棒にある球形のストッパーが損傷し、本来の位置から外れた位置にあった。

10.1.4. 修復方針

修復は現在、文化庁の指導のもとで行われている「今ある文化財を、現状を損うことなく保存し、永く後世に伝える」という、漆工文化財保存修復の原則に則り、現状維持修復を基本に行うこととした。尚、本作品の修復は、ドイツ・ケルンに滞在中の限られた期間での作業になるため、その期間内に完了するべく工程を選択して修復を行うことにした。

10.1.5. 修復工程

(1) 現状調査及び作業工程確認

本作品の素地、下地、加飾と現状の傷みを調査し記録に留めた。次に、事前に提出した修復方針と修復工程案を再検討した。

(2) 修復前の記録写真

修復前と修復後の比較が出来るよう写真撮影を行った。

(3) 設置台の制作

本作品を損傷なく安全に修復作業を進められるよう設置台及び作業台を製作した。

(4) 仮止め養生

欠損部分や亀裂部分の塗膜周辺は、作業中剥落しそうな危険な状態にあるため、細かく切った雁皮紙を糊貼りし塗膜の剥落防止を行った。

(5) クリーニング

本作品の表面を覆っている埃を払い、僅かに水分を含ませた木綿布にて汚れを除去した。ただし、本作品の塗膜表面には西洋塗料が塗られていたため、クリーニングは必要以上に行わなかった。

(6) 西洋塗料の除去

西洋塗料の除去に関する材料テストを行った。その結果、純水で塗料の除去が可能であると確認した。除去は綿棒に少量の純水を含ませて黒漆部分から行い、次に蒔絵部分の塗料を除去した。平蒔絵に使われた金粉は細かな粒子のため、剥落する恐れがあるため細心の注意を払った。

(7) 損傷部の固定

中心棒にある球形でストッパーの役目をする部分の修復は、当初の位置に戻す作業から行った。作業は、中心棒の漆塗膜に疵を入れないために球形の中心棒が貫いた部分の穴をヤスリ等で徐々に大きくし、元の位置に戻した。次に、球形部分の固定は内部が空洞であることから、際部分に何かを詰めて固定することを検討した。その結果、麦漆を含ませた麻紐を中心棒に巻きつけて乾燥した後、成形して固定した。

(8) 剥離塗膜や亀裂の圧着

剥離塗膜や亀裂の圧着の際に使用する押さえ治具の準備を行った。剥離塗膜や亀裂の接着は、接着力を強くするためにグルテンの量を多くした麦漆を使用した。麦漆は溶剤で希釈し、亀裂部分や剥離した塗膜下部分に含浸した。希釈した溶剤の揮発を待って、再度麦漆を差し入れて接着した。圧着が必要な部分はクランプを使用した。

(9) 欠損部分の刻苧充填

塗膜の欠損部分には、麦漆に木粉や麻の繊維を混入した刻苧を充填し形体を復元した。刻苧の充填は必要に応じて粗さを変え数回に分けて行った。本作品の素地は真鍮製で、下地工程等の貴重な情報が損傷箇所から確認できるため、損傷がない箇所は現状保存とした。

(10) 際錆

接着した塗膜際や刻苧で充填した部分に、真菰粉と麦漆を混ぜた錆止めを施し再剥落の防止を行った。

(11) 記録写真及び修復記録

修復後の写真撮影を行い、修復及び技術分析の記録をまとめた。

10.1.6. 修復後の状態

詳細は Table 10.1 を参照のこと。

10.1. Restoration Report

Tatsuya Matsumoto

10.1.1. Data

Title	<i>Trumpet with Design of Sprays in Makie</i>
Period	19th century, Edo period
Owner	Museum Volkenkunde (Kingdom of the Netherlands)
Inventory number	1-3613

10.1.2. Restoration Data

Duration	October 19, 2010 – November 13, 2010
Place	Restoration Studio, Museum für Ostasiatische Kunst, Köln (Federal Republic of Germany)
Conservator	Tatsuya Matsumoto

10.1.3. Condition before Restoration

- The surface of the coating film and the *makie* portions were coated with shellac and other materials used for restoration in Europe.
- The urushi coating film had deteriorated and lost its gloss as a result of passage of time and the influence of ultraviolet rays.
- The metal substrate was exposed in parts where the urushi coating film had been lost and the coating film around these areas had become lifted.
- Urushi film was missing at many places due to impact and much of the vermilion urushi film around the mouthpiece had been lost.
- The pipe of the trumpet had become deformed.
- *Makie* powder had been partially lost due to abrasion.
- The globular stopper in the middle of the pipe had been damaged and was found displaced from its original position.

10.1.4. Restoration Plan

Restoration of urushi objects today is executed according to the guideline set by the Agency for Cultural Affairs, that is, “to preserve existing cultural properties without changing the present condition as much as possible and to transmit them to future generations.” In other words, maintenance of the present condition is the norm. Since the restoration of this object would be performed during a limited time of stay at Cologne, Germany, restoration process was such that work would be completed within that time.

10.1.5. Restoration Process

(1) Investigation of the present condition and confirmation of the work process

Conditions of the substrate, foundation, decoration and damage were recorded. Then, previously submitted restoration plan and proposed restoration process were reconfirmed.

(2) Photographing before restoration

Photographs were taken so that the state of the object before and after restoration might be compared.

(3) Manufacture of a working table

A working table and a stand for the object were made to ensure that the object would be restored safely and without damage.

(4) Temporary facing

Since the coating film around missing areas and cracks were in such a condition that it might become detached during restoration, thin strips of *gampi* paper were attached with paste to prevent further detachment.

(5) Cleaning

Dust which covered the surface of the object was brushed off, and a slightly moistened cotton cloth was used to wipe the object. However, since Western coating material had been applied to the surface of the coating film, cleaning was kept to the minimum.

(6) Removal of the Western coating material

Materials to remove the Western coating material were tested. As a result, it was found that it would be possible to remove the coating with pure water. Cotton swabs moistened with a small amount of pure water were used to remove the coating from the black urushi portion. This was followed by removal of the coating from the *makie* portion. Extra care was taken to do the work since it was feared that the fine particles of gold powder used for *hiramakie* might be lost.

(7) Stabilization of damaged parts

The globular attachment on the pipe that serves as a stopper had to be returned to its original position. First, the hole on this globular attachment through which the pipe was passed was enlarged little by little by using a file, and the attachment was returned to its original position. Next, a way to stabilize the globular attachment, which is hollow inside, was considered. Stuffing something around its edge was a possibility. It was decided to wind a hemp cord which had been soaked with *mugi-urushi* around the pipe. Once the urushi around the cord had hardened, the cord was pushed inside the globular attachment to stabilize it.

(8) Press-stabilization of the lifted coating film and cracks

Preparations were made to press-stabilize the lifted coating film and cracks. In order to increase adhesive power, *mugi-urushi* containing more gluten was used to adhere the lifted coating film and cracks. *Mugi-urushi* was diluted with a solvent and impregnated into the cracked portions and under the lifted coating film. After waiting for the solvent to evaporate, *mugi-urushi* was impregnated once again. Clamps were used at places where press-stabilization was necessary.

(9) Filling of the missing parts with *kokuso*

Parts with missing coating film were filled with *kokuso*, which is made by mixing sawdust and hemp fibers to *mugi-urushi*, to reproduce the shape. Coarseness of the *kokuso* was adjusted according to need and *kokuso* was applied several times. Since the substrate of the object is brass and since it is possible to confirm from the damaged parts important information such as the process of applying foundation,

parts where there was no damage were left untouched.

(10) *Kiwasabi*

Sabi-urushi made by mixing *makomo* (wild Indian rice) powder and *mugi-urushi* was applied to the edges of parts where the coating film had been adhered or where *kokuso* had been filled in. This was done in order to prevent the coating film from becoming detached again.

(11) Photographing and compilation of a record of restoration

Photographs were taken after restoration and a record of the restoration work and technical analysis was compiled.

10.1.6. Condition after Restoration

See Table 10.1.

10. 2. 作品解説

東京国立博物館
竹内 奈美子

金属製で、細い管部分を伸縮式とした長喇叭。表面は全体を黒漆塗として、吹口のみ朱漆塗とする。朝顔形の共鳴部の外側に平蒔絵で菊、桔梗、竹などの折枝文や唐花文を描き、その内側には金箔を貼る。

このような長喇叭は吹口にリードを付け、伸縮によって音程を変えて演奏する。おくんち（長崎諏訪大社の祭礼）などの祭礼に用いられ、唐人笛ともよばれた。おくんちの様子を活写した屏風や絵巻、長崎の名所案内の挿絵など、江戸時代中期から唐人装束の楽人が長喇叭を演奏する姿が描かれている。

この喇叭は、オランダ東インド会社の日本商館付き医官で、日本に西洋医学を普及したことで有名なフィリップ・フランツ・フォン・シーボルトの収集品である。シーボルトはまた、日本の動植物や民族学資料の収集を行い、帰国後大部にわたる研究書『日本』を著わした、日本学の祖としても知られる。ライデン国立民族学博物館のシーボルトコレクションは、彼の一回目の日本滞在（1823～1829年）で収集されたものであり、この喇叭もその頃に制作されたものと考えられる。

10.2. Description of the Artwork

Namiko Takeuchi
Tokyo National Museum

The object discussed is a long trumpet made of metal with the thin pipe of which can slide back and forth. The entire surface is coated with black urushi while the mouthpiece alone is coated with *shu-urushi*. The outer side of the bell, the resounding portion, is decorated with a design of sprays of plants like chrysanthemums, bellflowers and bamboo and an arabesque design of stylized flowers. The inner side of the bell is covered with gold leaf.

In this type of long trumpet, a reed is attached to the mouthpiece and the scale is changed by sliding the pipe. Such a trumpet was used in ritual at Nagasaki Suwa Taisha and was also referred to as *tojinbue*. There are folding screens, picture scrolls and illustrations of famous places in Nagasaki from the mid-Edo period that show musicians in Chinese-style costumes playing long trumpets.

This trumpet is a collection of Philipp Franz von Siebold, a physician at the trading house of the Dutch East India Company in Japan who is famous for having promoted Western medicine in Japan. Siebold, known as the father of Japanese studies, also collected flora and fauna of Japan as well as ethnological materials and wrote *Nippon*, a voluminous report, after his return to Europe. The Siebold Collection at Museum Volkenkunde contains objects collected during his first stay in Japan (1823 – 1829), and this trumpet is also thought to have been manufactured around that time.

Table 10.1 寸法
Dimensions

口径 Diameter (cm)	長さ Length (cm)
13.8	119.3

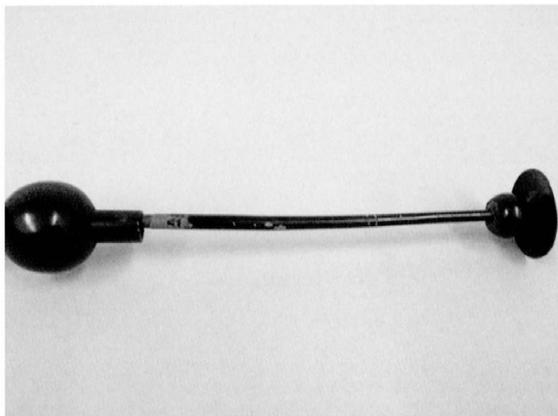


a 修復前 Before restoration

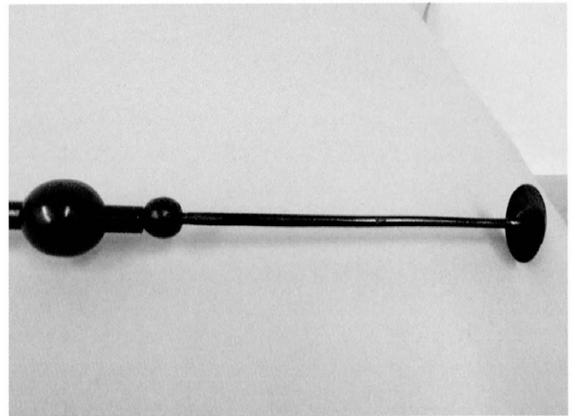


b 修復後 After restoration

Fig. 10.1 全体 Whole



a 修復前 Before restoration

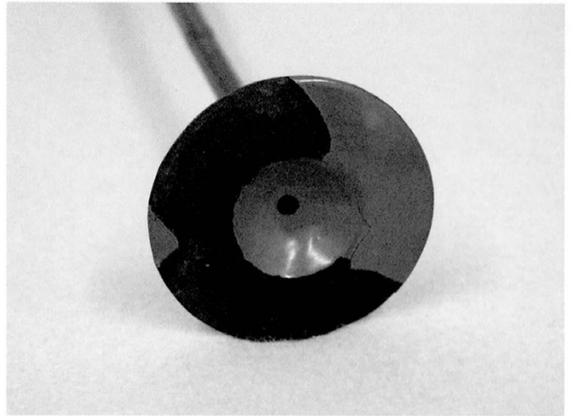


b 修復後 After restoration

Fig. 10.2 軸部分 Pipe



a 修復前 Before restoration



b 修復後 After restoration

Fig. 10.3 吹口部分 Mouthpiece



a 修復前 Before restoration



b 修復後 After restoration

Fig. 10.4 蒔絵部分 Makie portion

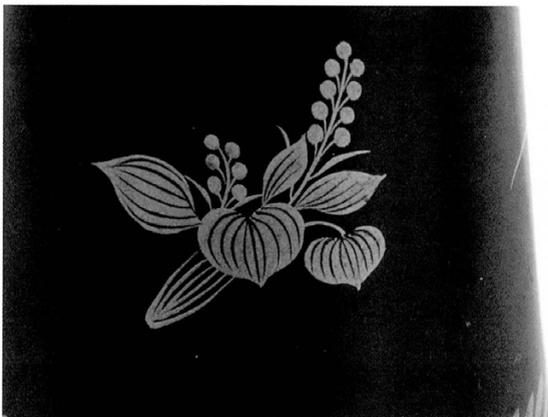


Fig. 10.5 裝飾デザイン
Design of a decoration

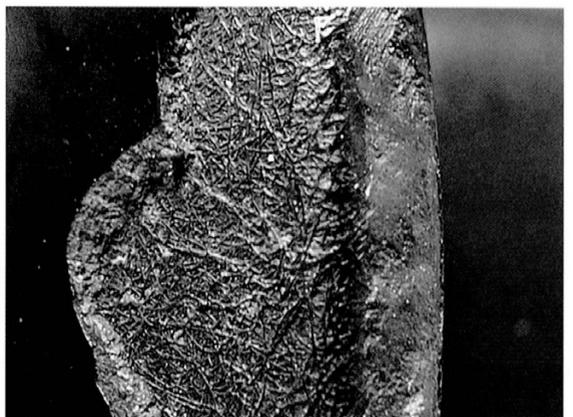


Fig. 10.6 露出した塗膜下の紙繊維
Exposed paper fibers under the missing coating film

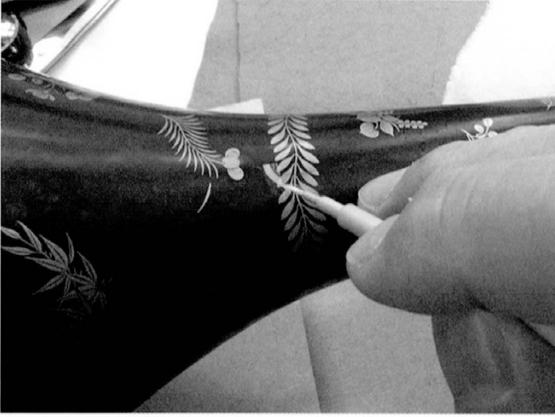


Fig. 10.7 塗膜亀裂部分の養生
Facing the cracked portion of the coating film



Fig. 10.8 塗膜剥離部分の養生
Facing the lifted coating film



Fig. 10.9 クリーニング (塗料除去)
Cleaning (removing the coating film)



Fig. 10.10 クリーニング
Cleaning

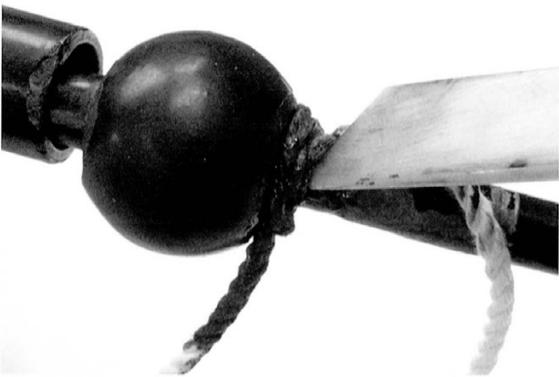


Fig. 10.11 麻ひも充填による固定
Stabilizing with a hemp cord



Fig. 10.12 麻ひも乾燥後、刃物による整形
Adjusting the shape with a knife after the hemp cord has hardened



Fig. 10.13 整形後、麦漆含浸
Impregnating *mugi-urushi* after having adjusted the shape



Fig. 10.14 損傷部分 麦漆含浸
Impregnating *mugi-urushi* to damaged parts

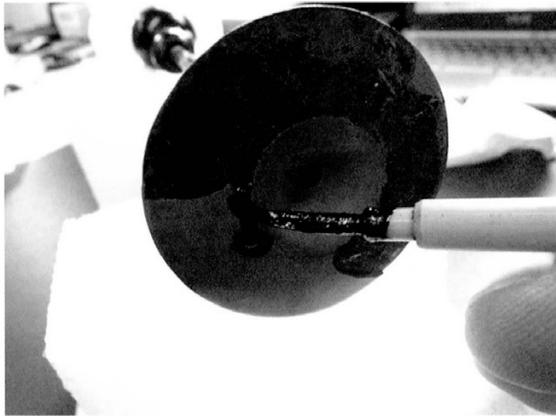


Fig. 10.15 塗膜剥離部分 麦漆含浸
Impregnating *mugi-urushi* to parts where the coating film has become lifted



Fig. 10.16 剥離塗膜 クランプ圧着
Using clamps to press-stabilize the lifted coating film



Fig. 10.17 塗膜欠失部分 刻苧充填
Filling a part where the coating film has been lost with *kokuso*



Fig. 10.18 透間部分 刻苧充填
Filling the gaps with *kokuso*

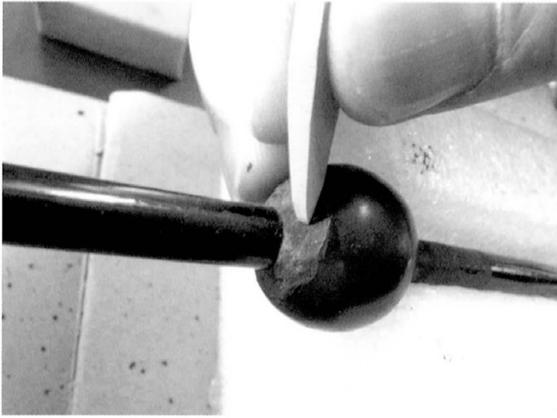


Fig. 10.19 刻苧部分の調整 ストッパー部分
Adjusting the kokuso surface (globular stopper)



Fig. 10.20 刻苧の調整 縁部分
Adjusting the kokuso surface (edge of the bell)



Fig. 10.21 際錆に用いる真菰と麦漆
Makomo powder and mugi-urushi for kiwasabi



Fig. 10.22 刻苧充填部分の際錆
Kiwasaki on the kokuso filled part

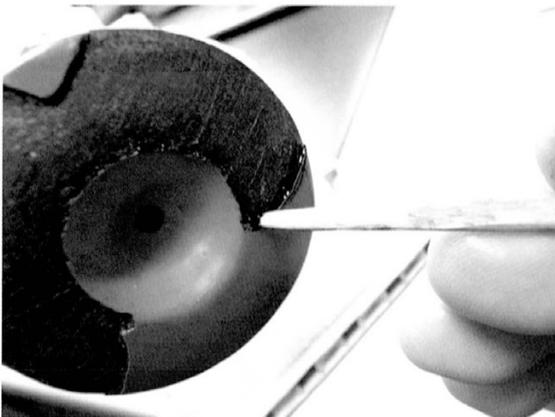


Fig. 10.23 剥落した塗膜際の際錆
Kiwasaki on the edge of the lifted coating film



Fig. 10.24 漆固め
Urushigatame



a 修復前
Before restoration



b 修復後
After restoration

C10.1 折枝散蒔繪喇叭
Trumpet with Design of Sprays in Makie



a 修復前
Before restoration



b 修復後
After restoration

C102 折枝散時繪喇叭 - 軸部分 -
Trumpet with Design of Sprays in Makie, pipe