山水人物蒔絵箪笥（スペイン国立装飾美術館）

Makie Decoration Cabinet with Landscape and Human
(Museo Nacional de Artes Decorativas)

修復前　全景
Before restoration, overview

修復後　全景
After restoration, overview

修復前　正面
Before restoration, front

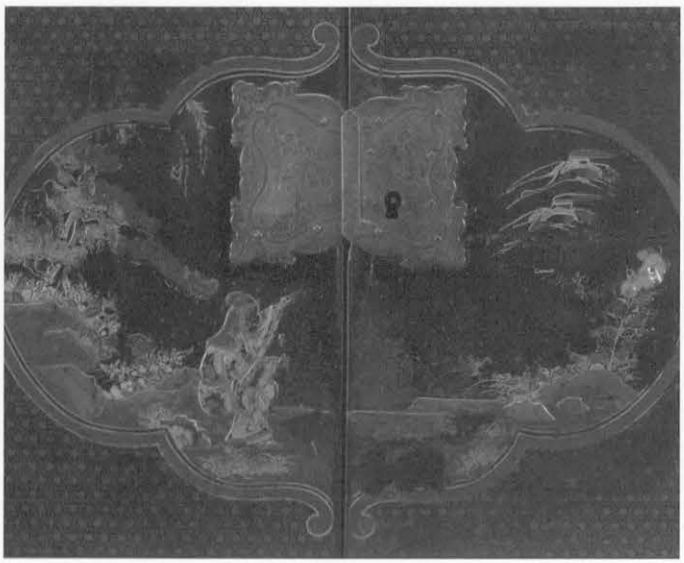
修復後　正面
After restoration, front

修復前　扉裏　内部引出し
Before restoration, inner side of the door panels and the drawers inside

修復後　扉裏　内部引出し
After restoration, inner side of the door panels and the drawers inside

山水人物蒔絵箪笥

平成 17・18 年度修復事業



品名：山水人物蒔絵箪笥
所蔵：スペイン国立装飾美術館

スペイン国立装飾美術館所蔵

山水人物蒔絵箪笥

松本達弥

1．概要

資料名称：山水人物蒔絵箪笥
所　　蔵：スペイン国立装飾美術館
制作年代：江戸時代　18 世紀
法　　量：横 65.0cm　奥行 42.8cm　高さ 47.9cm
修理期間：平成 17 年 6 月～平成 19 年 3 月

2．形状　技法

箪笥の扉は観音開きで、内部には10個の引出を納める。内部引出の中央部はアーチ形に装飾される。扉の中央には錠金具、左右には蝶番が付き、側面には提鐶、角には隅金具が付く。（図 1. 2. 3. 10）

扉表には窓枠を設け、2 羽の鶴を指差した人物を錆上高蒔絵、松、柳、菊など草樹文様は、錆上高蒔絵、研出蒔絵、平蒔絵などの技法で表現される。（図 7）また、菊の花部分は鮑貝の裏に朱漆を塗った伏彩色が施されている。扉裏には、左右 1 羽ずつ鳳凰が描かれ、研出蒔絵、平蒔絵で表される。

左右側面には花形の窓枠を設け、左側にはミミズク、藤、右側には菊、桔梗、萩、蝶などが描かれ、錆上高蒔絵、研出蒔絵、平蒔絵などで表される。また、藤の葉、菊、桔梗の一部には螺鈿が使われる。菊の花に使われた螺鈿には、朱漆で伏彩色され付描が施されている。（図 4. 5. 8）

甲板には、水辺に遊ぶ菊慈童と思われる人物が描かれ、扉表と同等の技法で表現されている。背面は、菱形の窓枠内に葛の葉文様、枠外は卍字くずし文様が描かれ、研出蒔絵、平蒔絵で表される。（図 6）

内部、引出の表面は、平蒔絵で紅白の撫子を描く。（図 9）

3．損傷状態

・箪笥の内外全体には、後補の塗料が塗られ全体が黒ずんで見える。
・正面扉の文様は擦れて欠失した部分が多く、特に高蒔絵部分は欠損が多い。
・両扉の端喰部分や素地の接ぎ目と思われる部分の内外に、亀裂が入っている。（図 12. 14）
・正面扉の左右 6 個の蝶番は後補であり、蝶番下の塗膜には制作当初の釘穴が確認できる。（図 11. 25）
・正面右下の隅金具は後補であり、残り3ヶ所の隅金具は付いていない。
・両側面の天板角部分の塗膜は欠損が多く素地が露出し、周辺塗膜は剥離し剥落の恐れのある危険な状態である。（図 13）
・天板部分の文様は擦れて欠失しているが、文様の置目や高上した下地の形跡が確認できる。
・右側面の天板と側面板の素地接合部や端喰部分に亀裂がある。
・右側面の伏彩色された螺鈿は剥離，剥落があり、欠失した部分には伏彩色の塗料が露出している。（図 8）

図1　修復前　全景
Fig. 1 Before restoration, overview

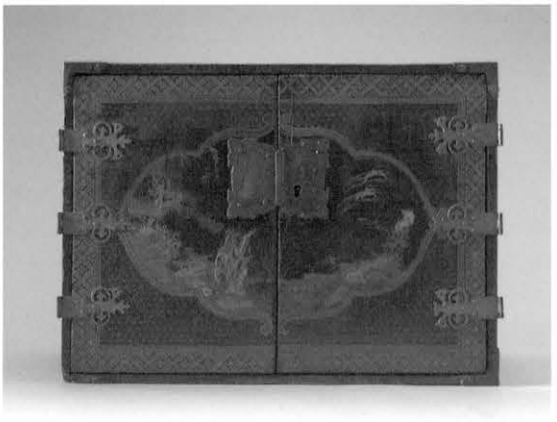


図2　修復前　正面
Fig. 2 Before restoration, front

図3　修復前　扉裏　内部引出し
Fig. 3 Before restoration, inner side of the door panels and the drawers inside

図4　修復前　左側面
Fig. 4 Before restoration, left side

図5　修復前　右側面
Fig. 5 Before restoration, right side

図6　修復前　背面

Fig. 6 Before restoration, back

図7　正面左扉　錆上高蒔絵部分

Fig. 7 Front, left door panel *sabiage takamakie*

図8　右側面　貝裏に朱漆を塗った伏彩色

Fig. 8 Right side, *fusesaishiki* using vermilion urushi on the back of the shell pieces

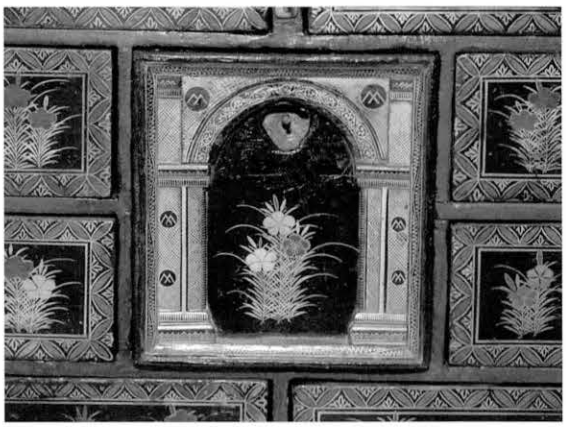


図9　内部引出し　中央部分

Fig. 9 Drawers inside, middle

図10　制作当初（日本製）の隅金具

Fig. 10 Original (Japanese) corner metal fittings

図11　後補（ヨーロッパ製）の蝶番金具

Fig. 11 Hinge (European), a later addition

・背面の黒漆塗り塗膜に施された、銀の研出蒔絵の地文様は擦れによる欠失が多い。
・右側の内扉には、釘が塗膜から突き出した状態である。
・内部、引出の正面や内側には塗料が全体に塗られている。
・内部、引出の内側の塗膜に剥離部分があり、制作当初のものと思われる下地が確認できる。

4．修理仕様

修理は現在、文化庁の指導のもとで行われている漆工文化財保存修理に則り、原則として現状維持修理を基本に行った。

5．修復作業工程

＜調査及び作業工程確認＞
蒔絵筆筒（以後、本資料と呼ぶ）の構造、下地、加飾と現状の傷みを調査記録し修復作業工程を確認した。

＜修復前の記録写真＞
修復前と修復後の比較ができるよう写真撮影を行った。

＜作業台の制作＞
修理品を損傷なく安全に修復作業を進められるよう作業台を制作した。

＜仮止め養生＞
本資料の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。（図 15. 16）

＜クリーニング＞
クリーニングは本資料の表面を覆っている埃を取り去り、僅かに水分を含ませた木綿布にて汚れを除去した。この際、加飾の蒔絵部分や亀裂部分に損傷を与えないよう充分注意し、クリーニングは必要最小限にとどめた。

＜金具の取外し＞
本資料の亀裂及び損傷は金具下まで及んでいる為、金具の取外しが必要となった。右扉の錠金具と正面左下の隅金具を残し、

図 12　扉裏　損傷部分
Fig. 12 Inner side of the door panel, damaged part

図 13　金具周辺　塗膜損傷部分
Fig. 13 Area around a metal fitting, damaged coating film

図 14　木地接合部に打たれた制作当初の釘（鎹）
Fig. 14 Original nail used to join the joints of the wooden substrate

図15　塗膜剥離部分　仮止め養生
Fig. 15 Facing the lifted coating film

図16　亀裂部分　仮止め養生
Fig. 16 Facing the cracks

図17　表面塗膜に塗られた塗料除去
Fig. 17 Removing the coating material from the surface of the coating film

全ての金具を取外し保管した。(図20)

＜後補塗料の除去＞

本資料の漆塗膜は、紫外線や経年劣化により艶の無くなった塗膜の復元の為、数回塗料が塗られていた。また、亀裂部分や塗膜の損傷部分にも塗料が充填されており、このままでは漆による修復が困難になる為、塗料の除去が必要になった。

塗料除去には、数種類の溶剤を試した結果、弱い溶剤では反応がなく、少し強い溶剤であるテトラヒドロフラン（THF）にて除去を行った。除去は、テトラヒドロフランを筆に含ませ塗料面に塗布し、塗料が軟化した後、エタノールで残った塗料を綿布にて拭き取った。なお、厚みのある塗料は、溶剤で軟化した塗料を篦や刃物で漆塗膜を傷付けないよう細心の注意を払い除去した。本資料全体の塗料を除去するには、約10ヶ月の期間を要した。(図17~19)

＜漆塗膜の漆固め＞

漆固めは、塗膜表面の細かな断文に漆を含浸し、塗膜強化と艶を取り戻すために行った。漆固めに使用した漆は、木地呂漆＋梨子地漆＋生正味漆を5:4:1の割合で配合し、精製石油系溶剤のペトロールで4倍～6倍に希釈し漆固めを行った。含浸した漆は断文に染み込ませるだけにし、蒔絵部分や螺鈿に残留が無いよう溶剤で丁寧に拭き取った。なお、漆固めは2～3回に止め、損傷部分の修復が終了後、再度行うことにした。

＜亀裂部分の圧着＞

本資料の左右扉には、素地の接合部に亀裂が多くあり、一部は鉄釘で補強されている箇所があった。圧着に使用する接着剤は、グルテンの量が多い小麦粉を水練りし、生正味漆を練り合わせた麦漆を使用した。圧着は、端金やクランプを使用し作業を行った。(図21.22)

＜塗膜及び螺鈿の圧着＞

剥離した漆塗膜の接着は、本資料を木枠内に固定し、竹ひごの弾力を利用した芯張り技法による圧着を行った。左側面にある剥

図 18　表面塗膜に付けられた塗料除去

Fig. 18 Removing the coating material from the surface of the coating film

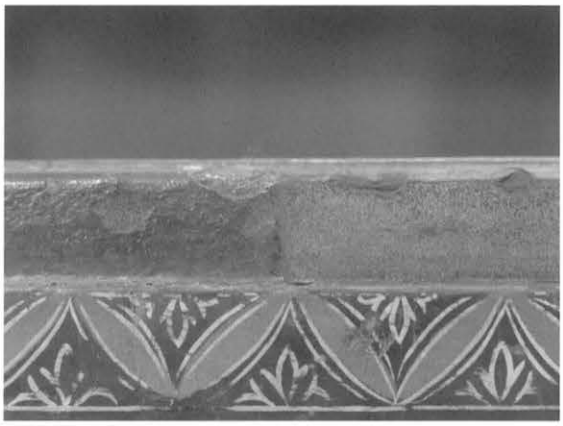


図 19　塗料除去（左　除去前、右　除去後）

Fig. 19 Removal of the coating material (left: before removal, right: after removal)

図 20　隅金具下　埃の除去

Fig. 20 Removing dust from under the corner metal fitting

図 21　亀裂損傷部分に麦漆含浸

Fig. 21 Impregnating *mugiurushi* into a crack

離した螺鈿の接着は膠を使用した。（図 23. 24）

＜刻苧の充填＞

亀裂部分の戻しきれない隙間や塗膜の欠損部分には、麦漆に椿材の木粉や麻の繊維を混ぜ合わせ、珪藻土を焼いた地の粉を加えた刻苧を形状が整うまで数回充填し復元を行った。なお、本資料の時代性や周辺塗膜の損傷が烈しいため、刻苧の充填は必要最小限に止めた。形状復元した部分は、砥石や鑢で刻苧肌を整えた。（図 26. 27）

＜際錆＞

形状復元した部分や塗膜の剥離した部分には、手擦れによる再剥落を防ぐため際錆を行った。際錆は、微粒子の地の粉を水練りし呂色漆と生正味漆を混ぜ合わせた錆を使用した。（図 28）

＜漆塗膜の復元＞

塗膜表面の艶の復元と修復した部分の固めとして漆固めを行った。漆固めは、木地呂漆と梨子地漆を 3：7 の割合で混ぜ合わせ、溶剤で希釈して行った。漆固めは、各面損傷状態が異なるため、溶剤の希釈濃度を変え 4 ～ 6 回行った。なお、高蒔絵部分や螺鈿に余分な漆が残らないよう丁寧に拭き取った。（図 29. 30）

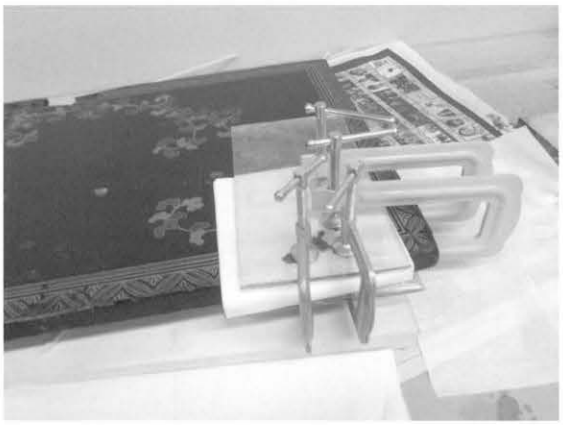


図 22　クランプによる圧着

Fig. 22 Press stabilizing with a clamp

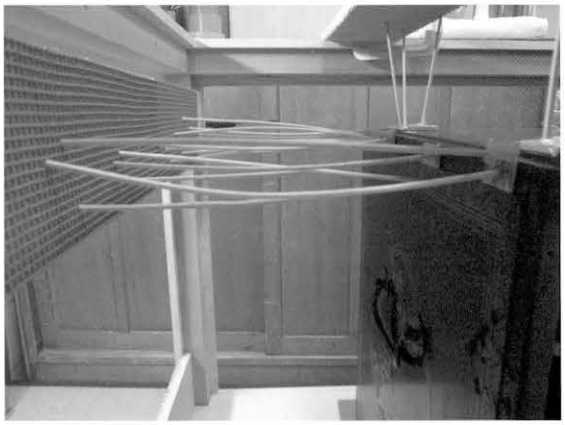


図 23　竹ひごによる塗膜圧着

Fig. 23 Press stabilizing the coating film with bamboo sticks

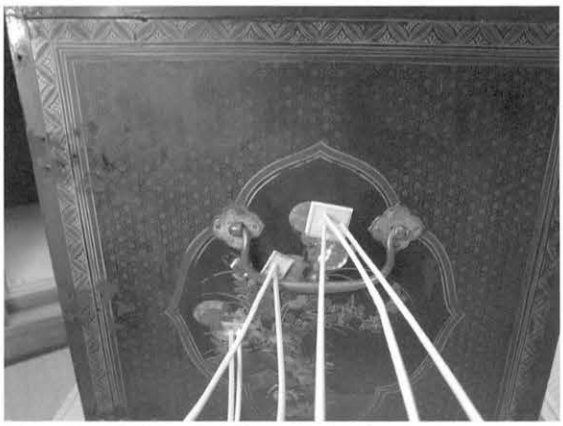


図 24　貝の剥離部分に膠を含浸し芯張り圧着

Fig. 24 *Nikawa* impregnated into the space of lifted shell pieces and press stabilizing with *shimbari* sticks

図 25　後補の釘穴に埋木

Fig. 25 Insetting wood into nail holes made during a past restoration

図 26　角欠損部分に刻苧充填

Fig. 26 Infilling *kokuso* into a missing area on the corner

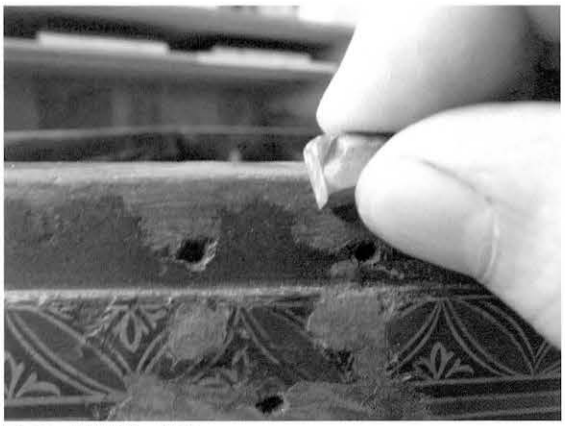


図 27　刻苧部分の研ぎ

Fig. 27 Smoothing out the *kokuso*

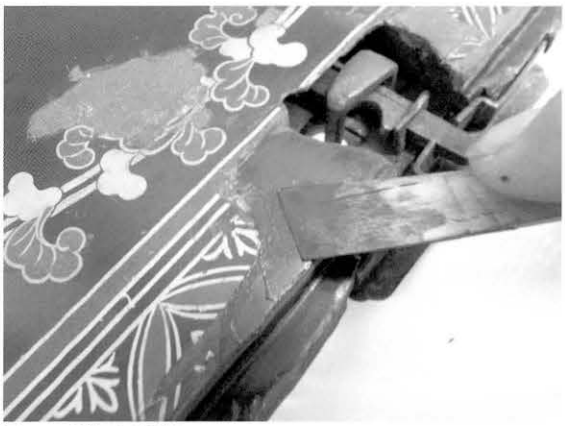


図 28　錆付け（際錆）
Fig. 28 *Sabitsuke* (*kiwasabi*)

図 29　漆固め（塗膜強化）
Fig. 29 *Urushigatame* (reinforcing the coating film)

図 30　漆固めの拭き取り
Fig. 30 Wiping off *urushigatame*

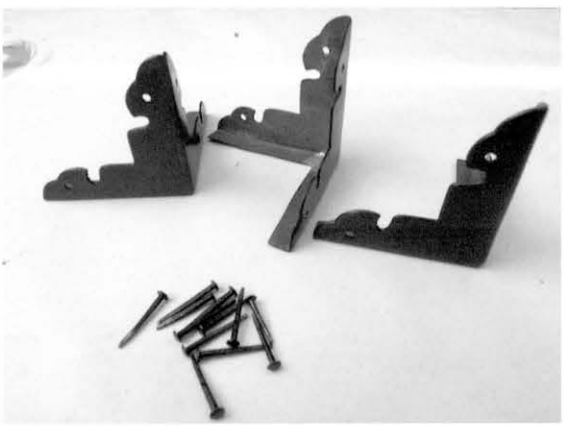


図 31　漆を焼付けて色調を合わせた復元隅金具と銅釘
Fig. 31 Corner metal fittings (reproduction) and nails whose tone of color was adjusted by baking urushi onto metal

＜隅金具の形状復元＞

本資料の下側の隅金具が3ヶ所紛失しており、展示をするうえで金具の設置が必要となった。なお、1ヶ所残っているヨーロッパ製の隅金具と甲板面のオリジナルの金具を参考に形体を起こし、銅素材で加飾の無い形体だけの復元を行った。復元した金具は漆を数回焼付けて古色を付け仕上げた。また、銅釘も制作し取り付けを行った。なお、金具制作は金工家の泉 公士朗氏に依頼した。（図 31. 32）

＜保存箱の制作＞

修復後の保存環境によっては新たに損傷を起す危険性がある為と、永く後世に伝える為に保存用桐箱を新調した。保存箱は桐製の慳貪箱とし、制作は会津の板物木地師の大塚 隆氏に依頼した。（図 38）

＜記録写真及び報告書作成＞

修復及び技術分析の記録をまとめ、修復後の写真撮影を行い全ての工程を終えた。（図 33 ～ 37）

図 32　復元隅金具

Fig. 32 Reproduced corner metal fitting

図 33　修復後　正面

Fig. 33 After restoration, front

図 34　修復前　扉裏

Fig. 34 Before restoration, inner side of the door panel

図 35　修復後　扉裏

Fig. 35 After restoration, inner side of the door panel

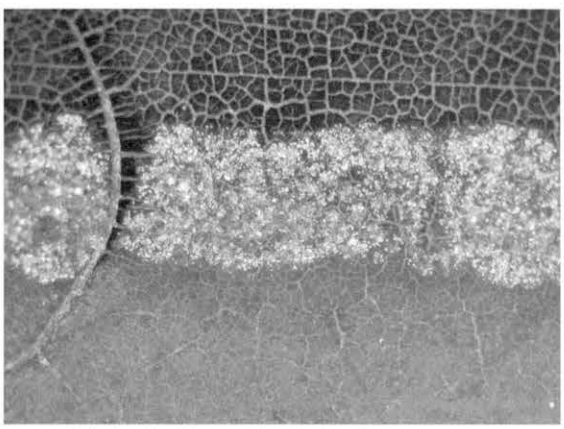


図 36　修復前　表面塗膜の拡大画像（50 倍）

Fig. 36 Before restoration, enlarged image of the surface coating film (x50)

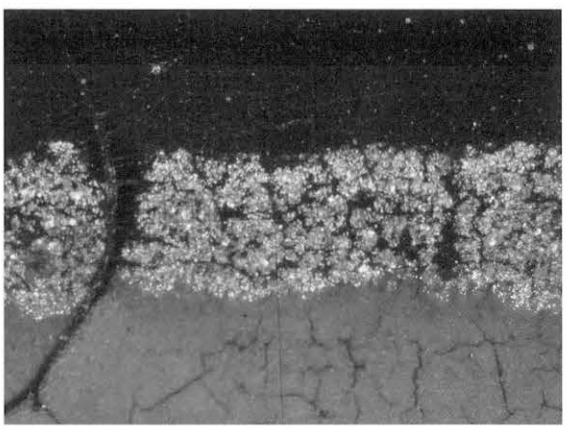


図 37　修復後　表面塗膜の拡大画像（50 倍）

Fig. 37 After restoration, enlarged image of the surface coating film (x50)

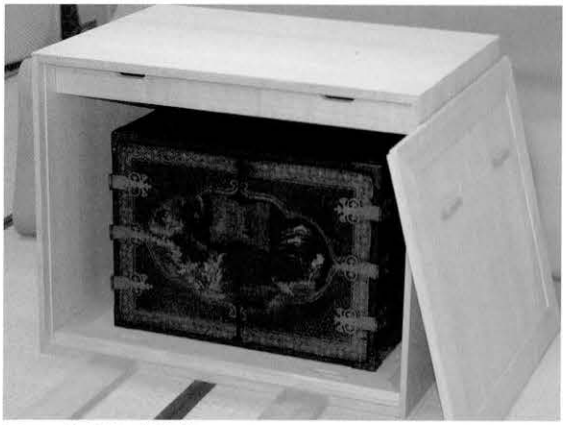


図 38　修復品の保存箱

Fig. 38 Storage box for the restored object

On the Restoration of *Makie Decoration Cabinet with Landscape and Human* in the Collection of Museo Nacional de Artes Decorativas

Tatsuya Matsumoto

1. Outline

Name of the object : *Makie Decoration Cabinet with Landscape and Human*
Collection : Museo Nacional de Artes Decorativas
Time of manufacture : Edo period, 18th century
Dimensions (cm) : Width 65.0 Depth 42.8 Height 47.9
Period of restoration : June 2005 – March 2007

2. Description and techniques employed

The Cabinet has a hinged double door concealing ten drawers within. The drawer in the middle is decorated with an arch. There are metal lock plates where the door panels meet, sets of hinges on the door panels, handles on both sides and metal fittings over the corners (Figs. 1, 2, 3, 10).

There is a cartouche on the front of the double door. The decoration in the cartouche consists of a figure pointing to two cranes, all done in *sabiage takamakie*, a technique of *takamakie* in which *sabi* foundation is used instead of urushi to raise the design. Techniques like *sabiage takamakie*, *togidashi makie* and *hiramakie* are used to depict pine trees, willow trees and chrysanthemums (Fig. 7). *Fusesaishiki*, or a technique of applying vermilion urushi, in this case, to the reverse side of an abalone shell piece, is used for the chrysanthemum flowers. On the inner side of the door panels a phoenix is depicted in *togidashi makie* and *hiramakie*.

There is a cartouche on each side of the Cabinet as well. A horned owl and wisteria plants are depicted on the left side while chrysanthemums, bellflowers, Japanese bush clover and a butterfly are depicted on the right side in *sabiage takamakie*, *togidashi makie* and *hiramakie*. *Raden* is also used on parts of the wisteria leaves, chrysanthemums and bellflowers. *Raden*, to which *fusesaishiki* has been applied, used for the chrysanthemum flowers is further decorated with *tsukegaki*, or drawing with *makie* powder (Figs. 4, 5, 8).

On the top board of the Cabinet there is what is believed to be a figure of a child playing by the waterside, depicted with the same type of technique as that on the front of the double door. On the back of the Cabinet there is a rhombus cartouche. The design inside this is that of ivy leaves while that outside it is one of a stylized swastika. Both are in *togidashi makie* and *hiramakie* (Fig. 6).

Red and white *nadeshiko* flowers are depicted in *hiramakie* on the front face of the drawers within the Cabinet (Fig. 9).

3. Condition of damage

- Some coating material had been applied to the entire surface of the Cabinet during a past restoration so that the whole Cabinet appeared blackish.

- A great amount of the decoration on the front of the door was missing due to abrasion; this was particularly visible on the areas decorated with *takamakie*.
- There were cracks around the joints of the substrates of the left and right door panels (Figs. 12, 14).
- The six hinges on the left and right doors were later additions, and nail holes belonging to the time of original manufacture were observed on the coating film underneath the hingess (Figs. 11, 25).
- The front lower right corner metal fitting is a later addition; there were no corner metal fittings on the other three lower corners.
- Much of the coating film at the junction of the top and side panels was missing and the substrate had become exposed. The surrounding coating film had become lifted and there was a great risk of further losses (Fig. 13).
- Parts of the design on the top board was missing due to abrasion, but it was possible to find traces of *okime* (under drawings) and of foundation used to raise the design.
- There were cracks on the part where the top board and the right side of the Cabinet join.
- *Raden* shell pieces on the right side to which *fusesaishiki* had been applied had become lifted or lost and the vermilion urushi used for *fusesaishiki* had become exposed on parts where the *raden* had been lost (Fig. 8).
- Much of the ground design executed in silver *togidashi makie* on the black urushi coating film was missing at the back of the Cabinet.
- A nail was sticking out of the coating film on the right door panel.
- Some coating material had been applied to the inside of the Cabinet as well as the front and inside of the drawers.
- Coating film on the inside of the Cabinet as well as on the inside of the drawers had become lifted, and foundation that is thought to have been the original was found.

4. Specification for restoration

Restoration was conducted following the principle of restoration for urushi cultural properties executed under the guidance of the Agency for Cultural Affairs. As a rule, priority was given to the maintenance of the present condition.

5. Procedures of restoration

- Pre-restoration investigation and confirmation of the restoration procedures
  The structure, foundation, decoration and present condition of damage were investigated and documented, and the procedures for restoration were confirmed.
- Documentation before restoration
  Photographs were taken before and after restoration so that the Cabinet might be compared.
- Construction of the working table
  A working table was made so that the Cabinet might be restored without causing any damage.
- Temporary facing
  Since the coating film around the cracks on the Cabinet were in danger of becoming detached during restoration, they were faced by adhering thin strips of *gampi* paper with paste (Figs. 15, 16).
- Cleaning
  To clean the Cabinet, dust covering the surface was first removed. Then dirt was wiped off by using a

slightly moistened cotton cloth. Special care was taken so that the *makie* decorations and the cracked parts would not be damaged. Cleaning was kept at a minimum.

- Removing the metal fittings

  Since the cracks and other damage to the Cabinet had spread under the metal fittings, it became necessary to remove them. All the metal fittings other than the lock on the right door and the corner metal fitting of the front lower left corner were removed and stored (Fig. 20).

- Removing previously applied coating material

  Some coating material had been applied several times to the Cabinet in order to reproduce the original urushi coating film that had lost luster due to ultraviolet rays and the passage of time. Cracks were filled and damaged coating film was impregnated with the same material. Since it would have been difficult in such a condition to use urushi for restoration, it became necessary to remove this coating material. After testing several types of solvents, it was found that a weak solvent would not be effective in removing the coating material. Thus, a slightly strong solvent, Tetra-Hydrofuran (THF) was used. It was applied to the surface of the coating material with a small brush. Once the coating material had become soft, it was removed by using a cotton cloth moistened with ethanol. Where the coating material had been applied thickly, a spatula or a knife was used to carefully scrape off the softened coating material, making sure not to damage the urushi coating film. It took approximately 10 months to completely remove the coating material from the Cabinet (Figs. 17 – 19).

- *Urushigatame* (consolidating the urushi coating film)

  Urushi was impregnated into microcracks on the surface of the urushi coating film in order to reinforce it and to bring back the luster of urushi. Urushi used for consolidation consisted of *kijiro urushi*, *nashiji urushi* (two kinds of translucent urushi) and *kijomi* (raw) *urushi* mixed at a ratio of 5 : 4 : 1. This was diluted four to six times with Petrole, a refined petroleum-based solvent. The impregnated urushi was made to soak only into the microcracks and was carefully wiped off the *makie* and *raden* parts with a solvent. Consolidation with urushi was done only two or three times for the time being, and it was decided to do consolidation again after the restoration of the damaged parts.

- Press stabilizing the cracks

  There were many cracks on the joints of the substrate of the left and right door panels of the Cabinet, and in some places iron nails had been used for reinforcement. *Mugiurushi* (raw urushi mixed with flour having a high gluten content that had been kneaded with water) was used as an adhesive. Bar clamps and clamps were used for press stabilizing (Figs. 21, 22).

- Press stabilizing the coating film and the *raden*

  The Cabinet was placed in a wooden frame and the lifted coating film was press stabilized by *shimbari* method using the resiliency of thin bamboo sticks. *Nikawa* (animal glue) was used to adhere the lifted *raden* pieces on the left side of the Cabinet (Figs. 23, 24).

- Filling with *kokuso*

  Kokuso was used to fill the gaps on the cracks that could not be rejoined and the missing areas of the coating film. It was applied several times until the desired shape was obtained. *Kokuso* was made by mixing sawdust and hemp fibers to *mugiurushi* and adding *jinoko*, or baked diatomaceous earth. Since the overall atmosphere created by the passage of time and the coating film around the cracks and the missing areas were severely damaged, application of *kokuso* was kept at a minimum (Figs. 26, 27).

  Parts where the shape had been reproduced were finely smoothed out with a whetstone and a file.

- *Kiwasabi* (applying urushi to the edges of the coating film)
  In order to prevent further lifting of the coating film by abrasion, *kiwasabi* was applied to the parts where the shape had been reproduced and to parts where the coating film had become lifted. For this, *sabi urushi*, which was made by mixing fine *jinoko* kneaded with water to *roiro urushi* and *kijomi urushi*, was used (Fig. 28).
- Reproducing the urushi coating film
  In order to bring back the luster of the coating film and to consolidate the restored parts, *urushigatame* was done again. For this, *kijiro urushi* and *nashiji urushi* were mixed at a ratio of 3 : 7 and diluted with a solvent. Since the condition of damage differed from place to place, the concentration of the solvent was adjusted and consolidation was done from four to six times. Excess urushi was wiped off carefully so that none would remain on the *takamakie* parts or on the *raden* (Figs. 29, 30).
- Reproducing the shape of the corner metal fittings
  Three of the bottom corner metal fittings were missing and it was necessary to replace them in order to exhibit the Cabinet. Thus the one remaining bottom corner metal fitting that had been made in Europe and the original metal fittings on the top board were used as references to determine the shape of the corner metal fittings. Simple copper metal fittings with no decoration were made, reproducing only the shape. These were given an aged appearance by applying a very thin coating of urushi and baked. Copper nails were also made to attach the metal fittings. Manufacture of metal fittings was entrusted to Koshiro Izumi , a metal artist (Figs. 31, 32).
- Making a storage box
  Since there is a risk of new damage occurring to the Cabinet depending on its new conservation environment, and since it is important to be able to preserve the Cabinet for future generations, a new storage box was made of paulownia wood. This paulownia box has a *kendon*-style door that sits in a rebate in the frame and can be removed by lifting it upwards into a recess which is slightly deeper than the one at the bottom and then pulling it outwards with the aid of a built-in handle. Manufacture of the box was entrusted to Takashi Otsuka, a wood craft maker of Aizu district (Fig. 38).
- Documentation and writing of a report
  A report was written of the restoration and photographs were taken of the Cabinet after restoration (Figs. 33 – 37).