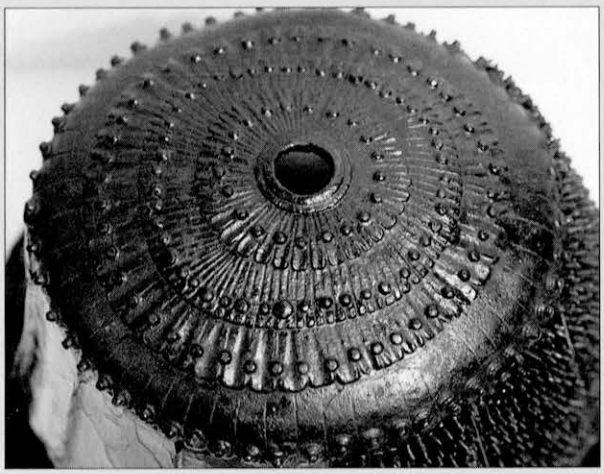
黒漆兜(雑賀鉢)

平成10・11年度
在外日本古美術保存修復協力事業



品名：黒漆兜(雑賀鉢)（江戸時代16～17c）
所蔵：メトロポリタン美術館　アメリカ合衆国
品質構造：鉄、漆塗
所蔵番号：28.60.3

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黒漆兜（雑賀鉢）

15　黒漆兜側面（修復後）
"*Kuro-urushi* Helmet" (side, after restoration)

16　黒漆兜正面（修復後）
"*Kuro-urushi* Helmet" (front, before restoration)

17　黒漆兜側面（修復前）
"*Kuro-urushi* Helmet" (side, before restoration)

18　黒漆兜正面（修復前）
"*Kuro-urushi* Helmet" (front, before restoration)

修理概要

黒漆兜（雑賀鉢）は、米国ニューヨーク市メトロポリタン美術館所蔵である。雑賀鉢とは、紀伊国（和歌山県）雑賀の甲冑師が仕立てた兜鉢で、矧ぎ方と鋲に特徴がある。室町時代後期、大量の兵員で戦うため、甲冑の需要は増加し、合理的で簡略化した兜の製作を余儀なくされた。その中から生まれた雑賀鉢は、異形と鍛えの良い点で歓迎された。このように、歴史的背景による実戦的な兜であるため、現存状態が悪く、部分的に鉄錆の侵食による漆塗膜の浮きあがりや亀裂、剝落が著しく認められた。過去にも数箇所、修理（塗り直し）が施されてきた形跡があり、修理を繰り返して使用されてきたものと思われる。

兜の現状から平成10、11年度在外日本古美術品保存修復協力事業の一環として修復されることとなり、22ヶ月あまりを経て平成12年３月24日に完成した。兜の保存修復工程と調査から得られた新知見を以下に報告する。

品質構造

頭頂部は頂辺の孔を中心に玉縁、小刻、同心円など４枚、４段重ねから成る菊形鉄辺が鋲止めされている。一段目は、菊形などを４㎜から５㎜間隔に掘り込み、21個の鋲を中心に打っている。

二段目は、孔を中心として放射状の毛彫りを３㎜間隔に彫り込み、48箇の鋲を下側に打っている。

三段目は、菊形を８㎜から10㎜間隔に彫り込み、47箇の鋲を下側に打っている。

四段目は、孔を中心として放射状の毛彫りを８㎜から11㎜間隔に彫り込み、側面の縦矧板と頂辺を56箇の座星で繋ぎ止め、頂辺部分の鉄地に直接素黒目漆を数回塗り重ねている。

この様な塗装方法は、側面部分の５間にある小星部分、前立の祓立台、角本にも同様に施している。

側面は、縦矧板12枚張りで、前方部分５間は小星を密に打ち、859箇の星が確認できた。後方７間は筋と面からなり、背面中央の腰巻板に接して角本を打つ。さらに背面中央、間の上部に響の孔が見られる。塗装方法は、鉄地と漆との密着生を良くするため、鉄地表面に細かい縦傷を入れ、下地漆を付けた後に素黒目漆を数回塗りかさねている。

腰巻の板は、鉄の0.7㎜の薄板一枚を使用し、側面の縦矧板を固定した上で、鉢の球状を維持する重要な役割を果たしている。このために腰巻、眉庇部分はとくに強化させる必要があり、布目の詰んだ麻布を貼る。さらに、筋面部分同様に下地漆を付けた後に素黒目漆を数回塗っている。腰巻の周囲４箇所に鐶を繋ぐ穴が９個あけられているが、そのひとつに躊躇い穴が一個見られる。

眉庇は２枚の横矧板を中央で重ね合わせ、三光鋲とからくり鋲によって前立の祓立台と腰巻を固定し、さらに眉庇の左右両際上に鋲留めし固定している。眉庇の裏側表面には、朱漆を数回塗り、共鉄の鐶もまた、鉢内側の左右、後方の３箇所に付けられている。

法量

縦：28.0　　横：23.6　　高さ：16.9（㎝）

損傷状態

現在、兜の鉄製の鉢のみが残り、鍛や吹返しなどの部分を欠失し、鉢の表面全体に古色を付けている。後方部分の７間からなる筋はとくに損傷が著しく、筋を境に鉄錆が広がり、塗膜が錆によつて押し上げられ、浮き上がりによって所々に罅が生じ、数箇所に塗膜の欠失を見る。また、この部分に後補の修理がなされた形跡を確認した。

前方部分、５間の小星が密に打たれた部分と頂辺、祓立台、角本の塗膜表面は全体的に細かい荒れが見られる。この痛み方の違いは、漆の工程の違いによって劣化状態がことなったと思われる。

前方部分、５間の小星、頂辺、祓立台、角本には直接、鉄地に漆が数回薄く塗りかさねているので密閉性が良く、鉄錆が出にくかったのではないかと推測する。また、後方部分の７間は、漆に土を混合した地を付けた後、漆を塗っており、直接漆を付けた部分よりも漆に土を混

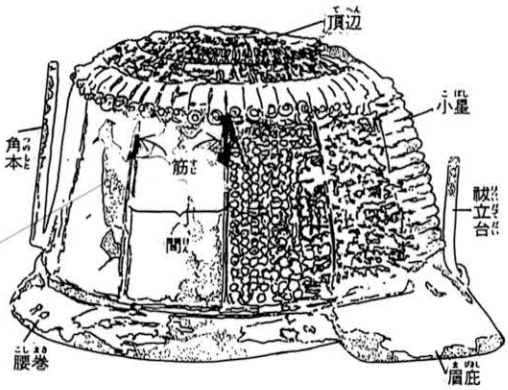
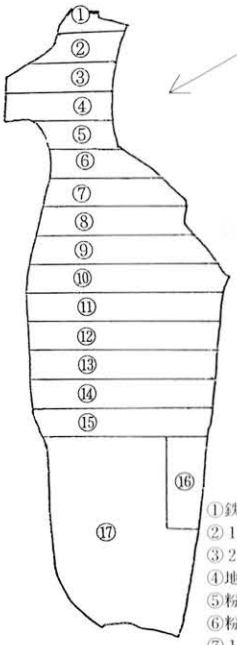


図184-1　兜の名称

Figure of the Helmet

頂辺
Top
角本
Back crest stand
筋
Borderline
間
Section
小星
Tack heads
祓立台
Front crest stand
腰巻
Skirt
眉庇
Visor



①鉄地
②１回目素黒目漆（防錆処理）
③２回目素黒目漆（防錆処理）
④地塗り（生正味漆）
⑤粉入（石粉）
⑥粉固め（生正味漆）
⑦１回目地付け（山科地の粉）
⑧研ぎ
⑨２回目地付け（山科地の粉）
⑩研ぎ
⑪３回目地付け（山科地の粉）
⑫研ぎ
⑬地固め（生正味漆）
⑭地下げ
⑮固め（生正味漆）
⑯接着漆（麦漆）
⑰復元された漆塗膜

図184-2
塗膜復元工程
Coating process
(see p127 for English)

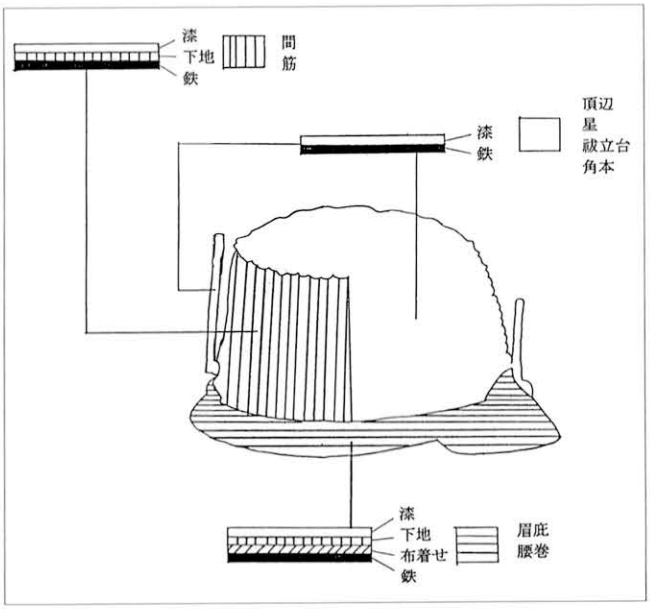


図185　塗装方法
兜（鉢）の部位により塗装方法が異なる
Method of coating
(coating method differs by parts)

186-1

186-2

図186　修理後の兜（側面、後面）
Side view of the helmet after restoration

187-1

187-2

図187　修理前の兜（側面、後面）
Side view of the helmet before restoration

図188　修理作業台の製作
Making a mold for the receptacle

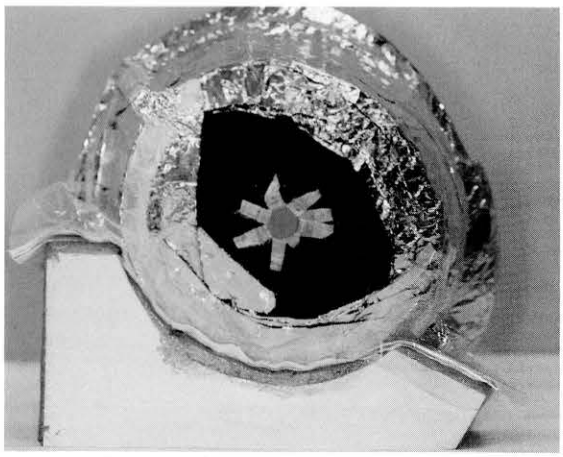


図189　接着工具の製作
Tool for restoration

入した分、衝撃に脆く密閉性に欠け、湿気を含み、徐々に鉄錆が侵食したと思われる。

眉庇、腰巻部分は内側と外側、共に漆塗膜に罅が生じ、それによる漆塗膜の剥離、欠失が見られ、欠失した漆塗膜の下から布が露出している。

鉢の内側全体には糊漆または麦漆を刷毛付けし、所々で塗膜の剥離、剥落、鉄錆が見られる。

内側の左右、後方の３箇所に付けられた鐶は全体に鉄錆がふいている。

〈修理方針〉（図３）

前方部分、５間の小星、項辺、鉢内側、眉庇、腰巻部分は現状保存修理を行う。

後方部分、７間の筋部分に関しては検討したうえ、漆塗膜下の鉄錆と共に浮きあがった塗膜の剥離を行った後、漆塗膜裏側に付着した鉄錆の除去を行う。その後、塗膜を貼り戻し、欠失した塗膜は新たに制作し、周囲との調和を図って復元を行う。また、新しい鉄錆の発生を防ぐために極力、湿気のある乾燥風呂に入れず自然乾燥させる方針を採った。

施工場所・工期

東京国立文化財研究所　修復技術部　第一修復アトリエ

平成10年５月20日～平成12年３月24日

施工項目

１、事前調査、写真撮影と記録（図186、187）

２、修理作業台及び接着工具の製作（図188、189）

・修理台の設計、発注をした。

・木粉と樹脂の混合物で兜の外側左右、内側の型を取り、受け台の製作を行った。

・接着道具類の製作を行った。

３、クリーニング（図190）

・表面に付着している埃を毛棒で払い落とした後、綿棒または先端を尖らせた竹の棒に木綿の布を包み、僅かに湿気を加えた布、またはエタノール溶液を含ませた布で古色を損なわないように表面の汚れを拭き取った。

４、漆塗膜の移動（図191・192）

・後方７間の筋部分に浮き上がった漆塗膜の罅と欠失した漆塗膜の原寸図を起した後、浮き上がった漆塗膜に薄く研ぎ込んだプラスチックの箆を差し込み、おこし上げながら慎重に剥がし取り、塗膜を図面の所定の位置に仮止めし、保管をした。この塗膜の剥離作業中、矧板接合部分の鋲が数箇所欠失し、鋲穴に漆下地が詰まっていることを確認し、過去に塗り直しが行われていたことを推測した。

５、地金と漆塗膜裏の錆の除去（図193）

・筋部分の浮き上がった塗膜を剥がし取った後、鉄地表面に露出した錆をリューターで慎重に除去し、残留した微粉末の錆を綿棒で丹念に拭き上げた。

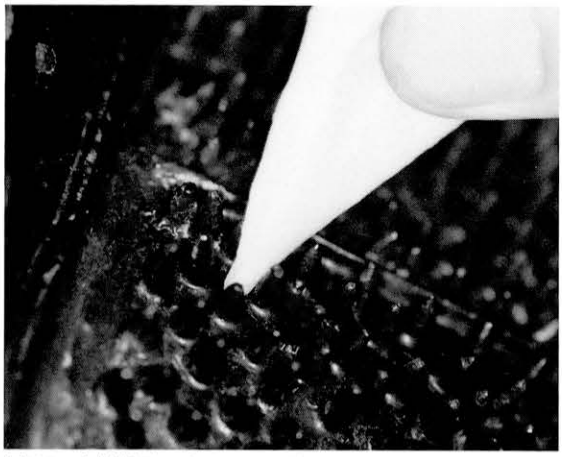


図190　小星部分のクリーニング
Cleaning the tack heads

図193　地金と塗膜裏の錆除去
Removing rust on the underside of a removed urushi coating film

図191　浮き上った塗膜の一時避難
Temporary removal of a lifted portion of the urushi coating film

図194　リューターによる塗膜裏の錆除去
Removing rust with an air turbine

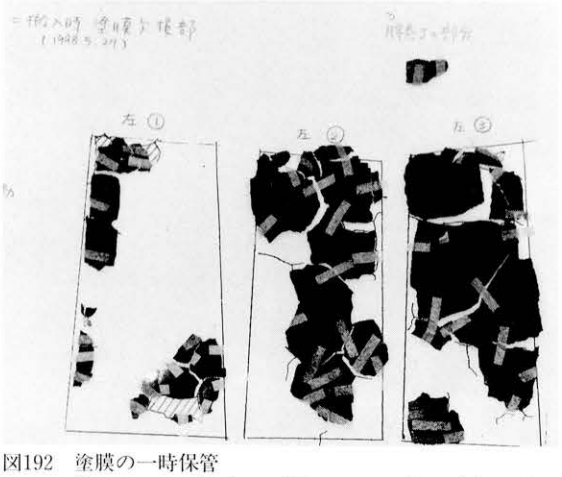


図192　塗膜の一時保管
Temporary storing of the removed urushi coating film

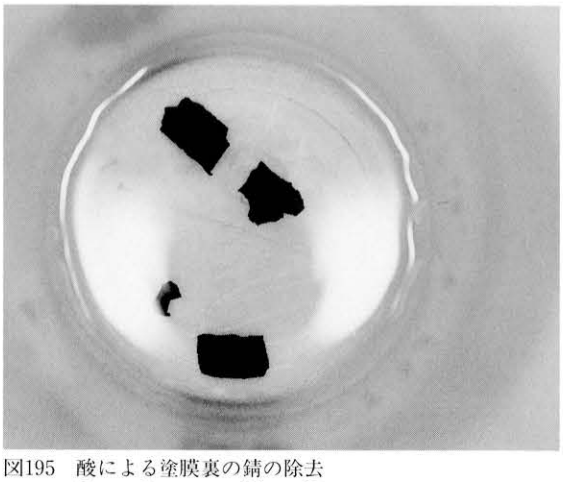


図195　酸による塗膜裏の錆の除去
Removing rust with acid

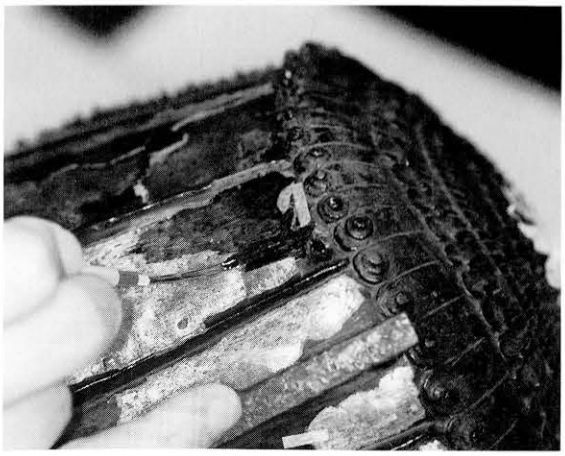


図196　劣化塗膜補強と防錆処理
Anti-corrosive treatment

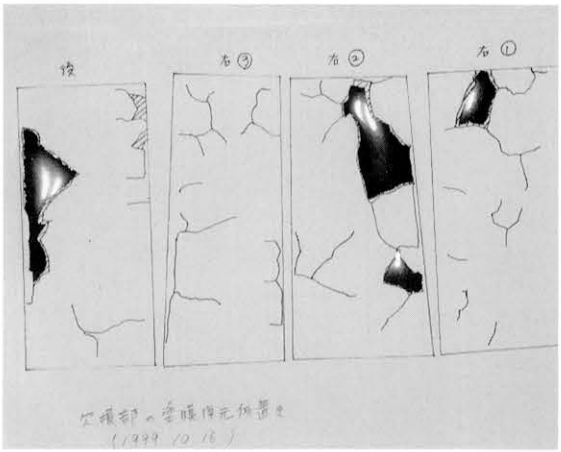


図198　塗膜欠損部分の復元
Reproducing the missing coating film

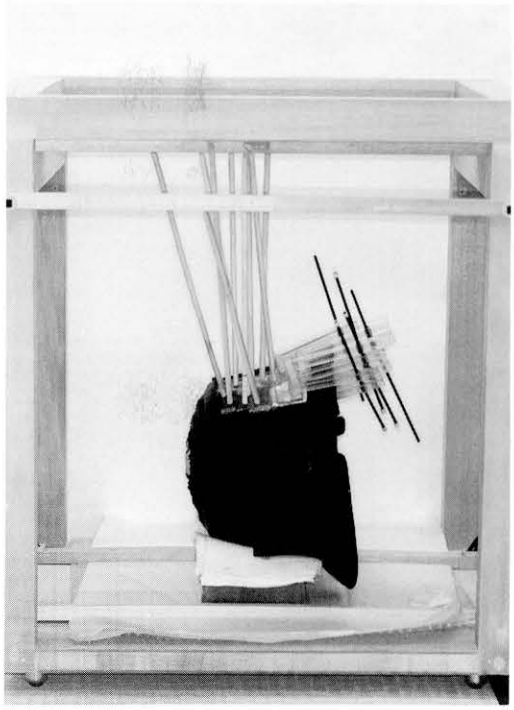


図197　浮き塗膜及び保管塗膜の貼り戻し
Re-fixing the urushi coating film

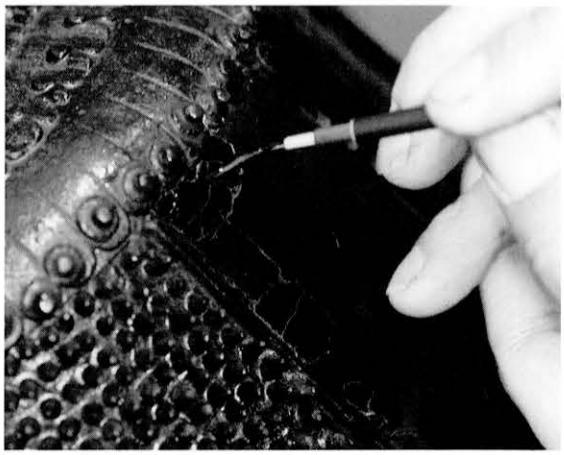


図199　色合わせ
Matching colors

図200　隅錆
Applying *sabi* foundation to the edges

・筋の漆下地は、腰巻に接した部分と中央部分が厚く、頂辺に近づくにつれて塗膜が極めて薄くなっている。このことによって、剝離した塗膜の裏に付着した鉄錆は、塗膜の厚みによってリューターと酸による二つの方法で除去を行った。

○リューターによる漆塗膜裏面の錆除去（図194）

厚みのある塗膜は、リューターの先端にダイヤモンド粉末を付着した刃を装着して、錆の除去を行った。

○酸による漆塗膜裏面の錆除去（図195）

極めて薄い塗膜裏面の錆は、10％の塩酸水溶液に浸け、30分おきに引き上げ、刷毛で裏面の錆を少しずつ洗い流してゆき、90分後、完全に錆を洗い落とした。その後、５％の重曹水溶液に浸け（一瞬泡立ち、気泡が出なくなれば中和されたことになる）気泡が出なくなるのを確認し、水洗いした後、リトマス紙でＰＨを測り、最終的に中和を確認した。

６、劣化漆塗膜の補強と防錆処理（図196）

・兜表面の劣化塗膜に対して、生正味漆にリグロイン溶剤を加えて希釈した漆を含浸させ、表面に僅かに残留した漆を拭き上げて自然乾燥を行った。場所によっては、これを数度繰り返し、劣化した塗膜を補強した。

・別置した後方７間の塗膜の防錆処理の方法として、露出した鉄地表面に素黒目漆を薄く２度塗り込み、密閉性をよくした後、保管していた塗膜の貼り戻しの際に、密着性をよくするために蒔地を行った。

７、浮き上がった漆塗膜と保管した漆塗膜の貼り戻し（図197）

・塗膜を接着する際に、麦漆を用いた。麦漆は糊漆よりも接着力があり、膠漆よりも扱いやすく、溶剤で希釈したときの浸透性もよい。

・接着の際に使用した接着冶具は、方形の丈夫な枠縁の間に桟を差し込み、枠の中に修理作品をいれ、圧着を必要とする部分に細くしなりのある竹の棒を当て、枠縁の桟に引掛け竹の張りを利用し、浮き上がった塗膜を４～５日間押えて漆の乾燥を待つしんばり方法と、接着冶具を必要としない部分にはプラスチック製の軽いクランプで押えて圧着を行った。塗膜の圧着には、漆の乾燥に適した夏期に集中させ、１回の塗膜接着に要した乾燥の日数は４～５日であった。

８、漆塗膜欠損部分の復元（図198）

・周囲の漆塗膜との調和を図るため、同じ方法で漆塗膜を製作し、欠損部分に象眼して接着冶具で押えた。

○漆塗膜製作方法

横10cm、縦15cm、厚1.5cmの石膏版に離型剤として、水で希釈した米糊を数度含浸させ、乾燥後、地漆を薄く付けて素黒目漆を３度塗り重ねる。その後、裏の石膏面から水を浸透させ、離型剤の糊を溶かして漆塗膜を剝離して、欠損部分の形に切り取り、象眼を行った。

9、色合わせ（図199）

・オリジナル塗膜と貼り戻した漆塗膜の境目に麦漆を充塡し、埋められた罅の表面を共漆と線描き用の蒔絵筆を用いて薄く２度塗りかさね、周囲との調和整えた。

10、隅錆（図200）

・手擦れで漆塗膜が再び浮き上がらないよう、塗膜の際に黒錆漆を付け、拭き上げて僅かに塗膜の隙間に黒錆漆を残した。

11、完成（図15、16、186）

On the Restoration of "*Kuro-urushi* Helmet" in the Collection of The Metropolitan Museum of Art, New York

TAGUCHI Yoshiaki, Urushiware Conservator

The restoration of "*Kuro-urushi Kabuto*" (black-lacquered helmet) known as "*Saiga bachi*" will be presented in this paper. This helmet, although some of its accessories are missing, is in the collection of The Metropolitan Museum of Art in New York. Saiga helmets were made by armorers in Saiga in the province of Kii, present-day Wakayama Prefecture, and their distinctive features lie in the way their parts are joined together and in the rivets used. There was a sharp increase in the demand for armors and helmets in the late Muromachi Period (which lasted from 1338 to 1573) when there were many civil wars involving great many soldiers, and armors and helmets were inevitably required to be simple, practical and reasonable. Saiga helmets appeared against such a historical background and were received favorably because of their unusual shape and the quality of their material. The helmet under discussion here, as such, was originally designed for use in actual fighting and was consequently in a bad condition before restoration. Iron rust had corroded the helmet in certain areas, causing the urushi coating layer to lift and in turn leading to considerable cracks and exfoliation. There were also traces of past repairs at several parts of the object, and it seems that the helmet had continued to be used while repeating repairs as required.

For these reasons, it was decided to restore this helmet over a period of two years, from 1998 to 1999, as a part of the Project for Conservation of Works of Japanese Art in Foreign Collections. The project was completed at the end of March 2000.

Materials and Structure

The top of the helmet is composed of four pieces of concentric circular iron plates in the shape of a chrysanthemum flower and riveted together. The five sections on the front appear unusual, with many small tack heads, totaling 859, closely placed all over the surface. The back is composed of seven sections. There are crest stands at the front and the back. The skirt of the helmet is made of a 0.7mm-thick plate and reinforces the entire helmet.

Measurements

Height	16.9cm
Width	23.6cm

Depth 28cm

Condition of Damage

Only the main part of the iron helmet remains, and its neck and side-visors had been lost. The entire helmet appeared very old. Especially the seven sections on the back had become greatly damaged to the extent that iron rust had developed from the edges. As a result, the urushi coating layer had become lifted by the rust, causing cracks here and there, and had also been lost at several places. There were traces of past treatments on these parts.

The urushi coating surfaces of the five front sections, the top, and the front and back crest stands were less damaged. This difference in damage probably arose from a difference in the process of urushi coating and a resultant difference in the degree of deterioration.

The iron substrates of the five front sections, the top, and the front and back crest stands are coated with several thin layers of urushi. As a result, it seems that they were kept airtight to a great extent, thereby making them highly resistant to rust. On the other hand, *ji* foundation had been applied on the seven sides on the back. Then urushi was coated as a finishing touch. Consequently, the iron substrates of those sections were kept less airtight and less resistant to physical shock in proportion to the amount of earth mixed. So moisture could affect the substrate, and the result was gradual corrosion of iron.

On both the outside and inside of the visor and the skirt, there were cracks in the urushi coating as well as loss of coating film in certain areas, causing hemp cloth to become exposed. *Nori urushi* or *mugi urushi* was applied with a brush on the entire inside surface of the helmet. The coating had separated from the foundation or fell off at several places and iron rust was also seen. The three rings that were attached at the right, left, and back of the inside of the helmet were encrusted with iron rust.

Restoration Policy

The restoration policy for this object was two-fold. For the five front sections, the tack heads, the top, the inside, the visor and the skirt of the helmet, it was decided to make only those treatments necessary for the limited purpose of maintaining their present condition. For the seven back sections of the helmet, after careful examination, we decided to remove those portions of the urushi coating that had lifted due to the iron rust underneath and then to replace them again after removing the iron rust while applying newly-prepared urushi coating in those areas where the original had been lost. To prevent rusting, we also decided to choose air drying as a method to minimize moisture in the hardening process of urushi coating.

Restoration Work

Urushi had been applied directly on the five front sections, the top and the front crest stand. As a result, their substrates were kept highly airtight and had not corroded as much as the seven section on the back.

On the other hand, there was a great difference in the degree of damage on the seven back sections. Because the seven sections have urushi foundation under the urushi coating, the urushi surface appears to have been less resistant to shock and easier to exfoliate. The urushi coating was pushed up by rust and lifted off the surface. As for the visor and the skirt, which serve the important purpose of supporting the entire helmet, their substrates were covered with finely textured hemp cloth under the foundation and the urushi coating. The foundation over the hemp cloth had become lifted in part, while the cloth remained closely attached to the iron substrate.

Following is a step-by-step explanation of the restoration process.

1. We took photographs and recorded the condition of the helmet before restoration (Figs. 186 & 187).
2. We made a receptacle to hold and support the object during restoration This was the most important preparatory step. After taking a pattern of the shape of the helmet, we traced it on plywood board and cut it out with a saw. Then we placed styrol foam between the boards to give thickness (Fig. 188).

   Following the completion of the framework of the receptacle, we applied a filler, which was a mixture of sawdust and synthetic resin, evenly to the object-holding face of the stand and covered it with a Saran wrap sheet. We placed the helmet which was covered for protection with a 0.01mm-thick tin foil. To increase the accuracy of the mold, we applied a thin layer of synthetic resin on the object-holding face of the receptacle and placed two or three pieces of cotton cloth. Then we put the helmet and removed it after the resin had dried. Thus the receptacle was completed (Fig. 189).

   This receptacle was designed to hold the entire helmet securely when its urushi coating was press-stabilized with *shimbari-bo* (wooden or bamboo sticks) and other tools and to enhance the efficiency of press-stabilizing work.
3. Next came the cleaning. Because this area is covered with many tack heads, we used a small feather brush or a thinly-sharpened bamboo stick whose tip was wrapped with bleached cotton cloth. We moistened the bamboo stick with a little alcohol or water, wrung it dry and carefully cleaned the grooves in particular (Fig. 190).
4. After cleaning was over, we went on to temporarily remove the portions of the urushi coating on the seven back sections that had become lifted. The urushi coating that had lifted due to rusting of the substrate was removed by pushing it up with a painting knife whose edge was thinned (Fig. 191).

5. Next step was to temporarily position the removed urushi coating pieces at their proper places on a life-size drawing of the lifted portions of the urushi coating. They were temporarily fixed with small pieces of *gampi* paper (Japanese handmade paper for protection) (Fig. 192).

   Those portions of the urushi coating which were pushed up by iron rust underneath could be removed, but the problem was those portions which adhered closely to the foundation. If we attempted to remove them forcibly, they would break into small pieces, ending in an uncontrollable mess. For this reason we decided to leave those portions untouched and, instead, to consolidate them by impregnating *mugi urushi* that was diluted with a solvent.
6. The iron rust on the surface of the helmet was carefully removed by using an air turbine (Figs. 193 & 194) to whose tip a blade was vapor deposited with whetstone or diamond powder. We flattened the edge of the blade in advance so that it would not cut excessively well but only remove the rust.

   With the cooperation of the Tokyo National Research Institute of Cultural Properties, the rust on the underside of the urushi coating pieces was removed not only with an air turbine mentioned above but also in part with acid (Fig. 195). The latter method was employed in those portions where the air turbine could not be used because the coating film was extremely thin. In this case, the coating film was soaked in a 10% solution of hydrochloric acid and taken out at 30-minute intervals to wash away the rust with a brush little by little. They were thoroughly derusted after 90 minutes. Then they were kept soaked in a 5% solution of sodium bicarbonate until it became certain that no more bubbles would come out. After they were washed in water and their pH was measured to doublecheck that they were neutralized, those urushi coating pieces were fixed again to the original positions on the helmet.
7. After the iron substrate and the underside of the removed urushi coating pieces were derusted, as an anti-corrosive measure, they were coated with *sugurome urushi* in two steps to keep them airtight (Fig. 196).
8. Next, to enhance adhesive strength, fine-grained stone powder was sprinkled with a feather brush between the anti-corrosive *sugurome urushi* layer on the helmet and the urushi coating pieces to be fixed again—a process known as *makiji*. After stone powder was sprinkled, it was fixed by applying *kijomi urushi* (top-quality Japanese raw urushi) thereon to consolidate the surface.
9. Before fixing the removed urushi coating pieces again to their original positions, we applied *mugi urushi* in two steps to their underside and the anti-corrosive *sugurome urushi* layer surface. In the first application, we used *mugi urushi* diluted with a solvent. It was intended to consolidate the urushi coating surface. In the second application, we used *mugi urushi* alone as an adhesive to fix the removed urushi coating pieces again with a pair of tweezers after the

urushi had hardened a little.

10. After the urushi coating pieces were placed at their original positions, they were press-stabilized by using *shimbari* sticks. To prevent the coating film from moving due to the pressure caused by *shimbari* sticks, small pieces of *gampi* paper were attached to those urushi coating pieces.
11. Since the urushi coating surface was slightly uneven, to fix the urushi coating pieces securely to the foundation, a thick transparent rubber board was laid on the surface of the coating after it was covered with Japanese paper wrapped by a sheet of Saran Wrap. The damaged places on the surface of the urushi coating pieces were marked on the rubber board in advance so that the re-fixed urushi coating pieces would be press-stabilized precisely at the correct positions with *shimbari* sticks.
12. Then the helmet was turned upside down, and those lifted portions were impregnated with diluted *mugi urushi*. The areas impregnated with *mugi urushi* were then pressed with very lightweight plastic clamps or the like so that unnecessary tension would not be applied on the visor.
13. After the removed or separately-kept urushi coating pieces were fixed again, thin tin foil was temporarily attached to the areas surrounding the groove of the missing urushi coating to protect the urushi coating and was cut along the outlines of the groove. *Ji* foundation was then applied to the grooves with a spatula. After temporarily removing the attached thin tin foil, the surface was polished with whetstone. This process was repeated four times or so until the grooves were filled. Then *kijomi urushi* was impregnated to consolidate the surface.

    The foundation was then scraped off with a knife to lower its surface to match the thickness of the coating film so that the reconstructed urushi coating pieces could be fixed there flush with the surrounding areas (Fig. 197).
14. To reproduce the urushi coating film, we made a 15mm-thick postcard-size plasterboard and applied starch glue to its surface two or three times to make a mold. We then applied urushi on it in several steps. After the urushi had hardened, we impregnated water from the reverse side of the plasterboard to dissolve the starch glue. Finally we removed the urushi coating film (Fig. 198).
15. We colored the cracks on the re-fixed urushi coating film using the same kind of urushi and a brush used for drawing outlines in order to match the surrounding areas (Fig. 199).
16. After lowering the *ji* foundation surface, we consolidated the surface by polishing it, as described above, and then coated the surface with *mugi urushi*.

    We picked up each reproduced urushi coating film with a syringe-like tool having a suction cup attached to its tip and vertically placed the film down on its original position. After placing the film in position, we pressed its surface

down properly by using *shimbari* sticks.

17. After all the pieces had been returned to their positions, sabi foundation was applied to the edges (Fig. 200).
18. Restoration was completed (Figs. 15, 16 & 186).

Coating Process

1. Iron substrate
2. First layer of *sugurome urushi* (anti-corrosive treatment)
3. Second layer of *sugurome urushi* (anti-corrosive treatment)
4. Foundation layer (*kijomi urushi*)
5. *Fun-ire* (sprinkling stone powder on the surface)
6. *Fun-gatame* (applying *kijomi urushi* to the surface on which sprinkled stone powder has completely dried for consolidation)
7. First *jitsuke* (applying raw urushi mixed with rough foundation powder produced in Yamashina, Kyoto, with a spatula)
8. Polishing
9. Second *jitsuke*
10. Polishing
11. Third *jitsuke*
12. Polishing
13. *Jigatame* (consolidating the foundation surface by applying *kijomi urushi*)
14. *Jisage* (lowering the surface by scraping)
15. *Katame* (applying *kijomi urushi* to consolidate the surface)
16. Adhesive urushi (*mugi urushi*)
17. Reproduced urushi coating film

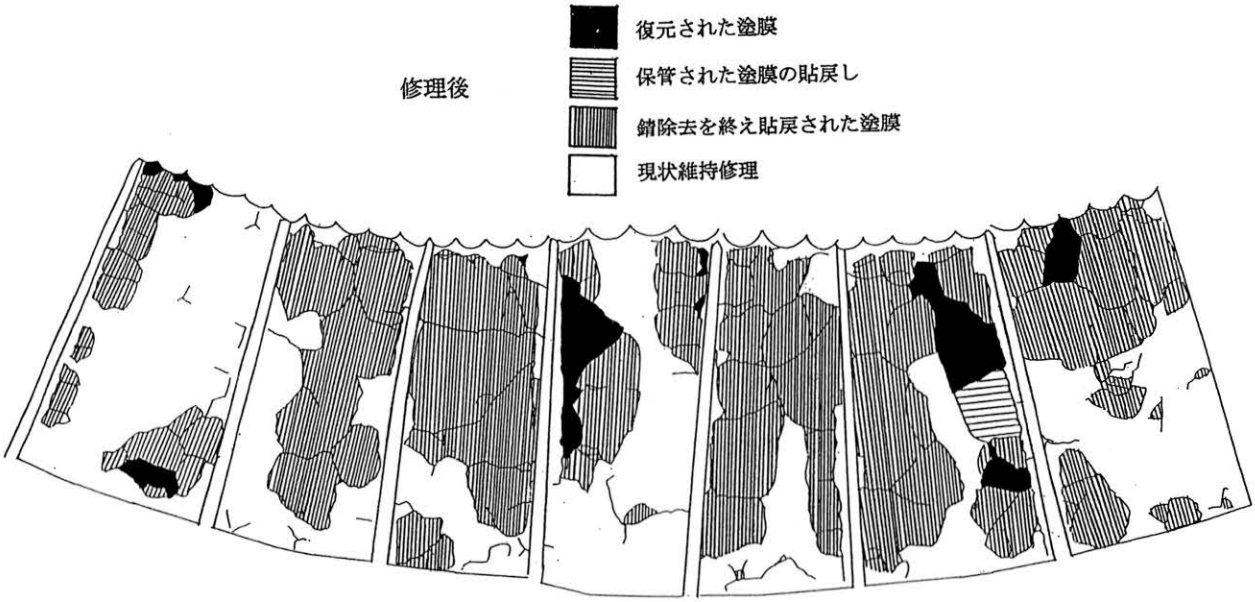


図201　黒漆兜後７間の展開図（修復後）
Illustration of the back 7 sections
(after restoration)

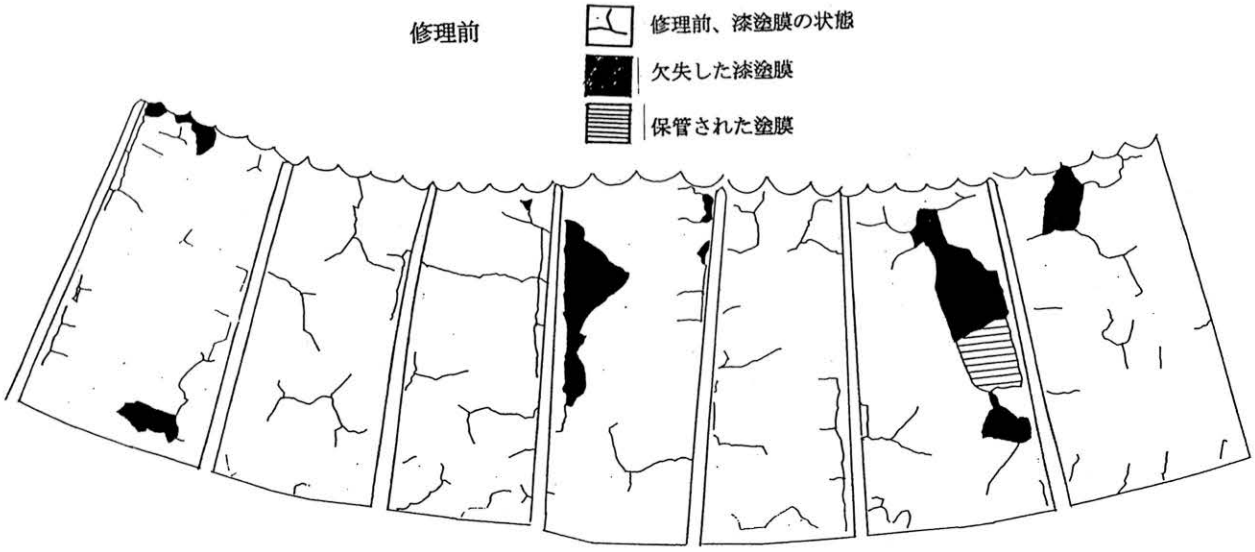


図202　黒漆兜後７間の展開図（修復前）
Illustration of the back 7 sections
(before restoration)