

URUSHI

漆

Urushi Study Group | June 10-27, 1985 | Tokyo

THE GETTY CONSERVATION INSTITUTE

U R U S H I

漆

Proceedings of
the Urushi Study Group
June 10-27, 1985
Tokyo

N. S. Brommelle and Perry Smith, *Editors*

THE GETTY CONSERVATION INSTITUTE

Cover:
Food Container, *detail*
Japan, Momoyama Period, 1568–1615
Black lacquer with gold makie
The Los Angeles County Museum of Art
M.87.202 a,b
Gift of Donald & Iris Blackmore

Coordination: Irina Averkieff, The Getty Conservation Institute,
Marina del Rey, California
Design: Joe Molloy, Mondo Typo, Inc., Santa Monica, California
Typography: Ventura/Adobe PostScript Stone Serif
and Berthold Sabon and Unifers
Printing: Dai Nippon, Tokyo, Japan

© 1988 J. Paul Getty Trust.
All rights reserved

Printed in Japan

Library of Congress Cataloging-in-Publication Data

Urushi Study Group (1985: Tokyo, Japan)

Urushi: Proceedings of the 1985 Urushi Study Group/
N.S. Brommelle and Perry Smith, editors.

p. cm.

Bibliography: p.

ISBN 0-89236-096-8: \$40.00

1. Lacquer and lacquering—East Asia—Congresses.
2. Lacquer and lacquering—Conservation and restoration—
East Asia—Congresses. I. Brommelle, N.S. II. Smith, Perry.
III. Title.

NK9900.7.E15078 1985 745.7'2-dc19 85-21394 CIP

THE GETTY CONSERVATION INSTITUTE

The Getty Conservation Institute (GCI), an operating program of the J. Paul Getty Trust, was created in 1982 to enhance the quality of conservation practice in the world today. Based on the belief that the best approach to conservation is interdisciplinary, the Institute brings together the knowledge of conservators, scientists, and art historians. Through a combination of in-house activities and collaborative ventures with other organizations, the Institute plays a catalytic role that contributes substantially to the conservation of our cultural heritage. The Institute aims to further scientific research, to increase conservation training opportunities, and to strengthen communication among specialists.

CONTENTS

	Prologue	ix
	Map	x
	Chronology	xi
HISTORY		
<i>Hirokazu Arakawa</i>	On the Chinese <i>Kyushitsu</i> Method Based on a Study of <i>Kyushoku-roku</i> Documents	3
<i>Motoo Yoshimura</i>	Innovations in Kodaiji <i>Makie</i>	7
<i>George Kuwayama</i>	Chinese <i>Guri</i> Lacquers	13
<i>Beatrix von Ragué</i>	<i>Inro</i> Research: Some Proposed Future Steps	23
<i>Akio Haino</i>	Sano Chokan, the Urushi Master, Studied through His Work	31
<i>Norimitsu Kimura</i>	<i>Heidatsu</i> and <i>Hyomon</i> in the Nara Period	37
<i>Yoshiyuki Kuraku</i>	Origins of the Use of Urushi in Japan and Its Development	45
<i>Jongseok Lee</i>	Lacquerware in the Unified Silla Period, with Special Reference to the Finds at Anap-chi	51
<i>Yoshio Hasegawa</i>	Urushi Coating and Color Painting Applied to Japanese Architectural Cultural Monuments	57
CONSERVATION AND TECHNIQUES		
<i>Zhou Bao Zhong</i>	The Protection of Ancient Chinese Lacquerware	71
<i>Shin Yagihashi</i>	The Preservation and Handing Down of Traditional Urushi Art Techniques in Japan	79
<i>Toshie Nakajima</i>	Conservation of Chinese Urushi: Methods and Difficulties	87

<i>Shogyo Ohba</i>	The <i>Kyushitsu</i> Technique Demonstrated on a <i>Natsume</i>	91
<i>W. T. Chase</i>	Lacquer Examination and Treatment at the Freer Gallery of Art: Some Case Histories	95
<i>Kenichi Kitamura</i>	Some Thoughts about Conserving Urushi Art Objects in Japan, and an Example of Conservation Work	113
<i>Susanne Barchalia</i>	Apprenticeship and Conservation	121
<i>Kyotaro Nishikawa</i>	Dry Lacquer Statues of Japan	127
<i>Alena Skálová</i>	Chinese Lacquer	133
<i>Yoshikuni Taguchi</i>	Essay on Shells That Became Cherry Blossoms	139
<i>Toshikatsu Nakasato</i>	Urushi Technique in the Prehistoric and Antique Periods in Japan	147

SCIENCE

<i>Toshiko Kenjo</i>	Scientific Approach to Traditional Lacquer Art	155
<i>A. Burmester</i>	Technical Studies of Chinese Lacquer	163
<i>Yumin Du</i>	The Production and Use of Chinese Raw Urushi and the Present State of Research	189
<i>Billie Milam and Hélène Gillette</i>	X-ray Radiography in the Study of Oriental Lacquerware Substructures	199
<i>M. Derrick, C. Druzik and F. Preusser</i>	FTIR Analysis of Authentic and Simulated Black Lacquer Finishes on Eighteenth Century Furniture	227
<i>Rosamond Westmoreland</i>	Solvent Testing Method for Identification of Oriental Lacquer Used in European Furniture	235
<i>Ju Kumanotani</i>	The Chemistry of Oriental Lacquer (<i>Rhus Verniciflua</i>)	243
	Glossary	253



Oval Tray
China, Yuan Dynasty, 13–14th Century
Carved red lacquer
The Los Angeles County Museum of Art
M.81.125.1
Gift of Mr. & Mrs. John H. Nessley

PROLOGUE

漆

In 1985, the Getty Conservation Institute (GCI) organized an international meeting on the study of Oriental lacquerware—urushi—in collaboration with the Tokyo National Research Institute of Cultural Properties in Japan. Held on June 10–27, the meeting included specialists in the history and techniques of urushi in an effort to stimulate an interdisciplinary discussion and approach to the conservation of this ancient and contemporary art form. The GCI wishes to express its gratitude for the opportunity to cooperate with the Tokyo National Research Institute of Cultural Properties in this important endeavor. Special appreciation is extended to Dr. Nobuo Ito, Director of the Institute at the time of the meeting, and to his colleagues who, through the organization of visits to museums, temples, urushi workshops, conservation studios, and manufacturers, facilitated a cultural and technical understanding of urushi objects.

The papers presented here are the proceedings of the meeting, which have been edited through the good offices of the International Institute for Conservation. We are very grateful to Mr. Norman Brommelle and Miss Perry Smith who undertook the editorial responsibility. Appreciation is also expressed to Miss Barbara Roberts, Decorative Arts Conservator, The J. Paul Getty Museum, who served as coordinator of the meeting, and to the many participants who travelled to Japan from other countries with the hope of gaining new scientific, historical, and cultural insights into the manufacture and conservation of urushi objects.

Luis Monreal

Director

The Getty Conservation Institute



CHRONOLOGY

CHINA

Neolithic Period	c. 7000–c. 1600 B.C.
Shang	c. 1600–1027 B.C.
Zhou	1027–256 B.C.
<i>Western Zhou</i>	1027–771 B.C.
<i>Eastern Zhou</i>	770–256 B.C.
Warring States Period	475–221 B.C.
Qin	221–206 B.C.
Han	A.D. 220
<i>Western Han</i>	206 B.C.–A.D. 8
<i>Eastern Han</i>	A.D. 25–220
Period of the Three Kingdoms and Six Dynasties	A.D. 221–581
Sui	A.D. 581–618
Tang	A.D. 618–906
Five Dynasties Period	A.D. 907–960
Liao	907–1125
Song	960–1279
<i>Northern Song</i>	960–1126
<i>Southern Song</i>	1127–1279
Yuan	1280–1368
Ming	1368–1644
Qing	1644–1912

JAPAN

Jomon	c. 200 B.C.
Yayoi	c. 200 B.C.–c. A.D. 250
Kofun (Tumulus)	c. A.D. 250–552
Asuka	A.D. 552–646
Nara	A.D. 646–794
Heian	794–1185
Kamakura	1185–1392
Muromachi	1392–1568
Momoyama	1568–1600
Edo	1600–1868
Meiji	1868–1912

KOREA

Three Kingdoms Period	37 B.C.–A.D. 935
<i>Kingdom of Koguryo</i>	37 B.C.–A.D. 668
<i>Kingdom of Paekche</i>	18 B.C.–A.D. 660
<i>Kingdom of Silla</i>	57 B.C.–A.D. 935
Unified Silla	A.D. 668–918
Koryo	918–1392
Choson	1392–1910

This chronology is intended to give the reader a general overview of the periods discussed in the text and not as a definitive reference.

HISTORY

Toshogu (*main shrine*) honsha and honden.



On the Chinese *Kyushitsu* Method, Based on a Study of *Kyushoku-roku*

Hirokazu Arakawa

Tokyo National Museum

The documents on the art of urushi in China rarely tell us about the detailed process of manufacture. To the best of my knowledge, there are only a few examples. One of these is *Kyushoku-roku*, which records methods of *kyushitsu*, the process and techniques for the application of urushi from the ground coating to the surface coating.

Kyushoku-roku is a document for specialists on the art of urushi. It covers almost all the techniques, with a proper explanation of each. It was written by Huang Wei, an urushi craftsman, in the Longqing period (1567–1572), but the original is lost. The edition with the stamp “*Kenka-do Zosho-in*” is thought to be the most reliable of the manuscripts still in existence. (All references in this paper to *Kyushoku-roku* refer to this edition; Arakawa 1963.) It consists of eighteen chapters, divided into two volumes: *Ken* and *Kon*. *Ken* describes tools, materials, and various points to note in making urushi; *Kon* classifies each technique and describes it in detail. A note to this edition says that the preface was written by Yan Min, but does not give any explanation about his background. Presumably he was an urushi craftsman of the Tianqi period, since the preface was written in the fifth year of Tianqi (1625).

Other important documents on *kyushitsu* include:

1. A volume of *Doten Sei-roku*, which was compiled by Tsuao Chi Hu in the Song dynasty (960–1279). He explains how to differentiate old vessels; the explanation of *kyushitsu* is included in the chapter, *Kokinben*.

2. *Tekko-roku*, which was compiled in thirty volumes by Tao Son I in the Ming dynasty (1368–1644). It is actually a book on legal systems and disturbances in the Yuan period (1280–1368), but the author also deals with paintings and calligraphic works. The last volume, *Kyuki*, describes the art of urushi.

3. Fourteen volumes of *Kinkyō*, which were compiled by Tsuan Ta Mi in the Ming dynasty. This was revised by Sun In, U Ie Shi, and Wan Mao Tao, and published in the thirty-seventh year of Wanli (1609). Included is a detailed description of *kyushitsu* for the seven-string *koto*. (It is interesting to find comments on *kyushitsu* in documents on *kotos*; I have already made a detailed study of this subject (Arakawa 1981a, 1981b, 1981c) and the reader is referred to these publications for a fuller account.)

Documents on *kyushitsu*

Kyushitsu is explained in principle in volume 17 of *Kyushoku-roku*, titled *Shippo*. This volume mentions seven processes from the wooden substrate to *nakanuri* (intermediate coating). The types of *uwanuri* (final coating), according to color, are

1. *Gyokuhon* is a kind of dictionary ("Yupian" in Chinese) published in the Six Dynasties in A.D. 543.

explained in volume 3, *Shisshoku*. Eight types are named: black, vermilion, yellow, green, purple, brown, "oil coating," and *kinshitsu*. Oil coating is a technique of applying oil on the lacquerware surface, and *kinshitsu* is ornamenting with gold filings and gold paint. In this paper we shall concentrate on *kokukyo* (black urushi).

The processes of *kyushitsu* explained in *Kyushoku-roku* and other documents are as follows:

1. *Kenso*. *Ken* is defined in *Gyokuhon*¹ as a bent work, a vessel made of curved wood. *So* means *kiji*, *shitaji*, and *sozai*, all substrates. *Kenso*, then, means *magemono*, or a bent-work substrate. In *Kyushoku-roku*, however, the terms *haitai* and *kikotsu* are used instead of *kenso*. The notes by Yan mention that materials such as bamboo, metal, and others were used as substrate. We should therefore interpret *kenso* as substrate (Arakawa 1977).

Yan's notes list bamboo, rattan, bronze, tin, ceramic, *nerimono* (a molding paste), cloth and paper, and layers of cloth as examples of substrates. In addition, wood is mentioned as being used for square boxes, bent works, and turned works. For example, paulownia and other woods were used as materials for zithers.

2. *Goho*. *Goho* means joining each surface or attaching legs. A craftsman joins surfaces with *hoshitsu*, fastens them with strings, and wedges them. *Kinkyō* explains *hoshitsu* as a mixture of raw urushi and *hoan min* (animal glue).

3. *Soto*. This is the filling with *kokuso* (a thick paste) of connecting parts, missing areas, and knots in the *kiji* (wooden substrate). Yan's notes explain the method of filling in deep gaps using a mixture of *hoshitsu* and wood powder or cotton dust.

4. *Fushitsu*. This is a method of using cloth as a reinforcement. Hemp cloth is carefully pasted on with *hoshitsu* so that there are no irregularities on the surface. *Hoshitsu* is applied to the edges and connecting parts because they are liable to exfoliate. According to Yan's notes, hemp fiber or thick paper was used during the Tianqi period instead of leather, which had been used previously. It should be noted that *fushitsu* is not done for *kotos*.

5. *Kanshitsu*, *kaishitsu*. These are types of urushi priming. *Kyushoku-roku* mentions the following materials mixed with urushi for priming: *tsunoko* (calcined deer-horn) and fine porcelain powder are first-class materials, bone powder and clam-shell powder are second-class materials, and ceramic powder and *tonoko* (finely ground baked clay) are third-class materials. These types of powder are sieved into coarse, fine, and intermediate grades, then applied in five separate stages.

First, coarse *kaishitsu* is applied thinly many times. Next, slightly finer *kaishitsu* is applied evenly in a thick coat. Third, a still finer *kaishitsu* is used to make angles and edges and fill in dents. Fourth, very fine *kaishitsu* is applied, neither thin nor thick. Finally, edges, angles, and border lines are "sharpened."

Yan's notes say that there are other *shitaji* (ground layers), known as *shitaji* substitutes. One is made of a mixture of ceramic powder and charcoal powder, to which starch, pig's blood, lotus juice, and glue are added; it was used by lower-ranking craftsmen in the Tianqi period and considered worthless. Another is called *mansui*, made from oil and lime; a detailed description is given in the section on *mansui* in *Tekko-roku*.

According to *Tekko-roku*, the *kai* of *kaishitsu* is ground ceramic powder. It is sieved into coarse, medium, and fine powder, and combined with *urushi* mixed with *nikawa* (animal glue). The *shitaji* substitute made from pig's blood, starch, etc., as opposed to *urushi* mixed with *nikawa*, is regarded as easily breakable. The chapter on *kaishitsu* in *Kinkyō* defines deer-horn powder as the best, bull-horn powder as second best, and copper and brass powder as "unique." It divides the method of applying *shitaji* into four parts and includes grinding processes—coarse grinding, water grinding, and oil grinding—between each layer.

Doten Sei-roku says that fine powders of gold, copper, and porcelain are used in making zithers. In addition the document mentions *happokai* (mixed powder), *rokkakukai* (deer-horn powder), and *mumei-kai* (limonite powder), noting that mixtures of plaster, copper alloy, and ceramic were used for zither *shitaji*. *Happokai* is the ground powder of various gemstones; *mumei-kai* is mixed with brown iron-ore powder.

6. *Soshitsu*. *Soshitsu* is *nakanuri* (intermediate coating). *So* means unmilled rice. *Soshitsu* is interpreted as *aranuri* (rough coating), or as *urushi* for *aranuri*. *Kushoku-roku* says that this smooths the surface of the *shitaji* and improves the density of the coating. There are three stages in the process of *nakanuri*: the first, *kaiso*, should be thick and smooth; the second, *kiurushi-so*, should be thin and even; and the third, *senso*, should be applied without wrinkles. Notes by Yan say that these three processes are old methods used for the *kyushitsu* of zithers. Vermillion and yellow are sometimes applied as *nakanuri*. It is known that raw *urushi* and fine powder are used for *suri-urushi*.

The chapter on *Soho* in *Kinkyō* also mentions three stages but adds a grinding process to the first stage in which high-quality raw *urushi* is used. It is interesting that the author mentions the *senso* method in detail. The process of making *urushi* is complete when the final coating and decoration are applied after the processes described above.

7. *Hoshitsu*. This term is used for *uwanuri*, the final coating. *Ho* means applying *urushi* in multiple layers. It also has the meaning of "dark-red *urushi*." The volume on *Shippo* in *Kyushoku-roku* does not say anything about *hoshitsu*, but it is recorded in the chapter on *Soshitsu* that *hoshitsu* is applied over the *nakanuri*, and *homen* (a surface prepared by laminating cloth using *urushi* as the binder) is mentioned in the chapter on *fushitsu* (cloth reinforcement). The book *Ken* lists some weaknesses of *uwanuri*, including cracking, wrinkling, and brush marks. As mentioned earlier, six kinds of *uwanuri* are given in volume 3, *Shishshoku*. Four methods for *kawari-nuri* (crackle pattern) are described in volume 4, *Monho*.

Kyushoku-roku explains *shissai* in the chapter following *hoshitsu*. This is a special method of applying *urushi* only on important points such as connecting parts and edges. It does not seem necessary to go into this in detail since it has no direct connection with the processes described above.

Afterword

During the meeting of the Urushi Study Group in Japan, there seemed to be great interest in the repair and preservation of *shikki* (lacquerware), but a lack of fundamental knowledge of the techniques involved. Only a few members of the Group were aware of the existence of old records on the process of *kyushitsu*. I have had a particular interest for some time in the differences and similarities in *kyushitsu* techniques from different parts of Asia: Japan, China, Korea, Ryukyu (Okinawa), and southeast Asia. On this occasion, the records on Chinese *kyushitsu* technique have been discussed, in order to introduce one aspect of this study.

[The translation of this paper has resulted in a variation of the author's original text. Ed.]

Bibliography

Arakawa, Hirokazu

- 1963 "Min-Shin no urushi-kogei to *Kyushoku-roku*" (The *Kyushoku-roku* and lacquer art of the Ming and Qing periods). *Museum* 151:16–21. Tokyo.
- 1977 "Urushi kogeiishi no ni-san no mondai: kensoko" (Some problems on the historical development of lacquer craft). *Museum* 318:13–24. Tokyo.
- 1981 "Kin no kyushitsu ni tsuite" (Lacquer work executed on kin zither). In *History of Lacquer Art (Shikkoshi)*. Vol. 4. Tokyo
- 1981 "Kin no kyushitsu ni tsuite" (Lacquer work executed on kin zither). Lecture for Academy of Lacquer Research. Unpublished manuscript.
- 1981 "Kin no kyushitsu" (Lacquer decoration of kin zithers). *Museum* 369:11–33. Tokyo

Innovations in Kodaiji *Makie*

Motoo Yoshimura
Kansei Gakuin University

From the sixteenth to the seventeenth centuries, *makie* furniture, the so-called Kodaiji *makie*, was very popular. Since I have already written about the dates of production and the manufacturers, this paper will concentrate on the innovations in Kodaiji *makie*, with specific reference to actual works (Yoshimura 1971).

First, it must be stressed that Kodaiji *makie* (a style of lacquer associated with the Kodaiji temple in Kyoto) does not employ the *okime* method. This very fact accounts for the peculiar beauty of Kodaiji *makie*. The *okime* method consists of drawing a rough sketch on paper with *yaki-urushi*, which is *e-urushi* (thickened raw lacquer and red ochre) made by putting it on a paper and scorching it with fire. By placing this rough sketch face down on the surface to be decorated, and rubbing lightly with either fingers or brush, the sketch is transferred. Today, almost all the rough sketches for *makie* are prepared in this way. However, in Kodaiji *makie*, there is evidence that this method was not employed.

Figure 1 shows the *asagao makie jikiro* (food container). Next to the upper right edge of the morning glory leaf in the center, there is a trace of a vermilion line. Similar vermilion lines are also found on the leaf to the left and on the upper side of the leaf done in *enashiji* in the left corner. It is difficult to see these lines in the picture, but they are easily observed on the actual work because they are conspicuous on the *kuronuri* (black) background. On this food container, it may be said that preliminary lines were made in vermilion and a rough sketch was drawn before the process of *makie* (sprinkling metallic powder on a wet lacquer surface to form a picture or design). In the final stage of the rough sketch, the total effect of the design was reconsidered and the preliminary lines were slightly revised. Usually, after the completion of *makie*, these vermilion lines are erased completely, but in this particular work this procedure was forgotten and hence the rough sketch is revealed.

Drawing a rough sketch in such an impromptu manner is a very risky proce-

Figure 1. *Asagao makie jikiro*
(food container).



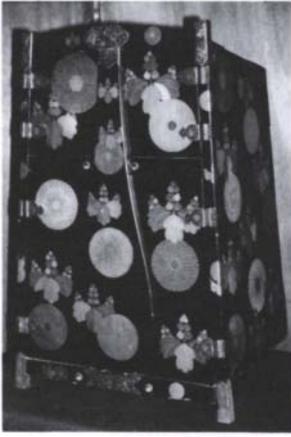


Figure 2a. Kiku-kiri-mon makie oigata gusoku-bitsu (box for storing armor) of Inuyamajo.

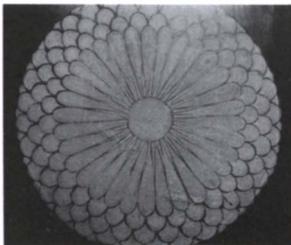
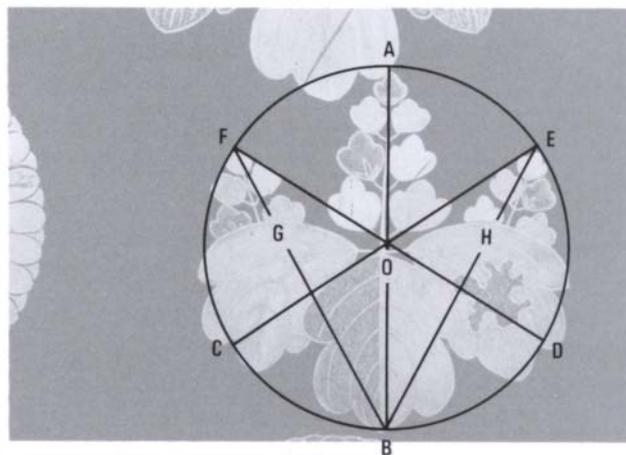


Figure 2b. Detail showing the hole in the center of the chrysanthemum design made by the point of a compass.

Figure 2c. Detail showing the hole made by the point of a compass where the paulownia leaf and flower stalk meet.



Figure 2d. Diagram showing the composition of the paulownia design using a compass.



ture. Therefore, except in the work of extremely skillful *makie* artists, such a method may result in an “unrefined” product. In order to minimize this risk, the following techniques were employed in Kodaiji *makie*. First of all, comparatively large flowers and leaves, such as those of chrysanthemums, Chinese bellflowers, and the morning glory seen in the food container under discussion, as well as sprays of chrysanthemum and paulownia, were expressed by the repetition of several patterns. The designs were prevented from becoming monotonous by the diversities of detail and the arrangement of the pattern of branches and stems, fronds of Japanese pampas grass, and small bush-clover flowers, which were described with lines and points. The details that give life to the design were probably drawn by the most skilled *makie* artist at the final stage. This means that there might have been a studio of artisans who drew the same patterns repeatedly and a *makie* artist who took the leading role. This division of labor would have been the ideal method for the manufacture of Kodaiji *makie* furniture, which was then mass-produced.

Next, let me introduce an example of a work using a compass, which enabled the rough sketch to be drawn easily and precisely: the *kiku-kiri-mon makie oigata gusoku-bitsu* (a box for storing armor) of Inuyamajo (Fig. 2a). In this work there are two types of chrysanthemum design, single and double, and both large and small designs. For the paulownia design, a five- and seven-flowered pattern is used, and here, too, large and small sizes are found. A careful study of the details reveals a small hole at the center of the chrysanthemum design (Fig. 2b), and a similar small hole is found at the point where the paulownia leaf and flower stalk meet (Fig. 2c). These small holes were without doubt made by the point of a compass.

The following method demonstrates a most effective use of the compass in

drawing the paulownia design. First, a circle of a certain size is made with a compass and the figure drawn so that the center of the lower stalk and the central leaf meet at the center of the circle (Fig. 2d). Obviously in this figure the lengths of the central flower stalk and central leaf are the same: each is equal to the diameter of the circle. Then the circumference is divided with the compass into six sections. The points of contact, A through F, are placed on the circumference and leaves are added to the left and right of the central leaf, having their tips on points C and D respectively. Line OB becomes the mid-rib of the central leaf; the arc touching COD becomes the mid-rib of the leaf on each side. Next, points B and F and B and E are joined; the points of contact of this line with the left and right leaves G and H are marked; then the lines FG and EH become the stalks of flowers on the left and right. This forms a figure similar to the paulownia design. Though we may not be able to say that all the drawings of the chrysanthemum and paulownia designs on Kodaiji *makie* were made using a compass, it is interesting to note that the forms of chrysanthemum and paulownia designs of the Keicho period (1596–1614) resemble designs made in this way.

It is also a well-known fact that Kodaiji *makie* did not employ *togidashi makie* (design flush with surface) or *takamakie* (high relief), or use methods of intricate decoration such as *kanagai* (gold leaf), *kirigane* (gold flakes), or *raden* (shell inlay); only *hiramakie* (low relief) was used. Yet the use of *hiramakie* alone would tend to make a work monotonous in color. Since the design is formed by a repetition of set patterns, diversity in color is necessary to enliven the design. *Makie* furniture had to be decorative because it was surrounded by brilliantly colored gilded screens and used by people dressed beautifully in costumes embellished with Tsujigahana dyes and gold embroidery. In order to bring about this ornamental appearance, various methods were used, such as sprinkling *aokin* (an alloy of gold and silver) while applying the gold filings, or using *nerigaki* (a mixture of urushi and gold filings) or *enashiji* (gold and silver powders sprinkled to make a definite design).

Furthermore, many more effects were created by applying *enashiji* on red ochre coatings or on black urushi. The combined use of *gin-makie* and *gin-enashiji* (techniques using silver) is seen in the *makie* in the *shaden* (building complex) of the Tsukubusuma shrine and in the *sumi-ire* (charcoal basket) of Daigoji temple.

Now let us discuss the compositional characteristics. In Kodaiji *makie* there are several motifs, such as pine trees, bamboo, cherry trees, and scattered musical instruments. But the most popular are the autumn plants, especially those that are depicted realistically. These realistic depictions of autumn plants did not appear suddenly in Kodaiji *makie*. There were already some works made between the fifteenth century and the first half of the sixteenth century that exhibited this tendency. For example, the *kiku-tsuru-kame makie tebako* (cosmetic box; Fig. 3) depicts chrysanthemums blooming on a mound with flowing water, as well as a crane and tortoise design, which are traditional symbols of good fortune. The diagonal depiction of the chrysanthemum on the side is also very traditional. However the chrysanthemum is much larger than the crane; the actual relative size of the motifs is ignored.

In works between the late fifteenth century and the first half of the sixteenth century, there is an increasing number of designs lacking a sense of balance. For example, as Professor von Ragué (1967) notes, in the *ogura-yama makie suzuribako* (writing box) in the Suntory Museum, the bushes growing on a distant mountain peak are drawn much larger than the nearby trees, ignoring perspective. Similarly, on the back of the lid of the *kasugayama makie suzuribako* (writing box) in the Nezu Art Museum, the autumn plants blooming in the distance are depicted much larger than the hut in the foreground. Such concentration gives a strong impression of the autumnal season to the viewer.

The design of the *akikusa tsuru-kame makie bundai* (low table; Fig. 4) is probably modeled after the previously mentioned cosmetic box (Fig. 3). However, with



Figure 3. Kiku-tsuru-kame makie tebako (cosmetic box).

Figure 4. Akikusa tsuru-kame makie bundai (low table).



the addition of Chinese bellflowers, gentian, and Japanese pampas grass to the chrysanthemum design, the symbolism of good fortune is not as obvious. On this table there is also a crescent moon in the upper right corner of the picture. This at first reminds the viewer of the *baigetsu makie bundai* in the Tokyo National Museum and other *bundai* designs of the Muromachi period (1392–1568), yet the autumn plants on the left are too large and gorgeous compared with those on the right where there is more empty space. This destroys the lyrical and lingering impression that is created by the diagonal composition.

Designs like these, which seem to break with tradition, appear one after another from the Momoyama period. The *bunko* (document box; Fig. 5) in Osakajo, which presents an excessively large maple tree and autumn plants with male and female deer standing below, is one example. Compared with traditional designs that would have depicted the motifs of deer, maple tree, and autumn plants with equal balance in order to portray the seasonal atmosphere, in this work the artist's attention is completely on the maple tree and the autumn plants, and the deer are merely supplementary. As this example reveals, plants, especially autumn plants, which had been only one of the motifs in the scenic pictures, seasonal pictures, or symbolic designs of good fortune since the Heian and Kamakura periods, became the focus of interest in the Momoyama period. Hence, in Kodaiji *makie* furniture, supplementary motifs such as cranes, deer, crescent moons, and flowing water disappeared, and the so-called "autumn plant design" of Kodaiji *makie* was established (Fig. 6).

The *susuki-kuzu makie choshi* (sake container; Fig. 7) is a work that manifests the spirit of the Momoyama period. Its accurate depiction of autumn plants and the design of pampas grass and arrowroot spread over the comparatively small pitcher gives a forceful impression that this work is much larger than it actually is. Both pampas grass and arrowroot are wild plants growing at the foot of mountains in the wilderness; neither often attracts attention. These plants, which are described as almost sprouting from the surface of the pitcher, do not evoke the feeling of "pity" that the Japanese feel for frail autumn plants whose lives are terminated by the coming of winter. Instead people are affected by the purely artistic nature of the color and shape of these plants.



Figure 5. Bunko (document box) from Osakajo.

Figure 6. The autumn plant design typical of Kodaiji makie.

Figure 7. Susuki-kuzu makie choshi (sake container) owned by Gonroku Matsuda.



Figure 8. Jubako (stacking boxes) showing contradictory design elements.
Figure 9. Sumiaka tebako (cosmetic box) from the Suntory Museum.

In addition to realistic depictions of autumn plants, in Kodaiji *makie* there are designs contrasting various contradictory elements. On the surface of the lid and the four sides of the main body of the *jubako* (stacking boxes) in Figure 8, pampas grass is depicted as fine lines, and drops of dew, chrysanthemums, and paulownia are scattered. The contrast between the delicately patterned lines of pampas grass and the distinctly solid shape of the chrysanthemum and paulownia design suggests the relationship of background and foreground. The design on the *sumiaka tebako* (cosmetic box) in Figure 9 contrasts the straight line of the cypress fence and the controlled curve of the paulownia arabesque design. There are also designs such as those of the *kobon* (tray; Fig. 10), in which fan-shaped designs are scattered over pampas grass, creating a sense of diversity. This design undoubtedly follows the tradition of *senmen chirashi* from the Kamakura period. However, what was important in the traditional *senmen chirashi* was the arrangement of various fans—fully open, half open, completely closed, and slightly open—scattered over the surface. In this *kobon*, large pampas grasses are used as background and elaborately decorated fan-shaped designs are scattered over them, thus creating a contrast between boldness and delicacy. This contrast is further emphasized because of the designs on the fan face, which are classical motifs of *sumiyoshi*—pine trees, arched bridge, *torii* (gateway), and shrine building—and *wakanoura* patterns—*katawaguruma* (waterwheel) in a reed bush and strips of paper and cranes. These traditional motifs introduced within the frame of a picture make the contrast all the more vivid.

Among these designs of contrasts, the most effective is *katamigawari*, where the two halves of the object are patterned differently. This design was originally developed for costumes; however, in the Momoyama period, when gorgeousness and splendor were preferred, the design was popular even in *makie* and in pottery such as *oribe-yaki*. In “Renchu kyuki” it is written:

Both *katakata-nui* and *katakata-haku* have no definite seasonal restrictions. There may be objects belonging to various seasons in one and the same design. It is not unnatural to have a classical picture design on one *katakata* (half) and something of seasonal import on the other *katakata*. (Ise n.d.)

Originally, in dyed fabrics, either contrary designs possessing seasonal atmosphere were drawn with *nui* on one side and *haku* on the other, or sometimes classical pictorial designs without any seasonal significance on one side were contrasted with designs of the four seasons on the other side.

Figure 10. Kobon (tray) with a design of fans and pampas grass.



Figure 11. Suzuribako (writing box) from Shoshuraigoji in Sakamoto, Shiga prefecture.



Often, in *makie*, different colors were used: *nashiji* (gold) on one side and *kuronuriji* (black) on the other. On the gold, sprays were scattered and on the black autumn plants were depicted. The *suzuribako* (writing box; Fig. 11) of Shoshuraigoji in Sakamoto, Shiga prefecture, somewhat altered the conventional form. On one side of the diagonally divided section is a screen design characterized by straight lines; on the other, the curved forms of paulownia and spider's web are contrasted. Moreover, within both sections, lines and solid shapes are contrasted.

Conclusion

As has been seen, the technique and the design of Kodaiji *makie* made mass-production possible, but at the same time exhibited splendid effects not inferior to individually produced pieces. When the origin of such designs and techniques is considered, both go far beyond the Momoyama period. Kodaiji *makie*, however, did not follow the main trend of tradition. Rather it employed indirect techniques and designs and, by skillfully combining them, created *makie* adaptable to the modern age. Since Kodaiji *makie* had to be mass-produced, it had to avoid using very intricate techniques like *takamakie* (high relief). However, the mere employment of very simple techniques such as those of *hiramakie* (low relief) and *maki-hanashi* (unpolished *makie*) would hardly compete with the gorgeousness of *takamakie* pieces that are decorated with *kanagai* (gold leaf) and *kirigane* (gold flakes). In order to compensate for this difference between Kodaiji *makie* and *takamakie*, special techniques were employed in sprinkling *makie-fun* (metal powders), *enashiji* (pictorial work) was diversified, and original and creative designs that were pleasing to the eye were added. The Momoyama period was a time when the development of these innovations was possible.

Bibliography

- Ise, Sadamutsu
n.d. "Renchu kyuki." In *Gunsho-ruiju*. Buke.
- von Ragué, Beatrix
1967 *Geschichte der Japanischen Lackkunst*. Berlin.
- Yoshimura, Motoo
1971 *Kodaiji Makie*. Kyoto National Museum.

Chinese *Guri* Lacquers

George Kuwayama

Los Angeles County Museum of Art

Of all the techniques of embellishing lacquerware, the art of carved lacquer is quintessentially Chinese. Typically these works occur in two basic forms: pictorial lacquers carved with illustrative or narrative themes, and *qulun*, commonly known as *guri*, which are sculpted scroll patterns arranged geometrically. *Guri* are simple spirals compounded into a complex pattern of curving and counter-curving scrolls, or into concentric rows of repeated sword-pommel patterns. It is an enduring theme in Chinese art, arresting in its geometric order and understated beauty. Dating Chinese lacquers with carved *guri* patterns is a problem that this paper will try to address.

The earliest Chinese specimen of scroll patterns in lacquer reproduces the *lei-wen* spiral, that ubiquitous background design on Shang bronzes. In a fragmentary example excavated from a Shang tomb at Taixicun, Gaochang Xian, Hebei province, *lei-wen* (thunder pattern) and other traditional bronze designs were carved into the body of the wood and then coated with red and black lacquer (Hebei sheng bowuguan 1974). Other materials unearthed there date the site to the late Anyang period. The Zhou dynasty site of Shangcunling, Henan, attributed to about 700 B.C., also yielded carved wood painted with lacquer.

Molded lacquers have been made since the Han dynasty (206 B.C.–A.D. 220) and possibly as early as the Warring States period (475–221 B.C.; Garner 1979:65). The most notable example of molded lacquer occurs in the ogival tracery of the lacquer casket dated 1042 from the Huiguang pagoda, Zhejiang (Zhejiang Provincial Museum 1973).

True carved lacquers, with simple geometric scroll patterns cut into a lacquer ground, came to be made in the Tang period (A.D. 618–906). The numerous layers of lacquer, totaling several dozen or more, are often colored in different hues creating a succession of contrasting bands. The earliest lacquers with *guri* carvings are armor plates excavated at Fort Miran in East Turkestan by Sir Marc Aurel Stein in 1906 (Fig. 1; Whitfield 1985). These British Museum pieces, dated by style and archaeological context to the Tang dynasty, consist of seven alternating layers of brownish-red and black bands of lacquer applied to a leather core. Crescents, commas, and S-shaped designs are cut at a sloping angle into the lacquer layers. The many applications of lacquer on leather armor plates were protective in their thickness, and the desire for adornment probably led to simple relief carvings that ultimately produced *guri* lacquers.



Figure 1. Armor plates excavated at Fort Miran, East Turkestan: earliest examples of lacquer with guri carving; Tang dynasty; British Museum.

Aside from these Fort Miran pieces there are no other *guri* lacquers that can be attributed with confidence to the Tang period. However, several ancient Chinese textual references support their manufacture during this era, particularly the ninth century *Yinhualu* by Zhao Lin (quoted in Garner 1979:70–72,275–277).

Textual sources also provide a basis for assuming the extensive manufacture of *guri* lacquers during the Song dynasty (A.D. 960–1279). Cheng Dachang's *Yanfanlu* of 1181 (Garner 1979:70–71,277) and the *Gegu Yaolun* edition of 1388 by Cao Zhao (David 1971:144–145) refer to carved lacquers. All three of the aforementioned texts refer to *xipi*, a term with as many interpretations as there are writers. However, from its contextual usage a general definition may be ventured. *Xipi* refers to lacquer layers of different colors with carved designs through these layers. Prior to Song it may have referred to flat marbled lacquers, which the Japanese call *tsugaru*.

A sizable corpus of *guri* lacquers from the Song period can be assembled from extant pieces that can be stylistically related to materials from datable archaeological finds or to similar Song objects in other media.

The 1977–1978 excavation of a mortuary site at Wujin Xian, Jiangsu, yielded a handled mirror box with carved *guri* patterns (Fig. 2; Chen 1979). The contents of the tomb indicate a date in the second half of the Southern Song period. The mirror box has a black surface and the beveled carving proceeds through layers of black, yellow, and vermilion to a base of dark brown. The design is an agglomeration of sword-pommel scrolls arranged around a central rosette of four dotted half circles. The upper surface of the *guri* relief is smooth and rounded.

In the summer of 1982, the tomb of Yu Gongzhu and his wife, who died in 1226 and 1199 respectively, was discovered in Pengxian, Sichuan (CPAM Sichuan Province 1985). The pillaged tomb yielded a red carved lacquer-covered box with five sword-pommel scrolls and a pentagonal rosette on its cover (Fig. 3). Its sides were embellished with severed half *guri* scrolls arranged in a horizontal band. This datable *guri* work has sword-pommel scrolls with a central filling that does not descend between the two curvilinear spirals, thus identifying a *guri* form that can be firmly dated to Southern Song (1127–1279). The continuance of this *guri* form into the Yuan period (1280–1368) is indicated by a Jizhou ceramic vase in the de Santos collection (Medley 1974:Pl. 120).



Figure 2. Handled mirror box with carved guri patterns excavated at Wujin Xian, Jiangsu; Southern Song period.

Figure 3. Cover of carved lacquer box excavated at Pengxian, Sichuan, showing sword-pommel scrolls and a pentagonal rosette; Southern Song period.

Figure 4. Pottery model excavated from a Liao kiln site in Beijing, showing a simple double-spiral pattern; Liao dynasty.

Figure 5. Fan handle carved with three elliptical groupings of facing heart-shaped scrolls; Jintan Xian, Jiangsu; Southern Song period.

Figure 6. Silver-lined cup with rows of curvilinear sword-pommel scrolls, discovered at Shazhou Xian, Jiangsu; Song dynasty.



An early type of simple double-spiral pattern was discovered on a pottery model excavated from a Liao (907–1125) kiln site in Beijing (Fig. 4; Lu 1978). It is without an upper arc and without the interior filling common to later sword-pommel scrolls.

Several lacquer fan handles adorned with carved *guri* scrolls have been excavated from a Southern Song tomb datable to around 1249. The interred remains and belongings of Zhou Yu were found at Jintan Xian, Jiangsu (Zhejiang City Museum 1977). One of the fan handles was carved with three elliptical groupings of facing heart-shaped scrolls (Fig. 5). The multiple layers of reddish-brown lacquer are divided into over ten segments by hairlines of black lacquer.

A silver-lined lacquer cup with rows of curvilinear sword-pommel scrolls cut through layers of black and red was discovered in a tomb at Shazhou Xian, Jiangsu (Fig. 6; Shazhou County Cultural Office 1981). This bamboo-bodied cup comes from a funerary site attributed by its excavators to the Song period.

One of the *lohan* paintings from a group of sixteen at the Seiryōji, Kyoto, illustrates an attendant holding a lacquer incense case with carved *guri* designs (Mainichi Newspapers 1976). This set of Japanese National Treasures is believed to have been brought from China by the Todaiji monk, Chonen. Japanese archival sources relate that Chonen returned to Japan in 987 with many Buddhist relics including the *Sixteen Lohans*. Chonen's paintings, however, are now believed to have been lost, and the existing Seiryōji *lohans* are widely accepted as Southern Song Chinese Buddhist paintings.

A good number of Song silver objects with scroll designs provide intriguing analogies to Song *guri* lacquers. The recent archaeological excavation of Tomb 201 at Laoheshan, Hangzhou, Zhejiang, uncovered a silver box with rows of sword-pommel scrolls on its cover and body (Jiang 1957). The find can be dated by a bowl inscribed with the date 1162.

A silver bottle was among the finds from a Song hoard at Deyang, Sichuan (Shen 1961). This bottle was adorned with two facing S-shapes configured into a heart motif. This identical pattern occurs along the border of a box cover found in the tomb of Zhu Tan, who was buried in 1389 at Jiu Xian, Shandong, attesting to the continuation of Song styles into Yuan and early Ming (Shandong sheng bowuguan 1972).

Another Southern Song tomb at Huangyueling, Jiangpu Xian, Jiangsu, yielded silver vases and round boxes with undulating repoussé designs that enlarge the known vocabulary of *guri* patterns popular during the Song period (Nanjing shi bowuguan 1973). A round lead box bearing similar scroll designs was recovered from another Song tomb located in Shanghai (Huang 1962).

Useful stylistic parallels can also be drawn from Song ceramics. Sword-pommel and *rui* (scepter) scroll designs painted on Jizhou stoneware are identical to those on many carved *guri* lacquers (Medley 1974:133, Pl. 117B). Stonewares with spiral patterns chiseled on their bodies before firing reproduce the effect of carved lacquerware (Medley 1974:Pl. 120). The proximity of kilns and lacquer workshops in Zhejiang and Jiangxi may account for this similarity.

All of the aforementioned *guri* lacquers, metalwork, and ceramics are from datable finds establishing reference points for stylistic comparison. There are, in addition, several groups of *guri* lacquers that relate closely to these stylistic landmarks, enlarging the corpus of Song *guri* lacquers. They reflect the popularity of relief scroll designs on Southern Song metalwork, lacquer, and ceramics. All of these pieces are very light in weight with thin wooden bodies, a characteristic shared by Song ceramics of the Ding and Qingbai variety. There is an amazing variety in the design of the scrolls, which are handsomely composed into geometric patterns. The coats of lacquer are usually applied in bands of various hues, creating parallel linear contours in colors that are revealed by the wide, shallow angle of carving. The knife cuts are sharp, creating a ridge where the surface meets the edge of the bevel. There are twelve lacquer pieces in Japanese and American collections that share these characteristics:

1. Circular box and cover, height 11.8 cm, diameter 22.7 cm, carved brown lacquer in *guri* decoration, Tokugawa Art Museum, Nagoya (Tokugawa Art Museum 1984:No. 1).
2. Circular tray, height 4.6 cm, diameter 11.4 cm, carved brown lacquer in *guri* decoration, Tokugawa Art Museum, Nagoya (Tokugawa Art Museum 1984:No. 2).
3. Bottle, height 16.3 cm, diameter 11.4 cm, carved brown lacquer in *guri* decoration, private collection (Tokugawa Art Museum 1984:No. 3).
4. Circular incense container, height 2.8 cm, diameter 7.1 cm, carved brown lacquer in *guri* decoration, Tokugawa Art Museum, Nagoya (Tokugawa Art Museum 1984:No. 4).
5. Circular tray, height 3.6 cm, diameter 22.8 cm, carved brown lacquer in *guri* decoration, private collection (Tokugawa Art Museum 1984:No. 5).
6. Circular incense container, height 3.9 cm, diameter 7.8 cm, carved brown lacquer in *guri* decoration, Tokyo University of Arts (Tokugawa Art Museum 1984:No. 6).
7. Oblong tray, height 3.4 cm, length 27.7 cm, width 13.9 cm, carved brown lacquer in *guri* decoration, Tokugawa Art Museum, Nagoya (Tokugawa Art Museum 1984:No. 7).
8. Tray, height 3.5 cm, diameter 19.2 cm, lacquer carved with *guri* decoration, Tokyo National Museum (Tokyo National Museum 1977:No. 431).
9. Incense container, height 3 cm, diameter 7.2 cm, lacquer carved with *guri* decoration, private collection (Tokyo National Museum 1977:No. 437).
10. Tray for scrolls, 15.8 x 30.8 x 3.2 cm, lacquer carved with *guri* decoration, private collection (Tokyo National Museum 1977:No. 439).
11. Circular dish (Fig. 7), diameter 28 cm, brownish-black, red, and yellow lacquer carved with *guri* decoration, Sackler Collection, Tokyo National Museum (Lee 1972:100, Fig.39).
12. Circular dish, height 2.5 cm, diameter 19 cm, brownish-black, red, and yellow lacquer carved with *guri* decoration, Sackler Collection, Freer Gallery of Art (Lee 1972:102–103, Fig. 41).

The section on *xipi* in the “Ancient Lacquer” chapter of the *Gegu Yaolun* has this revealing sentence: “The pieces which used to be made at Fuzhou have a burnished yellow ground and circular patterns. They are known as Fuxi. They are solid but thin and are also difficult to come by” (David 1971:144).

A black lacquer tray with a foliate rim in the Itsuo Art Museum relates stylistically to the above group (Tokugawa Art Museum 1984:No. 8). Although the swirling curvilinear composition of the interconnecting spirals is vigorous in its movement, it lacks the ordered symmetry and geometric balance of the other twelve.

Figure 7. Circular dish carved with guri decoration; Song dynasty; Tokyo National Museum.



Two bowl-stands, one in the British Museum (Garner 1979:75, Fig. 27) and another in the Los Angeles County Museum of Art (Kuwayama 1982:59, No. 7), may be added to this Song corpus. The slower rhythmic movement of the design and the increased stylization suggest a date subsequent to the group of twelve.

There are numerous *guri* lacquers that can be assigned with confidence to the Yuan period. Textual references such as the 1388 edition of the *Gegu Yaolun*, archaeological excavations, and the large number of extant pieces attributable to Yuan enable us to assemble an impressive corpus.

Technical developments in the manufacture of lacquerware may account for this larger corpus of Yuan lacquer objects. The thin, light, Song *guri* pieces with sharply-cut, wide, beveled grooves evolve into the heavier Yuan type with sturdier bodies, more numerous layers of lacquer, and grooves more deeply cut at a steeper angle with their surfaces rounded and smoothed. The wooden core is usually assembled so that the grain at one side is perpendicular to the rest, giving structural strength and rigidity to the body. The cavetto core is a series of wooden strips laid on top of one another and planed to the desired shape, giving stability against warpage.

Guri patterns of the sword-pommel variety now cover the entire surface of a piece in ordered rows. The elaborate and elegant tracery of Song *guri* is gone and the creative energies of the Chinese lacquer-carver turn instead to a new interest in depicting narrative scenes or pictorial elements sculpted in relief. Two round trays, one in the Okayama Art Museum (Tokyo National Museum 1977:No. 468) and the other in the collection of the Los Angeles County Museum of Art (Kuwayama 1982:64–65, No. 11), typify this style of carved black lacquer with *guri* designs on the upper face as well as under the cavetto. Concentric rings of sword-pommel scrolls in rows of six and twelve surround a symmetrical central medallion of roof-shaped arcs and pointed spirals with bifurcating tips. Under the cavetto there is a typical Yuan pat-

tern of a shorn row of sword-pommel scrolls. *Guri* scrolls also occur as subsidiary embellishments under the cavetto of platters carved with pictorial themes. These cavetto scrolls are a characteristic feature of many fourteenth century Chinese lacquers and appear as severed sword-pommel designs whose connecting arcs have been removed leaving two facing spirals. Identical in design to these pieces, but differing in its red color and in an eight-lobed outer rim, is another tray in a Japanese private collection (Tokyo National Museum 1977:No. 463).

There is another group of *guri* lacquers that may be attributed to the Yuan period. They have shorn sword-pommel scrolls under the cavetto and concentric rings of *guri* scrolls on the face. However, their central roundels differ in design from the previously cited group. Alternating pointed arrows and mushroom lobes surround a central circle, forming a pentagonal or hexagonal shape. The group is exemplified by a red lacquer tray in the Tokyo National Museum (Tokyo National Museum 1977:No. 464) and another in black lacquer in the Okayama Art Museum (Tokyo National Museum 1977:No. 467).

A fourteenth-century Buddhist painting of the *Eleventh Lohan* in the Fogg Art Museum illustrates a round lacquer box with *guri* scrolls.¹ Rows of severed sword-pommel designs embellish this box, resembling those under the cavetto of Yuan platters.

The archaeological excavation of a Yuan tomb at Wuxi, Jiangsu, unearthed a matched pair of round silver boxes with *guri* patterns (Wuxi shi bowuguan 1964). Simple sword-pommel scrolls are arranged concentrically in multiples of five around a pentagonal center.

In the absence of dated monuments and solely on the basis of stylistic projection, the Yuan group of *guri* lacquers can be extended to early Ming, up to the end of the fourteenth century. It is difficult to attribute *guri* works to the first half of the fifteenth century (Yongle, 1403–1424 and Xuande, 1426–1435), which is the apogee of pictorially carved lacquers. The under-cavetto *guri* designs on carved pictorial lacquers attributable to the fourteenth century can no longer be found.

Attributions to the later fifteenth century may be made on the basis of a *guri* tray (private collection, Tokyo) inscribed with the date of 1488. This tray continues the *guri* styles of the fourteenth century, but in slightly shallower relief and in somewhat wider proportions. Dated fifteenth-century lacquers with *guri* designs are extremely rare, thus establishing the uniqueness of this tray.

During late Ming, carved lacquer objects with *guri* scrolls revived in popularity. A tray (private collection, Tokyo) dated 1549 fortunately provides a stylistic monument. A large number of existing lacquerworks share stylistic characteristics with this dated tray. Its carving is shallow and flat, particularly in comparison with the deeper and heavier early Ming examples. Most of the late Ming *guri* pieces are black, in contrast to the red-on-black works of Yuan and early Ming. None of the late Ming *guri* carvings is polychromed, despite the enormous production during Jiajing (1522–1566) and Wanli (1573–1619) of multicolored lacquers bearing symbolic and narrative elements in carved relief.

Carved *guri* lacquers continued to be produced during Qing (1644–1912) although in smaller numbers than previously. A tall porcelain beaker with a lacquered surface in the Palace Museum, Beijing, is carved with rows of sword-pommel scrolls and S-shaped *guri* designs in addition to a central medallion with the emblematic character *shou* (long life; Fig. 8; Gugong bowuyuan 1985:No. 269). A Kangxi attribution for this vase may be ventured, since the shape is identical to contemporary porcelain beakers.

Several *guri* works in the Beijing Palace Collection, which bear Qianlong (1736–1795) marks, form a corpus of eighteenth century lacquer works. A typical example is a square lidded box decorated with horizontal rows of *guri* sword-pommel

1. The *Eleventh Lohan*, fourteenth century, ink and color on silk, 126 x 62.2 cm, Fogg Art Museum, Cambridge, Mass., purchase 851:1920.



Figure 8. Porcelain beaker with a lacquered surface carved with rows of sword-pommel scrolls and S-shaped *guri* designs; the central medallion is the character “*shou*” meaning “long life;” Kangxi period; Palace Museum, Beijing.
Figure 9. Square lidded box decorated with horizontal rows of *guri* sword-pommel scrolls as well as the simpler severed form; Qianlong mark and period; Palace Museum, Beijing.



Figure 10. Platter with foliated rim and six concentric rows of guri patterns clearly divided into quarters; Qianlong mark and period; Palace Museum, Beijing.

Figure 11. A Yuan platter showing a harmonious design that contrasts with the Qianlong platter in Figure 10; Yuan dynasty; Yamato Bunkakan.



scrolls as well as the simpler severed form (Fig. 9; Gugong bowuyuan 1985:Nos. 378, 379). Although similar to pieces from earlier dynasties, the connecting arch lacks the curvilinear tension of previous eras and is flat, straight, and rigid. Another marked Qianlong lacquer is a large platter with foliated rim and six concentric rows of *guri* patterns clearly divided into quarters (Fig. 10; Tokyo National Museum 1978:No. 228). This division contrasts with similar works of the Yuan period that emphasize the harmonious integration of all components (Fig. 11; Tokyo National Museum 1977:No. 466). Yet another lacquer box is marked Qianlong. It is eight-lobed and teems with deeply carved *guri* scrolls in four concentric rows on its cover (Fig. 12; Gugong bowuyuan 1985:No. 381). The depth of carving and the tightly packed scrolls create the effect of unrestrained embellishment typical of Qianlong.

Like so many aspects of Chinese civilization, it was in Japan that lacquers with *guri* designs continued to be created, from the Muromachi (1392-1568) through the Edo period (1600–1868). Inspired by the aesthetics of Zen and the tea ceremony, *kamakurabori* lacquered works were produced during the Muromachi era. Japanese tradition maintains that true carved lacquers were made as early as the Muromachi period, citing the works of Tsuishu Yosei in the late fifteenth century. Monnyu, another notable craftsman contemporary with Yosei, also created carved lacquer works. Tsuishu lacquers were patronized by the Ashikaga shoguns and subsequently by the ruling Tokugawa clan. Legend is confirmed by documentation in the late eighteenth century when tsuishu carvers are officially appointed as carved lacquer makers to the shogun (Noma and Tani 1952). Alas, it is only the lacquerware made in the eighteenth and nineteenth centuries that can be dated with assurance. The dating of carved Japanese lacquers is a complex issue and a few works now bearing Chinese attribution could be Japanese.



Figure 12. Qianlong lacquer eight-lobed box, with deeply carved *guri* scrolls in four concentric rows on the cover; Qianlong mark and period; Palace Museum, Beijing.

Bibliography

- Chen, Jing
1979 "Ji Jiangsu Wujin xin chutu de Nansong zhengui gigi" (Important Southern Song lacquers newly excavated at Wujin, Jiangsu). *Wenwu* 3:46–48.
- CPAM Sichuan Province**
1985 "Nan Song Yu Gongzhu fufu hezang mu" (The tomb of Yu Gongzhu and his wife of the Southern Song dynasty). *Kaogu Xuebao* 3:383–402, Pl. 22, No. 6.1.
- David, Sir Percival**
1971 *Chinese Connoisseurship*. New York: Praeger Publications.
- Garner, Sir Harry**
1979 *Chinese Lacquer*. London: Faber and Faber.
- Gugong bowuyuan**
1985 "Gugong bowuyuan zang diaoqi" (Carved lacquer in the collection of the Palace Museum). Beijing: *Wenwu Chuban She* No. 269.
- Hebei sheng bowuguan, Hebei sheng wenguanzhu**
1974 "Hebei Gaocheng Xian Taixicun Shangdai yidu 1973 nian de zhongyao" (The Shang dynasty site at Taixicun, Gaocheng county, Hebei province). *Wenwu* No. 8:42–49, Pl. 1.
- Huang, Xuanpei**
1962 "Shanghai Song mu" (Song tombs in Shanghai). *Kaogu* 8:418–419, Pl. 10, Fig. 4.
- Jiang, Zuanchu**
1957 "Dan Hangzhou Laoheshan Song mu chutu de qiqi" (A discussion of the lacquer vessels unearthed from the Song tombs near Laoheshan, Hangzhou). *Wenwu cankao ciliao* 7:30, Fig. 9.
- Kuwayama, George**
1982 *Far Eastern Lacquer*. Los Angeles: Los Angeles County Museum of Art.
- Lee, Yu-kuan**
1972 *Oriental Lacquer Art*. Tokyo: Weatherhill.
- Lu, Qi**
1978 "Beijing Mentouguo qu Longchuanwu faxian Liaodai ciyao" (Liao dynasty porcelain kiln remains found at Longchuanwu in Mentouguo, Beijing). *Wenwu* 5:Figs. 3, No. 10; 7.
- Mainichi Newspapers**
1976 "Kokuho" (National treasures). *Mainichi Shimbun* 3:123–124.
- Medley, Margaret**
1974 *Yuan Porcelain and Stoneware*. London: Pitman Publishing.
- Nanjing shi bowuguan**
1973 "Jiangpu Huangyueling Nan Song Zhang Tongzhi fugui mu" (The Southern Song tomb of Zhang Tongzhi and his consort in Huangyueling, Jiangpu). *Wenwu* 4:65, Figs. 15,17,18.
- Noma, Seiroku, and Tani, Shinichi**
1952 *Nihon Bijutsu Techo*, Tokyodo: 430 and 600.
- Shandong sheng bowuguan**
1972 "Fajue Ming Zhu Tan mu jiyao" (A report on the excavation of Ming Zhu Tan's tomb). *Wenwu* 5:36, Fig. 24.
- Shazhou County Cultural Office**
1981 "Jiangsu Shazhou chutu baoyin zhutai qiwan" (A lacquer bowl with a silver lining and bamboo body excavated from Shazhou, Jiangsu). *Wenwu* 8:39.
- Shen, Zhongchang**
1961 "Sichuan Deyang chutu de Songdai yinqi jianjian" (Brief report on the silver objects of the Song dynasty excavated at Deyang, Sichuan). *Wenwu* 11:48–52, Fig. 6.
- Tokugawa Art Museum and Nezu Institute of Fine Arts**
1984 *Carved Lacquer*, No. 1.
- Tokyo National Museum**
1977 *Toyo no shikkikogei*, No. 431.
1978 *Toyo no Shikki Kogei* (Oriental lacquer arts commemorative catalog), No. 228.
- Whitfield, Roderick**
1985 *The Art of Central Asia*. Vol. 3. Tokyo: Kodansha International.

Wuxi shi bowuguan

- 1964 “Jiangsu Wuxi shi Yuan mu zhong chutu yipi wenwu” (A hoard of cultural objects unearthed from a Yuan tomb near Wuxi, Jiangsu). *Wenwu* 12:Pl. 6, Fig. 6.

Zhejiang City Museum, Jintan Xian Cultural Bureau

- 1977 “Jiangsu Jintan Nan Song Zhou Yu mu fajue jianbao” (Brief report of the discovery of the Southern Song tomb of Zhou Yu at Jintan, Jiangsu). *Wenwu* 7:18–27.

Zhejiang Provincial Museum

- 1973 “Ruian Bei Song Huiguang ta chutu wenwu” (Northern Song cultural objects excavated from the Huiguang Pagoda at Ruian, Zhejiang). *Wenwu* 1:48–58, Pl. 8.

Inro Research: Some Proposed Future Steps

Beatrix von Ragué

Curator, Museum of Far Eastern Art, Berlin

The aesthetic beauty of *inro*—a small, compartmentalized container originally for seals, but also used for medicines and other small objects—delighted some Japanese collectors as early as the end of the eighteenth century and many more Western collectors from the late nineteenth century on. But in spite of some good old catalogs like the Tomkinson catalog of 1898, and the profound article by the late U.A. Casal published in 1941, the history of *inro* and their place in the many schools of Japanese lacquer art has come into focus only recently.

Due to the combined efforts of collectors and art historians in many countries, *inro* research has reached a new level during the last fifteen years. An astonishing number of books and catalogs on *inro* have been published in Japan, as well as in Western countries (see bibliography).

Hirokazu Arakawa, evaluating early Edo period publications, has demonstrated that according to written sources the use of *inro* was known during the Kan'ei era (1624–1644), and *inro* were in general use in the second half of the seventeenth century. Text and drawings in the *Hinagata itoshigusa* (1705) and *Bankin sangyo-bukuro* (1732) show that in the early eighteenth century many *inro* shapes were popular. *Soken kisho* (1781), published by Arakawa in 1982, has an annotated list of thirty-seven *inro* artists. In addition to origins, shapes, and artists, the new publications describe the many lacquer techniques used for *inro* decoration, most of which were well established in the early Edo period.

All the modern publications agree on the almost limitless number of subjects for *inro* decoration, ranging from a single animal or flower to complete landscapes; from the visible world to the world of ghosts; from geographic maps to motifs with literary associations; as well as abstract ornaments. As early as 1723, Koami Nagasuku, in an essay for his descendants, mentioned that “everything in the universe is depicted in *makie*” (Hutt 1984:109).

However, the authors of most recent *inro* publications conspicuously refrain from dating. It is generally agreed that ninety-nine percent of existing *inro* were made during the eighteenth and nineteenth centuries, but there are very few reliable guidelines for exact dating—new research is necessary.

It is known that Ritsuo, who died in 1747, liked to inlay other materials into his lacquer bases. We know that beautiful *irotojidashi*, a *togidashi* technique employing a colored design, was in vogue at the end of the eighteenth century and that ivory *inro* or *inro* whose lacquer decoration imitated other materials were made during the last decades of the Edo period. We also have some knowledge of the impact of *Ukiyo-e* woodblock prints on lacquer decoration. But to date an *inro* to some specific time in the eighteenth or nineteenth century is at best just an educated guess and far from reliable.

The reasons for this are well known: the abundance of *inro* techniques, shapes, and motifs is so overwhelming, and the quantity of *inro* scattered over the whole world so enormous, that up until now we have been discouraged from solid art historical research.

Some writers believe in a stylistic development that would provide a chance of *inro* dating. But that seems hardly plausible for two reasons. First, in many lacquer schools the style of the original master was perpetuated by his followers while other schools were simultaneously working in different styles. Second, as we know from Japanese painting, one artist frequently mastered several styles.

Just as different styles are hardly helpful for *inro* dating, a similar difficulty occurs with *inro* shapes (although with shapes, certain trends can be detected). External and internal cord-runners (*himotoshi*), for instance, both occur as early as 1705. And it is misleading to suggest that “the longer, more cylindrical shapes are generally to be found in earlier *inro* while a flatter, larger size was in greater abundance during the late Meiji era” (Jahss n.d.:186). In fact, flat *inro* shapes occur throughout the nineteenth century. Such generalized statements tend to confuse the reader. However, I would like to suggest in this paper a few possibilities for dating *inro*.

Dating

Some *inro* are datable because their decoration is based on dated woodblock prints or book illustrations. Lacquer collectors are not always aware of the fact that many prints, especially those related to the world of theater and actors, are dated or datable. Theater prints were normally made immediately after the theatrical event they depicted.

Julia Hutt (1977) was the first to publish such a connection between a woodblock and an *inro*. The print, made by Katsukawa Shunsho, represents the actor Ichikawa Danjuro IV performing the Shibaraku role (which was performed exclusively by Ichikawa artists). The *inro* is signed “Koma Kyuhaku *saku*.” The print is datable between 1768 and 1770, i.e., the year when Danjuro IV actually performed the Shibaraku role and the year when he changed his name and was henceforth not permitted to wear costumes decorated, as on the print, with the big squares that are the family livery of the Ichikawa artists. Most experts attribute the print to 1768.

The decoration of the *inro* obviously imitates the print and cannot have been made before 1768. Since at that time *inro* were objects of high fashion, the *inro*, too, was probably made before 1770; certainly it would not have been compatible with the taste of a man of fashion to carry an *inro* depicting a famous actor in a role he was no longer performing.

This short period of 1768–1770 makes it possible to identify the lacquer master Koma Kyuhaku, who signed the *inro*. There were several Koma artists who used the name Kyuhaku, but this *inro* must have been made by Kyuhaku III, who was active during the second half of the eighteenth century.

In cases like this, a datable print used as a model for an *inro* decoration can serve both to date the *inro* quite reliably and to identify the *inro* master. However, when an *inro* decoration is based on a woodblock illustration in a book, we often get only a date *ante quem non*. For instance, the decoration of a Kajikawa *inro* from the Casal Collection in the Osaka Municipal Museum of Art (Doi 1984:27, No. 43) is based on both sides on a Tachibana Morikuni print in the book *Ehon shaho-bukuro*, published in 1720. The *inro* cannot therefore have been made before that year. But since the subject of the print is not an actual event like the theatrical performance of Danjuro IV but a story from the old *Heike-monogatari*, one cannot be sure whether the *inro* was made very soon after the book was published or at a much later time. But at least the year of publication of the book provides the date “not before 1720” for the *inro*.

Both examples show that a close comparison of *inro* decoration with datable prints or book illustrations will offer some help for *inro* dating. The same method is currently used quite successfully by Margaret Medley in her research on the origin of blue-and-white porcelain decorations in printed book illustrations.

Signatures

One of the great difficulties in *inro* dating is, paradoxically, presented by their signatures. Although hundreds of thousands of *inro* are signed, the signatures very often give artists' names that were carried on through many generations. How many artists from the Kajikawa family (to name just one family) have made *inro*? Is there a way to tell whether a specific *inro* signed “Kajikawa” is a seventeenth, eighteenth, or nineteenth century piece? Is there a way to distinguish between several artists who use the same name? And if so, what can we learn about their chronological sequence? Are there means to decide that a signed *inro* cannot have been made before or after a specific year? If we find answers to some of these questions, dating of signed *inro*, and possibly even unsigned ones, might become much easier.

The most informative *inro* signature known to me was published in 1925 by Edward Strange. In his *Catalogue of Japanese Lacquer* in the Victoria and Albert Museum in London, he mentions an *inro* with the following signature: “Kobayashi Yasuaki of Yanagawa, age 65, Bunka 8th, year of Sheep” (No. 1175). There is no question, if the inscription is genuine, that the *inro* is dated 1811, a date confirmed by its execution in *sumi-e togidashi* (a style of design, imitating an ink painting), a technique often used at that time. The *inro* decoration shows a Chinese man with performing monkeys and a peasant family. Close to the man, we find the name of the painter Yasunobu. There were several painters with that name; the closest would be a Kano painter who died in 1798, thirteen years before the *inro* was made.

Often *inro* decoration was based on designs by famous painters. In such cases we find inscriptions like “made by Toyo after Hakugyoku Hogen.” The painter Hakugyoku, also known as Kano Sukenobu, was born in 1730 and lived contemporaneously with the lacquer master Toyo. Hakugyoku received the title of *hogen* (eye of the law), a Buddhist title awarded to artists and craftsmen, in 1762. No *inro* explicitly made after a design of Hakugyoku Hogen can therefore have been made before 1762. Nineteen years later, in 1781, Hakugyoku was given the higher title of *hoin* (seal of the law), the highest Buddhist title awarded to artists and craftsmen, and we know of other *inro* carrying the inscription “made by Toyo after Hakugyoku Hoin.”

It is unlikely that a lacquer artist working during the lifetime of Hakugyoku would have been so impolite as to mention the lower *hogen* rank after Hakugyoku received the higher title *hoin*. Furthermore, a lacquer artist producing fashionable *inro* objects would probably have preferred to use the latest design of a still-active painter, not an older one. If that assumption is correct, we can be sure that eighteenth century *inro* with the inscription “Hakugyoku Hogen” were made between 1762 and 1781, a much more specific date than “second half of the eighteenth century”.

There are other painters, too, who received titles, for instance the seventeenth century painter Kano Tanyu. His drawings were used and reused as models for lacquer decoration by many generations of lacquer artists after his death. As far as I know, inscriptions on such lacquer objects only say “made by...after Tanyu,” without mentioning the *hogen* or *hoin* title. It would be worth investigating whether eighteenth and nineteenth century lacquer masters ever mentioned Tanyu’s titles on their *inro*. Could it be that titles were used only during the painter’s lifetime? To know that would be a great help in other cases, too.

Sometimes not the painter’s title, but his *go*, or pseudonym, can be a help in dating. The Greenfield Collection now in the Metropolitan Museum, New York, includes an *inro* made and signed by Jokasai; at the side of the decoration the name of the painter Hanabusa Itcho is added (Pekarik 1980:No. 85). Hanabusa (1652-1724) used the *go* “Itcho” in combination with his name only after his return from exile in 1709 (Akiyama 1977:182), and therefore 1709 would be the earliest possible date for the *inro*.

There were several lacquer masters with the name Jokasai; the first one, active from about 1681 to 1704, had many pupils, all using his name. If the first Jokasai did not work after 1704, it must have been one of his followers who, after 1709, made the *inro* with the name of Hanabusa Itcho.

Knowing that there have been several *inro* masters using the name of Jokasai, and that drawings by Itcho, as by other painters, have been handed down through many generations of lacquer masters, is there a possibility of finding out more about the date of the *inro* and the identity of the lacquer master? I believe there is. One way to deal with signed *inro*, so far rather neglected, is the study of their seals and *kakihan* (cursive monogram).

Seals and kakihan

Kajikawa artists made lacquerware for the Edo shogunate from the seventeenth century on. Until now, it has seemed impossible to differentiate the work of one Kajikawa master from those of earlier or later generations, especially because Kajikawa *inro* are very consistent in technique and style and therefore very difficult to date. Most of them carry a gold lacquer signature “Kajikawa *saku*” followed by a red lacquer vase-shaped seal (Fig. 1), but there are several other types of Kajikawa signatures:

1. Kajikawa (without “*saku*”) and red vase-shaped seal (Doi 1984:No. 14).
2. Kajikawa *saku* (without seal; Figs. 2 and 3).
3. Kajikawa *saku* and gold lacquer vase-shaped seal (Schneeberger 1984:No. 115).
4. Kajikawa *saku* with red vase-shaped seal, both enclosed by a cartouche (private collection, Berlin, No. 11).

5. Kajikawa with square red seal “Kajikawa” (Schneeberger 1984:No. 56).

In many of these different types we also find different writing styles (compare Figs. 1 and 3) and different vase shapes. While many of the vases are roundish (Fig. 1), others are rather slim or have more elongated handles (Fig. 4), some show a very different arrangement of the characters inside the vase (Fig. 5), and at least one red lacquer vase seal has three little loops at the bottom (private collection, Berlin,

Figure 1. Signature Kajikawa saku with seal. Inro Collection Baur, Geneva, No. 390.

Figure 2. Signature Kajikawa saku (Doi 1984: No. 45).

Figure 3. Signature Kajikawa saku (Doi 1984: No. 55).



Figure 4. Signature Kajikawa saku with seal (Doi 1984: No. 21).

Figure 5. Signature Kajikawa saku with seal (Doi 1984: No. 44).



No. 35). To make things even more diversified, the nineteenth century master Kajikawa Hidetaka signed his full name, using a round seal (formerly in the collection of Kurt Herberts, Wuppertal, No. J 1817), while Kajikawa Bunryusai did not use a seal but a *kakihan* (Schneeberger 1984:No. 114).

We do not know how many Kajikawa artists made *inro*, but there must have been many whom we cannot so far separate and identify. Even when we have to deal with only three artists using the same name, for instance Koma Kansai, our present methods are not efficient enough to identify and date their work. Laurance P. Roberts in his *Dictionary of Japanese Artists* (n.d.) writes about Kansai:

Kansai (?-1792)... Lacquerer. Born in Edo. Adopted into the Koma family; was the first to bear the name of Kansai: the artist who brought the work of the Koma school back to its original standard.... His son, Koma Kansai II (1766-1835), is said to have been the finest artist of the family.... In 1824 retired as a priest and Koma Kansai III succeeded to the name. It is, so far, quite impossible to say which one of these three artists made which of the many pieces, usually *inro*, signed Koma Kansai.

But a look at Kansai *inro* shows that there are at least three different types of signatures: (1) Kansai with *kakihan* (Fig. 6), (2) Koma Kansai with *kakihan* (Fig. 7), (3) Koma Kansai *saku* (Fig. 8).

Figure 6. Signature Kansai with kakihan. Inro Collection Baur, Geneva No. 176)
 Figure 7. Signature Koma Kansai with kakihan (Doi 1984: No. 21).
 Figure 8. Signature Koma Kansai saku (Doi 1984: No. 119).



Could each of these signature types have belonged to one artist exclusively? Certainly it would be useful to arrange the existing Kansai and Kajikawa *inro* (and those from other schools as well) according to their types of signature, seal, and/or *kakihan*. By this means we should establish coherent groups. Other characteristic features such as technique and style could then be used to arrange these groups into a chronological order and, perhaps, connect each with one particular artist.

Conclusion

In 1964, I researched the lacquer master Toyo and his school (von Ragué 1964) using this method. At that time I found twenty-six different *kakihan* forms belonging to six major types (Fig. 9), all occurring with signatures from the Toyo school. The lacquer objects belonging to the different *kakihan* types (Fig. 9, A through F) quite obviously formed coherent groups, which by art-historical means could be arranged in chronological order. While general quality, style, techniques, sense of color, and other characteristics were not sufficient by themselves to give a closer date to the Toyo lacquer objects, all these features fit astonishingly well into the groups established by *kakihan* types. It became possible not only to recognize individual masters but even to identify a fake signature.

Several recent *inro* catalogs reproduce not only the *inro* but also the complete signature with seal or *kakihan*; evidence of the fact that a study of signatures, seals, and *kakihan* may open new and necessary avenues of *inro* research.

To sum up, I suggest further research on *inro* dating in three ways: by a close survey of dated prints and book illustrations used as models for *inro* decoration; by a more careful study of the dates provided by titles and artists' names, or *go*, mentioned on the *inro*; and by establishing groups of *inro* (and other lacquer objects) unified by the same type of signature, seal, or *kakihan*.

Figure 9. Kakihan forms of types A–F from Toyo school objects.



Bibliography

- Akiyama, T.
1977 *Japanese Painting*. Geneva.
- Arakawa, Hirokazu
1982 *Inro to netsuke*. Tokyo.
- 1984 "Inro to netsuke no hassei ni tai-suru ichi kosatsu." *Museum* 395. Tokyo National Museum.
- Boyer, Martha
1970 *Catalogue of Japanese Lacquer*. Baltimore: The Walters Art Gallery.
- Casal, U.A.
1941 "The inro." *Transactions and Proceedings of the Japan Society of London* XXXVII:1-53.
- Champoud Collection
1984 *Inro Catalogue of the Champoud Collection in Breblems, Switzerland*. Japan.
- Doi, Kuniko
1984 *Soshingu*. Osaka Shiritsu Bijutsukan zohin mokuroku XIV. Osaka.
- Hutt, Julia
1977 "Inro decoration: its individual character." In *Artistic Personality and Decorative Style in Japanese Art*. Edited by W. Watson. London.
- 1984 *Lacquer: An International History and Collector's Guide*. (Japanese section). Marlborough, Wiltshire: The Crowood Press.
- Jahss, Melvin and Betty
n.d. *Inro and other Miniature Forms of Japanese Lacquer Art*. (c. 1970). London.
- Pekarik, Andrew
1980 *Japanese Lacquer...from the Charles A. Greenfield Collection*. New York.
- Roberts, Laurance P.
n.d. *Dictionary of Japanese Artists*.
- Schneeberger, Pierre F.
1984 *The Baur Collection Geneva: Japanese Lacquer*. Geneva.
- Strange, Edward
1925 *Catalogue of Japanese Lacquer*. Vol. II. London: Victoria and Albert Museum.
- von Ragué, Beatrix
1964 "Materialien zu Iizuka Toyō, seinem Werk und seiner Schule." *Oriens Extremus* (Wiesbaden), Jg. 11 (the article appears in issue No. 2 and the reproduction of the Toyō *kakihan* list in the following issue.)
- Wrangham, E.A.
1972 *Exhibition catalogue*. Oxford: Ashmolean Museum.

Sano Chokan, the Urushi Master, Studied through His Work

Akiro Haino

Kyoto National Museum



On 3 April 1925, the Kyoto National Museum opened its first lacquerware exhibition, *The Works of Chokan, the Urushi Master*. Although the exhibition lasted only five days, two months later a collection of illustrations of the major works exhibited was published by the Chokan Memorial Association. The foreword of this book introduces Chokan (1794–1856), born the second son of Nagahamaya Jihei, an urushi artisan of Kyoto. Chokan was a self-trained man who wandered Japan for eight years in order to learn the best works and techniques and who never accepted orders that did not meet his policy. Fame was not Chokan’s goal; his works were collected and treasured for their high quality.

Along with this brief summary of the master’s life, the book illustrates forty-nine items that were in the possession of major collectors of the Meiji and Taisho periods, including Hayashi Shinsuke, Nishimura Motokichi, Ohara Magozaburo, Nomura Tokushichi, and Imamura Tejiro. These forty-nine items can be divided into two groups according to their purposes. The first group consists of tea ceremony items, such as *cha-ire* (tea caddy), *natsume* (tea-powder container), *kogo* (incense container), *mizusashi* (water bowl), and *kashi-bon* (pastry tray). The second group consists of tableware, such as *wan* (soup and rice bowl), *jikiro* (food container), *jubako* (nest of lunch boxes), and *hai* (cup). When considered from the aspect of the designs employed in *makie* (“sprinkled picture”) and *urushi-e* (true lacquer painting), the same forty-nine items can be roughly divided into two groups: those with traditionally Japanese designs taken from nature, plants, and flowers; and those that are modeled on Chinese designs.

In terms of design, the *jikiro* discussed in this paper to explain the personality and characteristics of Chokan’s work, belongs to the latter group. This *jikiro* is not among the collection of illustrations published in 1925. However, according to the writing on the paper that covered the box containing the *jikiro*, it was given to the Kyoto National Museum on that occasion. Thus it can be said that the *jikiro* was among the works that commemorated the seventieth year after Chokan’s death, and contributed to a reevaluation of the urushi master.

Figure 1. The *jikiro*.



The *jikiro*

The overall shape of the *jikiro* is round, with the edge of the container slightly curving outward and the side gently rounded (Fig. 1). It has a lid in the *otoshibuta* style (the lid dropping into the receptacle) and a black urushi ground coating. On the lid, a pair of phoenix and clouds are placed in gold, silver, and *aokin*, *hiramakie* and partly drawn in urushi colored with a mixture of red ocher and vermilion. At the center of the *kodai* (raised circular ridge) on the top of the lid, the characters for “made in the era of Kaei” (1848–1853) are placed in gold *makie* within a double circle (Fig. 2). Inside the lid, the elaborately drawn Chinese character for “wealth” is placed in gold *hiramakie* over a vermilion circle (Fig. 3). On the exterior of the receptacle are clouds and a pair of dragons. The receptacle has a raised base, on the inside of which the character for “noble” is placed in the same manner as the character on the lid (Fig. 4). On the outer surface of the base of the receptacle, there is a stamp reading “made by Chokan” in gold *hiramakie* inside a double circle (Fig. 5). From the base to the lower part of the side of the container, stylized flower petals are drawn next to each other. The *jikiro* is contained in a black urushi-coated box, at the bottom of which the following characters are found: “colored drawing”; “a sack of gold dust”; “lid attached”; “phoenix and dragon design in the Manreki style”; and “made by Chokan, the urushi master.”

The *jikiro* is called “a sack of gold dust.” This name derives from its round shape. The two characters signifying “noble” and “wealth” also suggest its name. As the writing on the bottom of the box indicates, the cloud, phoenix, and dragon designs follow the style of the Manreki (Wanli) period of the Ming dynasty (1368–1644). The stylized flower petals, seen together with the phoenix, dragon, and clouds, become symbols of the sacred mountains, typical of Chinese good-fortune patterns. Also, the inscription “made in the year of Kaei” imitates the wording “made in the Manreki period of the Ming dynasty,” which was seen on all work made in the royal

Figure 2. The lid, showing the characters “made in the year of Kaei.”

Figure 3. The character for “wealth” inside the lid.

Figure 4. The character for “noble” in the base of the receptacle.



Chinese studios of the Ming dynasty. Overall, then, the design follows the typical good-fortune pattern that is seen so often in Ming ceramics, textiles, and lacquerware.

Being a studious artisan, Chokan studied the basic techniques and patterns of Chinese lacquerware, especially the *zonsei* technique of the Manreki period. *Zonsei* is a technique of drawing patterns with colored *urushi* in vermilion, red ocher, green, and yellow, and then edging them in *chinkin* (incised gold decoration). Although Chokan learned from these Chinese traditions, he restructured the patterns and transformed them into “Japanized” Chinese design. In the original Chinese *zonsei*, the ground is completely covered with detailed patterns, but in Chokan’s work the ground is left black. The colored *urushi-e* and *hiramakie* give the same effect as that of *zonsei*. But the stylized petals and the separation of the two characters in the lid and the receptacle suggest an attempt to create an impression of space through simplification. By disregarding the minute ground patterns and by using other original devices, Chokan achieved a truly Japanese artistic use of space.

Therefore, although this object was made under the influence of the chinoiserie popular at that time, it contains Japanese elements that make it an original piece of work. For example, unlike traditional Chinese dragons, which have five claws, Chokan’s dragons have only four. Since Chokan was fully exposed to Chinese culture, and from the conspicuous way in which the dragons stretch out their claws, the difference in the number of claws seems intentional, not a result of ignorance.

This *jikiro* was not an isolated piece of work, but was created as one of a pair or part of a series. The existence of a Chinese flower *urushi-e* and *makie jikiro* reinforces this assumption. It is made in the same technique and size, and with the same two characters, “noble” and “wealth.” Moreover, the following are done in the same manner: the inscription “made in the era of Kaei”; a stamp on the bottom saying it was made by Chokan; and the description of the *jikiro*—“colored drawing”; “a sack of gold dust”; “lid attached”; “arabesque design in the Manreki style”; and “made by Chokan, the *urushi* master.” From these facts, it seems obvious that, apart from the peony and arabesque design, the two works are identical and were clearly made during the same period.



Figure 5. The stamp “made by Chokan.”

Sano Chokan, the man

The life of Chokan can be traced mainly from books published in the Meiji and Taisho periods. From these records, the outline of Chokan’s life emerges. Sano Chokan, often called Nagahamaya Jisuke, was the second son of Nagahamaya Jihei, born in Kansei 6 (1794) in Kyoto. He was a bright boy, who studied reading and writing from an early age and enjoyed making poems. On the death of his father, he succeeded to his father’s name. Then he wandered Japan visiting many studios, masters, and collectors to see and learn from their best works. Among the places he visited were Negoro, Yoshino, and Edo (present-day Tokyo). In Edo he visited the shogunate’s *makie* studio to try to study *murasaki-urushi* (a technique of making purple-colored *urushi*), but he was rejected. He found this insulting and later discovered the method on his own. In Bunsei 8 (1825) he returned to Kyoto and isolated himself in his studio. There, dressing in humble clothes and leaving his hair uncombed, he worked hard to create a new type of lacquerware. It was then that he changed his name to Chokan after Chokan, the great Korean master of Kourai and called himself a descendant of the Korean Chokan. Although he led a simple life, he enjoyed exchanging poems with his wife. All his creations were so rare and precious that collectors treasured them, but he never worked on orders that did not suit him, no matter how much money was offered. He died in Ansei 3 (2 March 1856).



Figure 6. A Portrait of Chokan by his son, Shosaburo.

Since such an outline still gives only a vague image, I wish to add some more incidents to clarify some of the aspects of Chokan, the man. The first is Chokan's association with Oshio Heihachiro (1793–1837). In 1751, the divine armor of Genji was partially burned during a great earthquake. At that time, the way of the samurai had already withered and there was no one to mourn the disaster that had befallen the divine armor, which symbolized the righteous way of the samurai. Oshio, who was only a low-ranking bureaucrat, was concerned with the decline of the samurai spirit as well as with the social conditions in which the samurai class no longer considered itself a protector and leader of the suffering people. He felt that restoration of the urushi chest for the divine armor was equivalent to revitalizing the samurai spirit. Oshio donated his personal fortune and asked Chokan and his elder son to make the chest, which was completed in 1834. A long inscription on the bottom of the chest indicates that it was made by Chokan when he was forty years old. The association with Oshio suggests that Chokan, too, was in favor of the anti-establishment movement.

From a rough outline of his life, we might also conclude that he was not a sociable person. However, he was not completely cut off from social and cultural activities in Kyoto, for he was one of the important members of a salon led by Taiko (1770–1860), a Zen priest of Daitoku-ji. Daitoku-ji originally had strong ties with the Sen family (of the tea ceremony) and this made Taiko's salon a gathering place for people associated with the tea ceremony and sophisticated learning. The Zen influence that Chokan received could also be the reason for his life style, careless as he was of appearances. At the salon, Chokan found friends with whom he could not only enjoy poetry but also share opinions and knowledge on works of art.

One of Chokan's acquaintances at Taiko's salon was Eiraku (Nishimura) Hozen (1795–1854), a ceramicist who is remembered today for his profound talent for making Chinese-style pottery. The friendship of Chokan and Hozen was so close that Hozen adopted Shosaburo, the second son of Chokan.

Shosaburo, also known as Zenjiro or Kaizen, assisted the Nishimura family by making chinaware. Like his father, Shosaburo was not only artistically gifted but also knew how to enjoy the elegant scholastic pursuits of writing poetry and playing musical instruments. Shosaburo left a seated portrait of his father wearing a chrysanthemum-patterned kimono (Fig. 6). The eyes of the old man are wilful and leave a strong impression on anyone who sees the portrait. At the top there is a description of Chokan written by Taiko: "Chokan, the urushi master, a descendant of the Korean Chokan, died on March 2, Ansei 3, at the age of sixty-three." In this description Taiko also mentions Chokan's reputation.

Other tales that indicate Chokan's skill have been passed down to us. According to one, the lids of some soup bowls that Chokan made fitted so well that they could not be opened. It is said that upon hearing this, Chokan laughed, made a small hole in the bottom of each bowl to let air in, and opened them. Even after a whole night, the soup in the bowl was still warm. Another tale has it that a certain man, who did not know Chokan personally, criticized Chokan's work in front of him. Then Chokan put his soup bowl in boiling-hot water, stirred, and took it out. The ignorant man was embarrassed to see that the bowl remained unharmed in spite of such harsh treatment. Of course, there seems to be much exaggeration in these stories, as in many tall tales of famous men, but they help in assessing the reputation of Chokan's skill.

Chokan's personality, not only as an artist, but also as a virtuoso, is clearly reflected in the fact that he acknowledged in writing the value of the work of other artists. On a box of *mitsuda-e* bowls with plant and flower designs, Chokan wrote in Kaei 7 (1854) that they were made in the Keicho period (1596–1614). On another occasion he identified an ink box made by Koetsu in Tempo 12 (1841). Also, in Chokan's *Memoir* (private collection), he left an invoice and directions with diagrams for storing tableware he had made. From these accounts, we have a picture of a man who was devoted to his profession and studious in research.

Another good way of grasping a picture of the man in relation to his historical background is to compare Chokan to another urushi master, Tamakaji Zokoku (1807–1869). Zokoku was born thirteen years after Chokan in Takamatsu, Shikoku. Like Chokan, he was born in the house of a scabbard-painting master, learned techniques such as *tsuishu*, *tsuikoku*, *kouka ryokuyo*, *zonsei*, and *kinma*, which were introduced to Japan from China and other Southeast Asian countries, and left works that reflect these foreign styles. The work of the two artists, and the environments in which they were brought up, were similar but their lifestyles and their places of activity were quite different. Zokoku was under the patronage of the Lord of Takamatsu and his reputation was widely promoted under the protection of established society. Chokan, on the other hand, lived and died as a master without the protection or endorsement of the establishment.

Conclusion

I wish to conclude this paper by summing up the characteristics of Chokan. He was an urushi master who adapted foreign influences to create an original Japanese style and who worked in his own way without relying on any authority. The renowned masters of the Edo period can be separated into two groups: those under the protection of the Tokugawa shogunate and those living outside bureaucratic control. Chokan is a typical example of the latter group. The objective attitude he showed in his study of work by others and in his own work gives him the outlook of a modern artist. We have only just begun to research the master who was a forerunner of the modern period, and I believe that many works will be rediscovered to enrich our understanding of Chokan and his age.

Heidatsu and Hyomon in the Nara Period

Norimitsu Kimura

Shosoin Treasure House

The opinions expressed here are based on both the treasures and the writings about *heidatsu* and *hyomon*, the ancient urushi art techniques of Japan, which are stored at the Shosoin. I have the honor and privilege to be entrusted with the Shosoin's treasures and documents, and I believe it is my duty to write on the subject of urushi.

In *heidatsu* and *hyomon* silver and gold foil is cut into designs and adhered to the *urushi-shitaji* (ground) or *nakanurimen* (intermediate layers). After application of additional urushi, the topmost urushi layer is either peeled off the silver or gold foil or burnished to display the overall design. Finally, designs in fine lines are engraved in *kebori* technique.

Heidatsu and *hyomon* appear basically the same and today it is generally thought that *heidatsu* is the Chinese term and *hyomon* is Japanese. However, before this general conclusion was reached, there was much debate among scholars on this question. I believe that the debate should be reopened and all opinions should be given attention, respect, and reconsideration. In my personal opinion, although recent debate has touched upon method, it has been primarily semantic. I believe that it is not as important to discuss differences in terminology between *heidatsu* and *hyomon*, as it is to discuss them as they relate directly to urushi art techniques.

Treasures of the Shosoin

Both terms, *heidatsu* and *hyomon*, appear in the *Todaiji Kemmotsucho*, a list of many treasures dedicated to *Todaiji Rushanabutsu* (Daibutsu) by the Empress Dowager Komyo on 21 June 756 (Tempyo shoho 8) for the soul of her deceased husband, the Emperor Shomu. The following are included in this list of treasures:

1. Document in twenty volumes placed in a box decorated with silver *heidatsu*. The box was placed in a bag of Korai embroidery.
2. North storehouse 25. Four *gosu* (round boxes) decorated with silver *heidatsu* (Fig. 1 a–d). Each contains *go* (board game) pieces.
3. A harp decorated with silver *hyomon*; legs decorated with ivory. Inside the harp it is written that it was made by the Hyoui family; attached is a purple silk bag, lined in red silk.

Figure 1 a–d. Gosu (round boxes) decorated with silver heidatsu (N25): A C E I.



Figure 2. Fragments of a round mirror (N42-6): A C J.

Figure 3. An octagonal mirror (N42-12): A C E H.

Figure 4. Shikkohei (ewer; N43): A C E H.



Figure 5. A comb case decorated with silver heidatsu (N154): A C E I.

Figure 6. A harp decorated with gold and silver hyomon (N26): B D F H.



Legend to the captions

- A. Nuritate (lustrous finish).
- B. Roiro-shiage (mirrorlike finish).
- C. Hagiokoshi (urushi over the design is peeled off).
- D. Togidashi (urushi over the design is burnished).
- E. Objects that have a rough urushi surface due to the peeling off of the urushi layer applied over the gold and silver foil.
- F. Objects that have a distinct boundary between the gold and silver foil and the urushi, due to urushi left behind after kebori.
- G. The gold and silver foil are lower than the urushi surface.
- H. Gold and silver foil are level with the urushi surface.
- I. Gold and silver foil are higher than the urushi surface.
- J. Not clear, due to the peeling off of gold and silver foil.

4. A double-edged Chinese-style sword mounted with gold and silver, 89 cm in length. A dragon on a cloud is carved in silver. The grip is made of sharkskin. An ornament shaped like a mountain is in silver. The sheath has silver *hyomon* with ivory and dragon designs. A baldric in white leather is attached; the buckle is made of leather, too. There is a blackish-purple body-belt and a Korai green silk bag, lined in red.

5. A Chinese sword mounted with silver, decorated with the shape of a mountain in silver. Ivory and animal *hyomon* design.

6. A Chinese sword mounted with gold and silver, decorated with the shape of a mountain in silver gilt. Ivory and animal *hyomon* design.

7. A Chinese sword mounted with gold and silver and a Chinese sword mounted with silver gilt. Both are decorated with the shape of mountains in gold and silver. Dragon scale and ivory *hyomon* design.

8. A Korean-style sword mounted with silver, decorated with the shape of a mountain in silver. Ivory *hyomon* design.

9. North storehouse 42-6. Fragments of a round mirror, diameter 38 cm. Urushi back with gold and silver *heidatsu* (Fig. 2). Red silk belt. Urushi wooden box.

10. North storehouse 42-12. An octagonal mirror, diameter 29 cm. Urushi back with gold and silver *heidatsu* (Fig. 3). Red silk belt. Urushi leather box with red silk inner lining.

11. North storehouse 43. *Shikkohei* (ewer) decorated with flower and bird shapes in silver *heidatsu* (Fig. 4). Silver chain. A cap shaped like a bird's head. Capacity 2.7 liters.

Besides the above, on 26 July of the same year, an additional dedication was recorded in a different *Kemmotsucho*. It mentions "a comb-case decorated with silver *heidatsu*" (north storehouse 154; Fig. 5).

Thus, a total of sixteen treasures with *heidatsu* and *hyomon* decorations is reported. Out of these, there are nine examples of *heidatsu* and seven examples of *hyomon*. Eight of these items (Nos. 2,9,10,11) exist today. It is also clear from the list that they are *heidatsu*. However, the comb-case decorated with silver *heidatsu* is thought to have been deposited on a later occasion by a different route.

Next, in A.D. 814 (Konin 5), about sixty years after the above treasures were offered, a previously listed harp decorated with silver *hyomon*¹ was removed from the storehouse and was later replaced in A.D. 817 by the present harp decorated with gold and silver *hyomon* (Fig. 6; north storehouse 26).²

These are the treasures with *heidatsu* or *hyomon* recorded in either the *Kemmotsucho* or the *Dashi-irecho* (A.D. 817). However, there are other groups of treasures in the Shosoin that have come from other sources. In A.D. 950 (Tenryaku 4) the Kensakuin storehouse that belonged to Todaiji was destroyed and the many Buddhist altar fittings and utensils were moved to the south storehouse of the Shosoin. Later, some of these were again removed to the central storehouse. The quality and variety of these treasures are much greater than the items in the *Kemmotsucho*. Most of them indicate the year in which they were made and are datable to the Nara period. Those without any indication of date closely resemble the previously listed treasures in both quality and shape, suggesting that they are also of the Nara period.

Among these items are treasures which utilized techniques similar to *heidatsu* and *hyomon*. A list of these items was not drawn up when they were moved, however. Someone in the Meiji period studied them with reference to the *Kemmotsucho* and gave them official names. I do not know how the terms *heidatsu* and *hyomon*, which appear in the *Kemmotsucho* were interpreted but it is thought that the objects were identified by referring them to the items already recorded in the *Kemmotsucho*. With the exception of two or three of these items, all of them are *heidatsu*. The first two

1. "...this harp is made by the Shiheii family..." is written on the harp and therefore it is thought to have been of the Zui period.

2. The harp is inscribed "...in the year of Otsuga Kishun..." and is therefore thought to have been made in Kaigen 23 (A.D. 735).

Figure 7 a,b. Chinese swords mounted with gold and silver (C8-2,3): B? D? H.

Figure 8. A sword mounted with gold and silver (C8-4): B? D? I.

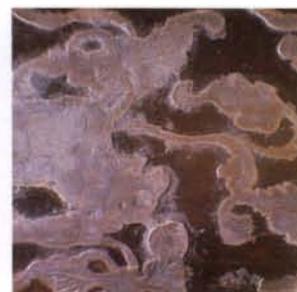


Figure 9. A mother-of-pearl inlaid box (C88): A C E H.

Figure 10. Kawabako (leather box) decorated with gold and silver heidatsu (C138): A C E I.

Figure 11. An inner tray decorated with silver heidatsu (C164): A C E H.



Figure 12. A box decorated with silver heidatsu (S70-5): A C E H.

Figure 13. An octagonal mirror case decorated with silver heidatsu (S71): A C E G.



Figure 14 a,b. A mirror case decorated with silver heidatsu (S71): A C E G.

Figure 15. Heidatsu tsubo (pipe-holder for wu; S108): A C E G.



Figure 16. Heidatsu tsubo (pipe-holder for wu; S108): A C E G I.

Figure 17. A sho (musical instrument; S109): A C E G I.

Figure 18. A phoenix head decorated with heidatsu (S174-2): A J.



Figure 19. A dragon-shaped ink-box with silver heidatsu (S174-3): A I J.



Chinese-style swords mounted with silver gilt were reported in the special survey of swords (made between 1963 and 1966) to be *heidatsu*. The mother-of-pearl inlaid box and the phoenix head (originally called turtle head) decorated with *heidatsu* were also reported in a special survey of urushi art (made between 1968 and 1973) to be *heidatsu* or a combination of *heidatsu* and *raden*. However, neither survey was a study of *heidatsu* and *hyomon* alone.

1. Central storehouse 8-2,3. Two Chinese swords mounted with gold and silver (Fig. 7 a,b).
2. Central storehouse 8-4. A sword mounted with gold and silver. Gold and silver *heidatsu* in ivory and animal design (Fig. 8).
3. Central storehouse 88. A mother-of-pearl inlaid box (Fig. 9).
4. Central storehouse 138. Two *kawabako* (leather boxes) decorated with gold and silver *heidatsu* (Fig. 10).
5. Central storehouse 164. An inner tray decorated with silver *heidatsu* (Fig. 11).
6. South storehouse 70-5. A box decorated with silver *heidatsu* (Fig. 12).
7. South storehouse 71. An octagonal mirror case decorated with silver *heidatsu* (Fig. 13).
8. South storehouse 71. A mirror case decorated with silver *heidatsu* (Fig. 14 a,b).
9. South storehouse 108. Two *heidatsu tsubo* (pipe holders for *wu*) (Figs. 15,16).
10. South storehouse 109. A *sho* (musical instrument; Fig. 17).
11. South storehouse 174-2. A phoenix head (originally described as a turtle head) decorated with *heidatsu* (Fig. 18).
12. South storehouse 174-3. A dragon-shaped ink-box with phoenix head decorated with silver *heidatsu* (Fig. 19).

These fifteen treasures are in *heidatsu* and *hyomon*. When the previously listed nine items are added, there is a total of twenty-four items. They still exist at the Shosoin.

A personal perspective on the history of research

The following is a list of various opinions about *heidatsu* and *hyomon*, mainly about their terminology and technique, in order of publication.

In Mayori Kurokawa's *Nihon Shikki Shurui* (1901), *hyomon* is thought to be a simplified form of *heidatsumon* and, therefore, *heidatsu* and *hyomon* do not vary as techniques but are part of the same *togidashi* technique in which urushi is applied over a design and burnished with charcoal. However, I cannot completely agree with this explanation because among the treasures there are several items using the peeling off technique instead, and there are no references to *heidatsumon* being the origin of *hyomon*.

In Zentaro Ono's *Guide to the Shosoin* (1920), *heidatsu* is the art of raising the gold foil above the urushi surface so that it can be felt by the hand, while *hyomon*, like *raden*, has the design either on the same level as the urushi surface or a little below it. In both, urushi is applied over the design and later burnished, but they differ in appearance. However, some of the *heidatsu* pieces mentioned in the *Kemmotsucho* have the gold foil protruding above the urushi surface while in others it is lower than the urushi. Moreover, there is one obvious example of a design that is level with the urushi surface, thus bringing this opinion into question.

Shoka Tsujimura's *Tokyo Bijutsu Gakko Koyukai Geppo* (1927) mentions four points: (1) *kuro-urushi nuritate*, (2) *kuro-urushi nuri-togidashi*, (3) smoothness and unevenness of *kirigane* (gold flakes used in *makie*), (4) the existence of urushi in *kebori* (hairline engraving). Moreover, it introduces the concept that *heidatsu* and *hyomon* are different. When *heidatsu* is used, the urushi painted over the design is immediately peeled off. *Hyomon* uses *togidashi* and the design is always level with the urushi surface. However, as to the existence of urushi in *kebori*, although Tsujimura only mentions urushi remaining in *heidatsu* and *hyomon*, there are very few examples of *kebori* that have urushi. The condition of the urushi over the gold and silver foil in those objects that are thought to be *heidatsu* does not appear to have anything to do with *kebori*; it appears to have been simply peeled off. Meanwhile, in the harp, which alone is entitled to be called *hyomon*, the urushi remains only in the *kebori* and the gold and silver foil is burnished to the same height (of course, some parts have fallen off).

Shisui Rokkaku in his *Shikko-shi* (1928) and in his *Tokyo Shikko-shi* (1933) relates that although it may be convenient to think of *hyomon* as a simplified form of *heidatsumon*, if there is a difference it lies in the fact that in *heidatsu* either a thin layer of urushi is applied over the gold and silver foil and later removed or urushi application is avoided on the design, thus allowing the design to protrude above the urushi surface. Rokkaku's opinion is therefore similar to Tsujimura's. However, I do not completely agree with him, since there has been no report of applying urushi avoiding the gold and silver foil parts. Moreover, one cannot say that all designs with peeled off urushi are in relief.

Tomio Yoshino in his *Studies of the Shosoin* (1929) says that *heidatsu* consists in lightly burnishing and peeling the urushi off thin gold and silver foil designs. Therefore there are two types of gold and silver foil design, one being the relief kind and the other being the recessed kind. *Hyomon* uses a thick *kanagai* (gold or silver leaf) and urushi is applied several times until it becomes a beautiful piece of art when burnished. The separate categorization of *heidatsu* and *hyomon* is a more detailed observation than before. However, I feel that there is still room for more research.

In Tosen Hirose's *Studies of the Shosoin* (1929) *heidatsu* and *hyomon* are thought to be completely different techniques. *Heidatsu* uses the burnishing technique that created exquisite, elaborate items in the Tang (Nara) period. *Hyomon*, which flourished after the Heian period, is the simplified technical form, so to speak, of *heidatsu* design, but began in the Tang period. Thus it was also seen during the Nara period. Hirose also says that all the surviving items are *heidatsu*, which uses the burnishing technique. Thus, his interpretation is quite contrary to those previously held, for he states that *heidatsu* has an even surface and *hyomon* has a rough surface. I do not have any objections to calling *haritsuke-hyomon* simply *hyomon*, a simplified technique found in later generations. However, I cannot agree with the statement that all items of the Nara period were *heidatsu* using the burnishing technique, because it simply goes against the facts.

It was Tomio Yoshino's *Nihon Shikko-shi* (1934) that suggested for the first time that both techniques were practically the same but that *heidatsu* is the Chinese name and *hyomon* the Japanese name. This idea is based on the fact that there is no use of the word *hyomon* in Chinese documents but in Japan during the Nara period there are at least six examples (nine items) of *hyomon* plus numerous examples in later ages. He concludes that this is similar to calling the Chinese "*kyocho*," "*soku*" in Japanese and that this interpretation is the solution to the long argument over *heidatsu* and *hyomon*. This interpretation has since been widely acknowledged in the world of urushi art history and it is the most accepted view up to this day. However, I believe that *hyomon* after the Heian period (794–1185) refers to a different technique.

Shosoin Kyushitsu-hin Chosa Hokoku (1959) by Yuzuru Okada, Gonroku Matsuda et al. and *Shosoin-no Shikko* (1975) by Okada, Matsuda, Arakawa et al. support Yoshino's interpretation but also stress the fact that these items fall in the end either into the "peeled-off" group or into the "burnished" group. They maintain that there is only one example of a burnished object, the *hyomon* harp, and hint that Shoka Tsujimura's (1927) and Tomio Yoshino's interpretations (1929) are quite reasonable. However, this single example of a burnished object, the *hyomon* harp, is not reported in the *Kemmotsucho*. All the objects listed there are examples of *heidatsu*; not one example of *hyomon* is found. Thus they avoid separating *heidatsu* and *hyomon* in terms of technique after realizing the difficulty of matching the actual objects with the documents.

From this, it can be said that there is one interpretation which says that *heidatsu* and *hyomon* are different techniques and another interpretation that says that they are the same. Today, there is so much support for the idea that *heidatsu* is the Chinese name and *hyomon* is the Japanese name, that this is becoming accepted as fact. Yet during the compilation of the *Kemmotsucho* in the Nara period, there existed an explanation that the Chinese-style swords imported from China had *hyomon* designs. I cannot erase this from my mind, nor can I consider the peeling-off technique and the burnishing technique to be the same when obviously they are completely different. Therefore, on this point I support Shoka Tsujimura's view (1927) and the *Shosoin Kyushitsu-hin Chosa Hokoku* (1959), which suggest that *heidatsu* is the peeling-off technique and *hyomon* is the burnishing technique.

Conclusion

Looking again at the Todaiji *Kemmotsucho*, the items are listed in it as either *heidatsu* or *hyomon*. I feel there was a reason for this. There must have been several people engaged in compiling this list, which covers in great detail the quality, shape, and measurements of more than six hundred treasures. It is almost impossible to think that only one person did all this in such a short time. Most probably, different people dealt with different kinds of objects and, when the records were combined, different names had been used to describe the same technique. It can be seen from the way the *Kemmotsucho* is written that it was probably drafted by one learned man from many notes handed on to him by several people, in order to unify the mode and content of the list. The amazing orderliness of the text and that person's familiarity with the field and his extremely deep knowledge of every kind of art are evident.

Next, we cannot simply say that what was then called in China *heidatsu* was known as *hyomon* in Japan, as if we were calling the Chinese "kyocho," "soku" in Japanese. There surely must have been an accepted distinction in technique to differentiate the two. As in later times, *togidashi makie* was called *hiramakie* and *choshitsu* was called *kamakurabori*. Although *heidatsu* and *hyomon* look alike at first glance, the techniques involved in their creation differ immensely. I think the person who compiled or drafted the list must have realized the differences involved and given them their names. That person did not want to differentiate objects according to whether they were originals or copies or whether they were made in China or Japan. He wanted to differentiate between the technique in which gold and silver foil designs are cut out and placed on urushi, urushi is once again applied and later peeled off, and the second technique, in which the design is revealed by burnishing the urushi instead of peeling it off.

As already mentioned, in the last stages of *kyushitsu* (coating) it is necessary to burnish the surface with repeated applications of *dozuri* or *suri-urushi* because there are minute lumps or a frosted surface resulting from the *sumitogi*. This is called *roiro-shiage* and should be considered completely different from *nuri-hanashi*. In other words, *roiro* takes more time and effort. It can be clearly seen from other records that the art of *roiro-shiage* already flourished in the Nara period.

In this paper, I have studied the *heidatsu* and *hyomon* reported in the *Kemmotsucho* and have seen that among the surviving objects most are called *heiatsu* and only one is described as *hyomon*, a harp that was recorded sixty years after the rest. To say that this harp is everything there is to know about *hyomon* in the Nara period is extremely dangerous and we must be very careful when speaking about it. However, since there is a clear difference between *heidatsu* and *hyomon*, my interpretation given above should be considered.

Acknowledgments

I should like to thank the General Director of the Shosoin, Mr. Yoshihiko Hashimoto, for his sympathetic understanding; Mr. Hiromu Abe, Chief of Conservation Section in the Shosoin; Mr. Daitsu Kitamura, Professor Isao Fuyuki, Mr. Kenichi Kitamura, and others for their advice on urushi art techniques; and Professor Masaki Nakano and Ms. Toyoko Takahashi for helping with the collection of data.

Bibliography

- Hirose, Tosen
1929 *Studies of the Shosoin.*
- Kurokawa, Mayori
1901 *Nihon Shikki Shurui.*
- Okada, Yuzuru, Gonroku Matsuda et al.
1959 *Shosoin Kyushitsu-hin Chosa Hokoku.*
- Okada, Yuzuru, Gonroku Matsuda, Hirokazu Arakawa et al.
1975 *Shosoin-no Shikko.*
- Ono, Zentaro
1920 *Guide to the Shosoin.*
- Rokkaku, Shisui
1928 *Shikko-shi, Kokogaku Koza.* Vol. 3.
- 1933 *Tokyo Shikko-shi.*
- Shinryu, Seharpe
1979 *Annual Report of Office of the Shosoin Treasure House.* Vol. 1.
- Tsujimura, Shoka
1927 *Tokyo Bijutsu Gakko Koyukai Geppo.* Vol. 27, No. 2.
- Yoshino, Tomio
1929 *Studies of the Shosoin.*
- 1934 *Nihon Shikko-shi.*

Origins of the Use of Urushi in Japan and Its Development

Yoshiyuki Kuraku

Archaeologist

The use of urushi in the prehistoric period

It was not until the 1930s, when urushi objects were unearthed from historic sites, that it became clear that urushi was used in Japan from the prehistoric era. This realization first came with the discovery of urushi bows, goblets, combs, and sword-shaped wooden items of the final Jomon period (c. 1000–400 B.C.), during the excavation of Korekawa, Hachinohe, Aomori prefecture.

Since then, various urushi objects have been found on many sites, mainly in eastern Japan. Recent national land development, even on low-lying marshy ground, has yielded numerous urushi objects from over five hundred sites in east and west Japan that date to the prehistoric era (the Jomon, Yayoi, and Kofun periods). Although the lacquerware objects were buried for a long time, they still maintain their original shapes and colors. The inner wood may have rotted away, but the urushi itself is extremely strong and free from erosion.

The oldest urushi found in Japan to date is from the Torihama shell mound in Obama-shi, Fukui prefecture. It includes arrows with red urushi coating, parts of shallow wooden bowls with red and black urushi coating, and a comb with red urushi. Because these objects were found with pottery of the early Jomon period (c. 4000–3000 B.C.), they are also dated to this period. Furthermore, in the same shell mound, other objects from the middle of the early Jomon period were also found such as earthenware with red urushi partially applied on the surface, with black urushi arcs drawn on red urushi ground, and with pictorial designs formed by narrow lines of red urushi on black urushi ground. These objects prove that during this period there existed quite advanced techniques of mixing pigments and of applying different urushi colors. Such examples from the early Jomon period were also excavated from the site of Ondashi, Yamagata prefecture, in the summer of 1985, proving that urushi was produced in various regions (Fig. 1). Moreover, the fact that the urushi technique in this period was highly evolved means that the first use of urushi must have been much earlier.



Figure 1. Pottery decorated with urushi, early Jomon, Ondashi site, Yamagata prefecture.

So far, urushi objects from the middle Jomon period (c. 3000–2000 B.C.) have been found only in eastern Japan. Besides earthenware with urushi coating, there are bows and containers such as pots, bowls, spoons, and trays made of wood with red and black urushi. Though not many urushi remains have yet been discovered, more are expected to be found in the future.



Figure 2. Pottery bowl with red urushi decoration on a black urushi ground, final Jomon, Kamegaoka site, Aomori prefecture.

Figure 3. Rantai (woven bamboo) lacquerware, final Jomon, Korekawa site, Aomori prefecture.

Figure 4. Wooden bracelets, final Jomon, Funagatani site, Ehime prefecture.

During the middle to late Jomon period (c. 2000–1000 B.C.), not only wooden containers, but also accessories decorated with urushi, such as combs, necklaces made of bone, and clay earrings and earplugs, were made. In addition, many bows decorated with red urushi belonging to this period have been discovered.

Towards the final Jomon period, extraordinary strides were made in urushi art in eastern Japan and it became amazingly rich and varied. In western Japan, too, the use of urushi seems to have spread, and numerous sites that contain such objects are gradually being found. Among these objects are pottery jars covered completely with red urushi and jars and plates with distinctive curved designs in red urushi on black urushi ground (Fig. 2). The brilliant contrasts created by the use of red and black demonstrate the richness of artistic expression.

The remains of *rantai-shikki* (lacquerware with a woven bamboo substrate), especially popular in the final Jomon period, are found mainly in the Tohoku district, but also in other regions from Hokkaido to the Kinki district. This advanced technique is found on containers, baskets, and pots covered completely with red urushi (Fig. 3) and on plates with designs in red urushi on black urushi, similar to those painted on pottery.

In various locations in western Japan, a number of bracelet-shaped objects made of wood with red urushi have been excavated (Fig. 4). These objects were produced continuously until the Yayoi period.

In addition, in the Jomon period, urushi was used not only as a paint, but also as an adhesive and fixing agent; for example, it was used to repair damaged pottery and to fix arrowheads to their shafts.

During the Yayoi period (c. 400 B.C.–A.D. 250), the availability of iron made possible the use of a lathe, which added a new dimension to the production of substrates. Urushi technique, however, continued to follow the traditions of the Jomon period, whereas, compared to that period, the use of urushi decreased. It was rarely used to decorate pottery and was mostly limited to application on wood. Also, urushi on containers for daily use is difficult to find. It seems likely that the use of urushi became restricted to such objects as decorative bows and accessories, headpieces and combs. In contrast to the Jomon period, usually only one color—black or red—was used and the drawing of designs was rare. Exceptions to this are some goblets and armor colored with red ochre (Fe_2O_3) or mercuric sulfide (HgS) and outlined with black urushi. The red urushi used in the Jomon period became neglected and disappeared after the late Yayoi period (c. A.D. 100–300). Moreover, in the Kanto and Tohoku districts where lacquerware was popularly produced during the Jomon period, little evidence has been found so far of the use of urushi dating from the Yayoi period. The only known example is the use of lacquer for repairing damaged pottery found in Saitama and Niigata prefectures.

The Nabatake site in Karatsu-shi, Saga prefecture, excavated in 1981, is important in that it exhibits the beginning of Japan's agriculture, which was influenced by Chinese and Korean cultures. On this site, about ten *shikki* (lacquerware vessels) were found, dating from 500 B.C. to 400 B.C., the latter part of the final Jomon period to the early Yayoi period. With one exception—a jar covered with red urushi on both inner and outer surfaces—the vessels had geometrical designs in red urushi over black urushi. Such designs were not found in western Japan during the Jomon period. This technique was probably imported from the Korean peninsula along with agricultural techniques; it was never widely handed down nor developed much, and later it was overtaken by the traditional techniques dating from the Jomon period.

The use of urushi spread almost throughout Japan in the Kofun period (c. A.D. 300–A.D. 600). The advanced state of the technique can be seen in the various accessories—weapons and armor—that were interred along with bodies in ancient burial mounds. New substrates, such as bamboo, leather, and metals, were introduced and, especially in the late seventh century, the technique of pasting layers of cloth with urushi began to be employed in making caskets.

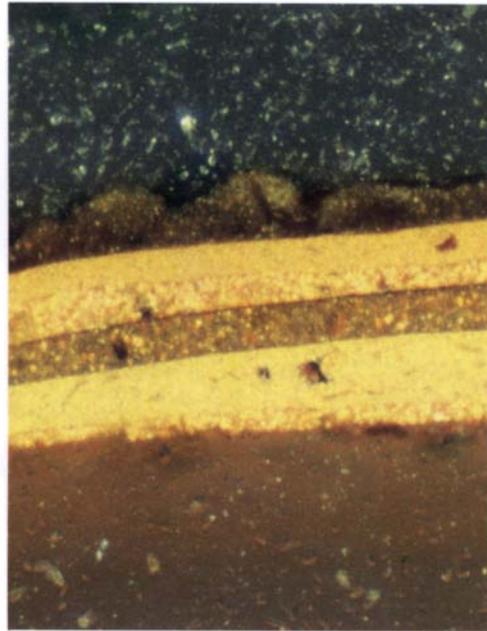
The origin and technique of urushi

The origin of the use of urushi in Japan was thought formerly to have been influenced by China. However, the excavation of the Torihama shell mound in 1975 revealed that it was used in Japan from the beginning of the early Jomon period. On the other hand, the discovery of a red urushi bowl (height 5.7 cm, diameter 10 cm, diameter of base 7 cm) belonging to the beginning of the Neolithic age, during the second excavation (1977–1978) of the Hemudu site in Zhejiang province, shed further light on the relationship between Japan and the mainland. An Zhimin, the assistant director of the Institute of Archaeology CASS, People's Republic of China, has recently and emphatically stated that the origin of urushi techniques in Japan was strongly influenced by the Neolithic culture of the lower Yangzi River region; they were introduced to Japan and put to use along with such techniques as split stone earrings and elevated floor construction. Yet only one piece of urushi has been excavated from the Hemudu site and two lacquerware vessels from the remains of Yü-tun belonging to the Majiapin culture, which followed the Hemudu culture. However, it is not possible to make a definite statement from this evidence that the urushi technique of the Neolithic age in China is directly related to the objects excavated from the Torihama site. In fact, it may be said that there is a very subtle difference in the archaeological concept of time between Japanese and Chinese specialists. To discuss this matter we must wait for further scientific examinations and analyses. For example, carbon-14 analysis of the stratum of the Hemudu site from which the urushi was excavated dates it to around the latter half of 4000 B.C., which is also the date given to the remains of the Torihama shell mound.

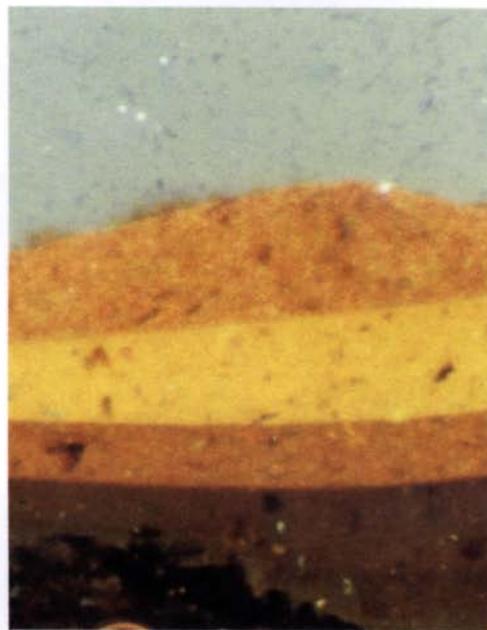
Conclusion

The urushi technique of the Jomon period was very advanced from the outset, for example, in the use of both red and black urushi for painting. In general, red urushi was red ochre (Fe_2O_3) and cinnabar (red mercuric sulfide, HgS). It is considered, so far, that cinnabar was first used in the middle of the late Jomon period. After that, cinnabar and red ochre were both used, on different objects or on the same object, to produce different tones and gain effectiveness, a very complicated technique (Fig. 5). Sometimes the thickness was composed of five or six layers, about 150–200 μm in total. Since each layer is almost completely smooth, it can be supposed that each layer was well-polished before the next was applied. This advanced technique is indeed fascinating. Occasionally even alternate applications of red and black were carried out. Already in this period, plaster materials such as clay, *kokuso-urushi*, or granite-sand *urushi-shitaji* were employed for making objects with irregular surfaces (for example, *rantai-shikki* or combs). Therefore it is possible to say that the fundamental urushi technique had been established by the final Jomon period. Through the Yayoi and Kofun periods, urushi applied art techniques developed from the tradition of the early Jomon period. This became the basis for the great advance in urushi technique after the seventh century, under the influence of the Tang culture in China.

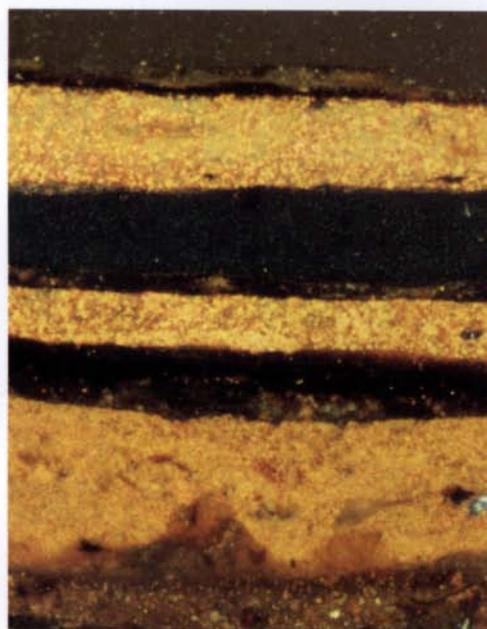
Figure 5. Photomicrographs of cross sections of urushi layers.
 (a) Wooden bowl, late Jomon, Juno site, Saitama prefecture.
 (b) Lacquered woven bamboo bowl, final Jomon, Morigafuchi site, Ishikawa prefecture.
 (c) Wooden ring (see also Fig. 4), final Jomon, Funagatani site, Ehime prefecture.



- ← impure red ochre (α - Fe_2O_3)
- ← cinnabar (HgS)
- ← cinnabar
- ← impure red ochre
- ← cinnabar



- ← cinnabar (HgS)
- ← cinnabar
- ← impure red ochre (α - Fe_2O_3)
- ← cinnabar
- ← ground



- ← clear lacquer
- ← cinnabar (HgS)
- ← carbon black
- ← blackish color
- ← cinnabar
- ← black
- ← cinnabar
- ← ground

Bibliography

- Hemudu Archaeological Team**
1980 "Excavation of 2nd season at Hemudu site in Zhejiang province." *Wenwu* [Cultural Relics] 5.
- Hopei Museum and CPAM, Hopei Province**
1974 "The Shang dynasty site at T'ai-hsi-ts'un, Kao-ch'eng county, Hopei province." *Wenwu* [Cultural Relics] 8.
- Kaneko, Hiroyuki**
1981 "Wooden lacquerware of special shapes in Funagatani sites." *Gekkan Bunkazai* 218.
- Kenjo, Toshiko**
1984 "Analysis on ingredient of urushi-like film in *shikki*." In *Report on the Excavation of Juno Bog Site*. Saitama Prefecture: Board of Education and Prefectural Museum.
- Kida, S. and S. Sugiyama**
1932/
1980 *Plates Showing the Vegetal Relics of the Japanese Stone Age*.
- Kobayashi, Yukio**
1962 "Kyushitsu." In *Techniques of Ancient Times*. Hanawa Shobo.
- Kobayashi, Y. and N. Mino**
n.d. "On the structure of Jomon combs in lacquer excavated at Misawagawa site, Hokkaido." In *Annual Report of the Historical Museum of Hokkaido* No. 7. Historical Museum of Hokkaido.
- Kuraku, Yoshiyuki et al.**
1984 *A List of the Sites where Lacquer (Urushi) Implements were Recovered. East Japan*. Nara National Cultural Properties Research Institute.
1985 *A List of the Sites where Lacquer (Urushi) Implements were Recovered. West Japan*. Nara National Cultural Properties Research Institute.
1986 "Lacquerware techniques of the Yayoi period." *A Study of Yayoi Culture* 6. Yuzankaku.
- Morikawa, Masakazu et al.**
1979 *Torihama Kaizuka—An Examination of Bog Sites of the Early Jomon Period*. Vol. 1. Fukui Prefecture: Board of Education.
1981 *Torihama Kaizuka—An Examination of Bog Sites of the Early Jomon Period*. Vol. 2. Fukui Prefecture: Board of Education.
1983 *Torihama Kaizuka—An Examination of Bog Sites of the Early Jomon Period*. Vol. 3. Fukui Prefecture: Board of Education.
- Nagashima, Masaharu**
1984 "Urushi techniques of the Jomon period seen in ornamental bow excavated from Juno Bog site." In *Report on the Excavation of Juno Bog Site*. Saitama Prefecture: Board of Education and Prefectural Museum.
1985 "Lacquerware techniques of the Jomon period—a study of the *rantai* lacquerware of Tohoku prefecture." *Bulletin of the National Museum of Japanese History*. Vol.6.
- Nakajima, Naoyuki et al.**
1982 *Nabatake*. Karatsushi City: Board of Education.
- Nakasato, T., Y. Emoto, and R. Ishikawa**
1971 "Note on the structure and technique of a Neolithic comb of lacquer work unearthed at Sanno site, Miyagi prefecture, and preservative treatment on it." *Science for Conservation* 7(3).
- Naora, Nobou, and Esaka Teruya**
1941 *On Objects Excavated from Kamegaoka Bog Site*. Kodai-Bunka. Vol. 12–3.
- Naruse, Masakazu**
1984 "Red-pigmented pottery, urushi-painted pottery and urushi wares: chemical analysis of their red pigments." In *Report on the Excavation of Juno Bog Site*. Saitama Prefecture: Board of Education and Prefectural Museum.
- Suzuki, Kimio**
1984 "Meaning of the excavation of Juno Bog Site—with special emphasis on wooden products and urushi objects." In *Report on the Excavation of Juno Bog Site*. Saitama Prefecture: Board of Education and Prefectural Museum.
- Takahashi, Tadahiko**
1985 "Remains of urushi workshop of the Jomon period." *Ethnos* 26. Shin-nihon Kyoiku Tosho.

- Takahashi, Tadahiko et al.**
- 1984 *Report on the Excavation of Nakayama Site*. Gojome Town, Board of Education, Akita Prefecture.
- Yamada, Masahisa and Masae Yamaura**
- 1984 "Types of *shikki* and selection of trees: on techniques of production." In *Report on the Excavation of Juno Bog Site*. Saitama Prefecture: Board of Education and Prefectural Museum.
- Wu Su**
- 1978 "Excavation of the Neolithic site at Yü-tun in Ch'ang-chou, Kiangsu province." *Kaogu* (Archaeology) 4.
- Zhimin, An**
- 1985 "Effect of the prehistoric cultures in the lower reaches of Changjiang River on ancient Japan." *Journal of the Archaeological Society of Japan* 70(2).

Lacquerware in the Unified Silla Period, with Special Reference to the Finds at Anap-chi

Jongseok Lee

Cultural Properties Research Specialist

When the historical development of lacquerware in Korea is considered, the works from the Unified Silla period are rarely discussed. The Unified Silla period dates from the late seventh century to the early tenth century. It spans the 250 years between the time when Silla unified the Three Kingdoms (Koguryo, Paekche, and Silla) and the fall of Silla at the hands of the new conqueror, the Koryo dynasty. Although it was in this period of Korean history that the most brilliant craftworks flourished, the study of lacquerware during these years has been surprisingly neglected. I surmise that this is because there is a lack of research materials from this period.

However, ten years ago an excavation was carried out at a lake named Anap-chi, located in the Kyongju district, where a Unified Silla palace once existed. Numerous objects were discovered at the bottom of the lake, including lacquerware, metalware, porcelain objects, tiles, stoneware, wooden objects, and various other remains.

Judging from the state of the collapsed stone walls of the lake and the characteristics of the excavated remains, there is no evidence of extensive reconstruction or dredging work since the lake was built in A.D. 674. It has probably been in ruins since the fall of Silla in A.D. 935. This suggests that the remains at Anap-chi consist mainly of objects from the Unified Silla period, with a very few from the Koryo period (918–1392).

The lacquerware found at Anap-chi consists of a number of broken pieces, but more than forty of these have recognizable shapes. There are twenty-five broken multilayered boxes, several pots and bowls, small juglike jars for oil, wooden inkslabs that show distinct signs of use, two pieces of *heidatsu* (applied metal decoration) material that were presumably used to decorate special objects such as Buddhist altars, and colored picture boards whose use is unknown (Cultural Treasures Conservation Department 1978). These remains differ from those excavated from the tombs of the preceding Three Kingdoms period (37 B.C.–A.D. 668), displaying a phase of luxurious life in the Silla palace. They seem to have remained at the bottom of the lake since the day of the destruction of the kingdom and thus exhibit consistent characteristics.

According to the *Samguk Sagi* (History of the Three Kingdoms), the government of Silla had a special department for lacquer. While there were other departments that handled general wooden products, the lacquer department was not only engaged in the production of lacquerware but also managed the cultivation of lacquer trees.

Korea has had a long tradition of regulating the use of lacquer objects. The government used its strict authority to determine the use of lacquerware according to rank. The *Koryo-sa* (History of Koryo) records that the government encouraged the development of lacquer tree plantations throughout the country, and, especially in the Yi dynasty, each local official was obliged by law to supervise and manage the lacquer tree plantations in his territory. Such laws were intended to prevent lacquer being wasted; royalty and public officials had priority in the use of lacquer objects, items that have been consistently regarded as valuable.

The lacquerware of Anap-chi should be considered from this standpoint. The lacquer items, as well as objects of gold, silver, and bronze, were found only on the banks of the lake where there were old buildings. In other words, compared with the Silla stoneware, which was found scattered randomly, the lacquer objects were found in a specific location. Therefore, these lacquer objects must have been used in the daily life of the palace, unlike the earthenware of the Three Kingdoms period. All known lacquerware from the Three Kingdoms period has been excavated from tombs and includes such utensils as pots, bowls, cups of various shapes, trays, wooden coffins, etc.

There are also reports of discoveries of lacquerware fragments from sites dating to the end of the Bronze Age and the beginning of the Iron Age, which preceded the Three Kingdoms period. These are prehistoric remains from before the period when the Naknang culture flourished, and they are regarded as the oldest evidence of lacquer objects in the Korean peninsula. While prehistoric remains of lacquer objects are very scarce, in the Three Kingdoms period there is evidence that lacquer was used to decorate wooden coffins and their accessories. Lacquer coffins were used in the kingdoms of Koguryo, Paekche, and Silla, and throughout the Koryo period and Yi dynasty, and are still used at luxurious funerals and as a sign of particular respect.

There probably were similar funerary customs in the Unified Silla period; unfortunately, however, no remains have been discovered from that period to prove it. Possibly because of a change in funeral regulations, discoveries from the Kyongju district consist predominantly of stone tomb chambers and containers of bones, etc. Additionally, there is no research material available because there has not been any excavation of tombs of this period. For these reasons, research in the area of craftwork is quite poor. Thus the discovery of the remains of Anap-chi has given us not only important research material but also an opportunity for tremendous progress.

Characteristics of objects at Anap-chi

The majority of the tableware from Anap-chi has a very thin body and an interior finish of red lacquer. In the Three Kingdoms period, the main tablewares were pots (Lee n.d.). Wooden wares were made by hollowing out wood; thus the remains from the tombs of that period are characterized by thick centers. (Alternatively, dry lacquer was used.) Although it is rare to find signatures in the lacquerware from the Three Kingdoms period, a number of lacquer objects of the Unified Silla period are signed. Such signatures are either written in red or done by the technique of hairline carving. These signatures seem to be related to the official signatures of Silla.

A precise manufacturing technique for the wooden substrate developed during this period. There are two different methods of making wooden vessels: one is to form the side by bending a thin piece of wood, as seen in multilayered boxes; the other is to shave willow (*Salix kriyanagi*) or, less often, fir (*Abies holophylla* Max.) twigs into a diamond shape and weave them to form the body of a bowl or a pitcher.

The shallow trays of multilayered boxes are found in great numbers among the remains of Anap-chi. They have high bases that are larger than the openings at the top, so that they can be stacked. They are lacquered in red inside and black outside. The material is fir, with a beautiful grain. After careful investigation of a broken part of a vessel, it was found to be formed from two or three layers of thin veneer about 1 mm thick. This shows that there was quite a precise manufacturing process. These round-brimmed vessels are reminiscent of Japanese multilayered boxes or tea ceremony utensils, not seen in present-day Korea. Only the technique of using thin boards of stripped fir to make the brims of sieves or containers and the lids of wicker trunks has been carried down through the ages.

The same technique of making curved objects using fir is seen in a wooden inkslab. The inkslab itself is made of solid wood and lacquered, but the base is made of thin wood that is overlapped and bent to form the four corners. This is one of the techniques used in manufacturing curved objects and is a truly astonishing method.

The method of making willow twigs into a diamond shape and weaving them into a desired form is a unique and precise manufacturing process, characteristic of the techniques of this period. After fixing the round bottom area by attaching some pieces of wood where needed, small twigs that have been shaved to form an angular shape are woven to construct the side of the vessel. This not only prevents a thin vessel from becoming cracked or deformed but is also a very practical way of making wooden bowls with narrow brims, or jars with small necks. I am familiar with the examination of lacquered jars from the Shosoin (1975) using x-radiography, etc., and assume that they too were made by this method of using willow twigs.

There was a “willow department” in the Silla government, which supervised manufacturers who used wood from trees of this family. Wicker trunks have been traditional furniture in Southeast Asia since ancient times; in Korea, where bamboo grows only in limited areas, willow was naturally used more frequently. Until the time of the Yi dynasty in Korea, demand for willow products was considerable and there were special ranks of people who were appointed to attend to this matter as an occupation. It is no coincidence that there was a willow department in Silla, and in the following years the technical level was unrivaled.

Heidatsu

Next, the development of the *heidatsu* technique in Silla lacquerware should be mentioned. It is recorded in the “Miscellaneous” section of the *Samguk Sagi* that “it is prohibited for those whose rank is lower than the fourth rank to use gold, silver, brass and [certain] lacquer ware.” The lacquerware mentioned here is red with black outside, and gold and silver *heidatsu* lacquer. In other words, this regulation says that such vessels are allowed only to the upper three ranks, i.e., *shinkotsu*, sixth, and fifth. Those who belonged to the fourth rank were lower government officials in the palace and village headmen. This seems to indicate that at the height of the Unified Silla period’s prosperity, the use of precious novelties such as lacquerware spread among ordinary citizens, which presumably led to the creation and enforcement of this new prohibitive law.

Heidatsu lacquerwares from Anap-chi are not vessels in common use and there is no way of knowing what their original purpose would have been. However, there are two wooden objects that might have been used as parts of a Buddhist altar or ceremonial utensils. One consists of eight multilayered flower petals (17.5 cm long, approximately 1 cm thick), on the outer surface of which are butterflies and animal faces made of thin silver plates. These petal-shaped decorative pieces are similar to the half-opened water lily decoration on the lid of the copper jar (a container for *sari*, a relic of the Buddha) in the iron tower of the Nara Seidaiji temple. It is difficult to speculate in what way the wooden pieces from Anap-chi, which resemble enlarged versions of these pieces from Japan, were used.

Another type of *heidatsu* object consists of several half-tubular pieces shaped like bamboo split in half. They seem too delicate to decorate poles or walls. However, from the religious symbol at the bottom end, the band of beads, and the silver *heidatsu* flower patterns over the whole surface, they must have formed part of an object that had some sacred meaning, and were made with the utmost care and precision. There are several reasons for assuming a religious association with the *heidatsu* wooden objects. More than twenty Buddhist images were found among the remains from Anap-chi, the practice of Buddhism was popular among the royalty and nobility in Silla and Koryo, and there is an historical record that describes frequent Buddhist ceremonies in the prince's palace, at the same time as festivals for kings and nature gods.

Heidatsu is a lacquer technique that gained popularity in the seventh century during the Tang dynasty in China, and is thought to have spread to the Korean peninsula by the time Silla culture was at its peak in the eighth century. In tracing this route, attention should be paid to the wooden pillow and wooden footrest (Cultural Treasures Conservation Department 1973) in the tomb of King Munyong of Paekche (sixth century), because the features of these objects (thin sheets of gold attached to the lacquered surface to achieve a turtle shell design) suggest the possibility of the *heidatsu* technique. Other unusual examples from old tombs are a silver *heidatsu* hexagonal tray with grapevine design (Kokura collection), which is thought to have been unearthed in the province of Kyongsang Namdo, and the gold and silver *heidatsu* copper mirror in the possession of the National Museum of Korea. It is doubtful, however, whether this was manufactured in Silla, because of a great similarity in design to those known to be from the Tang dynasty.

In any event, the *heidatsu* designs on the wooden decorative objects from Anap-chi are not delicately made; they are not symmetrical and the lines are unclear. At the same time they depict realistic flowers and plants in an artistic way. This is probably a natural result of the *heidatsu* technique being applied to a wooden surface, or it could have been a trend in that period. Until now it was thought that *heidatsu* was a technique for applying designs on metal surfaces, such as the Tang mirror. The Anap-chi remains, however, are remarkable new evidence that this technique was used to decorate lacquered wood. In other words, the discovery of the wooden *heidatsu* suggests that a new technique was developed to fit the characteristics of a new locality. This is related to the subject of how thin-shelled mother-of-pearl lacquerware appeared in Korea.

The technique that naturally accompanied the development of *heidatsu* was mother-of-pearl lacquerware. This is commonly regarded as having enjoyed popularity in the Tang dynasty; however, objects from the Tang dynasty decorated with mother-of-pearl are scarce. Unexpectedly few such remains have been discovered in either Korea or Japan.

There is a great similarity between the technique of gold and silver *heidatsu* and that of mother-of-pearl applied to wooden objects. Considering the fact that at the beginning of the tenth century mother-of-pearl products were regarded as a specialty in Koryo, it is reasonable to assume that the technique had existed since the end of Silla. The lacquer department of Silla was renamed the “decorative vessels department” in the eighth century during the reign of King Kyongdok, which seems to show that lacquerwares were no longer traditional simple products and the types of decorative manufacturing processes had become a lot more versatile and numerous. In A.D. 930, which corresponds to the period between the end of Silla and the beginning of Koryo in Korea, there is a record that Koryo’s royal government sent mother-of-pearl objects as a gift to the rulers of the late Tang dynasty. Around A.D. 1000 a system of manufacturing mother-of-pearl boxes seems to have been set up, indicating that the demand for mother-of-pearl had increased so rapidly that it was necessary to build government-controlled factories. The Koryo remains, such as the mother-of-pearl sutra casket (reputedly one of the best in the world), are the products of this historical background. Lacquerware craftsmen of Korea concentrated their efforts on mother-of-pearl, unlike those of China or Japan, who had more colorfully diversified products.

The oldest mother-of-pearl object is the copper mirror with a design of flowers and animals, which was discovered in another excavation. The remains of the Three Kingdoms period tombs in Kyongju include the black lacquer saddle that was discovered in Hwangnam, to which semicircular shells are attached with metal nails and bronze objects with shell decoration. These shell decorations were not done by the mother-of-pearl lacquer technique, but they are interesting examples of designs that used shells. Although mother-of-pearl products superior to those of the Unified Silla have not been discovered, judging from the historical evidence it is reasonable to assume that certain techniques had been tried and established since the early days.

Lacquer pictures and colored paintings

Finally, I would like to discuss lacquer pictures and colored painting. In the tomb in Kyongju from the Three Kingdoms period, an unexpectedly large quantity of lacquer pictures and lacquerware was found. Most of these are objects such as trays, square goblets, etc., decorated with designs of flowers, plants, animals, and so forth, rendered with red lacquer. In contrast, no lacquer painting was discovered at Anap-chi. Instead, there were pieces that seem to be broken parts of black trays, which have delicate drawings in red lacquer and gold. Red lacquer was used for the rough rendering of plant designs, and objects were drawn with gold using the Chinese method. Details were done with thin silver lines. There are five pieces, such as those described above, that are very important material for the study of decorative techniques and require more thorough examination.

Buddhist pictures rendered with red and yellow pigments on black lacquerware were also found, but the pieces are so small that it is difficult to determine what type of vessel they formed part of, or whether the design was of flowers or clouds. One of the red-painted pieces seems to be part of a disc-shaped object, and it has a Chinese phoenix in the center that is surrounded by eight very precise and complex flower petals. Another object of interest is the piece shaped like a mortuary tablet that has a plant design at the edge and obvious traces of red and yellow coloring.

It is difficult to carry out a comparative study of these lacquer paintings. However, parts of some pieces are of equal quality to those of the Shosoin. There are objects other than lacquerware that seem to be particularly related to the Shosoin treasures, which should be the subject of further investigation.

With regard to the Buddhist pictures, another subject to be discussed is yellow lacquer. The yellow lacquer mentioned here is not a mixture of yellow pigment and lacquer, but the clear sap of semitropical evergreen trees *Dendropanax morbifera* Lev., which grow only on the southern coast of the Korean peninsula and nearby islands. This natural sap is mentioned in historical records in both Korea and China, some from the Tang dynasty, which call it Paekche or Silla lacquer. A record of the Song dynasty equates lacquer with yellow lacquer, which illustrates how famous Korean yellow lacquer was both inside and outside Korea (Lee n.d.). No objects decorated with this yellow lacquer have yet been discovered. However, the wooden pillow for a queen that was found in the tomb of King Munyong from sixth century Paekche may have had yellow lacquer as a background. Also, yellow lacquer may have been used on the paintings on the bark of white birch that were found in the Ch'onmach'ong mound, or on others from Anap-chi. Although the collection of sap from this kind of tree has been limited, it is a subject for study that should not be ignored, because of its historical importance, being equated with lacquer until the end of the Yi dynasty.

Bibliography

- Cultural Treasures Conservation Department**
 1973 *King Munyong Excavation and Examination Report*. Seoul.
 1978 *Anap-chi Lake Excavation and Examination Report*. Seoul.
- Kim Pu-Sik (1075–1151)**
 1928 *Samguk Sagi* (History of the Three Kingdoms). Choson sahakhoe edition. Seoul: Kyongsong.
- Lee, Jongseok**
 n.d. *Study of Ancient Korean Lacquer Ware*. Seoul: Tankuk University Press.
 1975 *Lacquer Ware in the Shosoin*. Tokyo: Heibon Publisher.

Urushi Coating and Color Painting Applied to Japanese Architectural Cultural Monuments

Yoshio Hasegawa

Agency for Cultural Affairs



Figure 1. Ise-jingu: the shaden (building complex) of the shrine.

As the *shaden* (building complex) of the Ise shrine illustrates, Japanese buildings were originally of plain wood (Fig. 1). When Buddhist architecture was introduced from the Asian mainland in the sixth century, however, the technique of using vermilion or other red colors on buildings was also imported. There are traces of vermilion paint on wood excavated from the corridor of Yamadaji, an architectural monument of the Asuka period (mid-seventh century), much discussed in the press at the time of its excavation. The application of vermilion to angle rafters and common rafters has also been confirmed by the excavation of *Shitennoji kodo* (lecture hall; eighth century).

The interior and exterior of Horyuji (Fig. 2), which is the oldest existing wooden building, dating to the late seventh century, were painted in red pigment dissolved in liquid glue. Lotus flowers and *hosoge* (arabesque) designs were drawn in colors on the ceilings of the inner and outer sanctuaries (Fig. 3), and Buddhist pictures were drawn on the walls of the inner sanctuary. Red pigment was also used for painting the interior and the exterior of *Yakushiji toto* (eastern pagoda; 730, Tempyo 2) and *Toshodaiji kondo* (central sanctuary; 770–780, around Hoki), and lotus flowers and arabesque designs were drawn in colors inside the rooms (Fig. 4). All these show

Figure 2. Horyuji kondo (central sanctuary building).



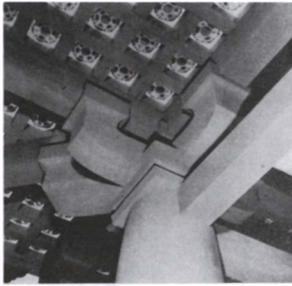


Figure 3. The ceiling of the outer sanctuary of Horyu-ji kondo.



Figure 4. Painted designs inside the rooms of Toshodai-ji kondo.

that Buddhist architecture in the eighth century was very colorful.

As early examples of urushi used on some parts of buildings, Byodoin Hoodo (1053, first year of Tenki; Fig. 5) and Chusonji Konjikido (1124, first year of Tenji) should be mentioned. At Byodoin Hoodo urushi was used for *raden* (mother-of-pearl inlay) works on the *shumidan* (altar) canopies of the Honzon Amidanyorai. The ceiling and the *kumimono* (bracket complexes) inside the Hoodo were painted in rich colors, and the outside of the building was painted with a red pigment. The original painting of Chusonji Konjikido (Fig. 6), which was partly modeled on Byodoin, has been well maintained as the building was protected by the *sayado*, a protective structure built in the medieval period. The temple exhibits the best of the arts and crafts of that age, such as *raden*, *ikakeji*, *makie*, and *heijin* (similar to *makie*), decorating the inner sanctuary; *urushi-haku* was executed on the other visible parts of the whole building, the roof structure excepted (Fig. 7).

The Tamamushi *zushi* (shrine) and the Tachibana Fujin Nenjibutsu *zushi* of Horyu-ji are the oldest in existence, made between the seventh and the eighth centuries, and they were coated with urushi. The *zushi* of Taimadera *hondo* (main hall), however, is the first example made as part of an entire building. This *zushi*, recognized as having been made in the early Heian period (around 794), is approximately 5 m wide, 1 m deep and 5 m high. It was originally coated with black urushi and decorated with pictures drawn with gold and silver powder. The undersurface of the roof and the eaves was decorated with *heidatsu* (applied metal decoration). Graining in black urushi and red oxide was applied to the balustrade. The *zushi* of Taimadera was repaired in 1243, the first year of Kangen, and a door decorated with *makie* was added at this time. Much of the *zushi* and the *shumidan* was repainted in 1453 (Kyotoku 2).

Figure 5. Byodoin Hoodo.



Figure 6. Chusonji Konjikido: (a) the shumidan (altar), (b) outside, showing the kumimono (bracket complexes).

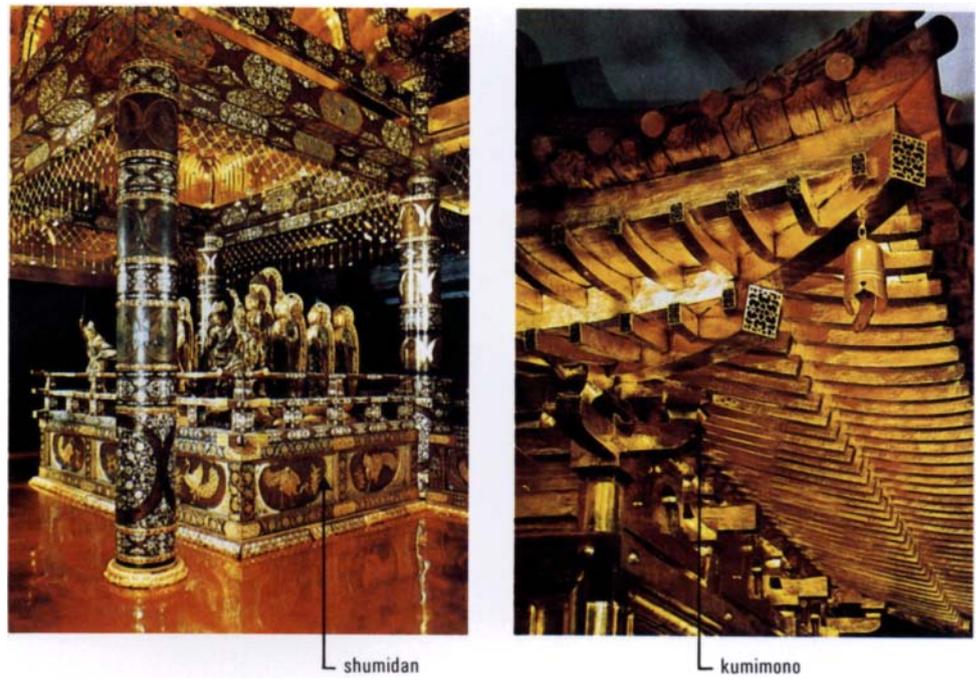


Figure 7. Chusonji Konjikido, showing typical architectural features.

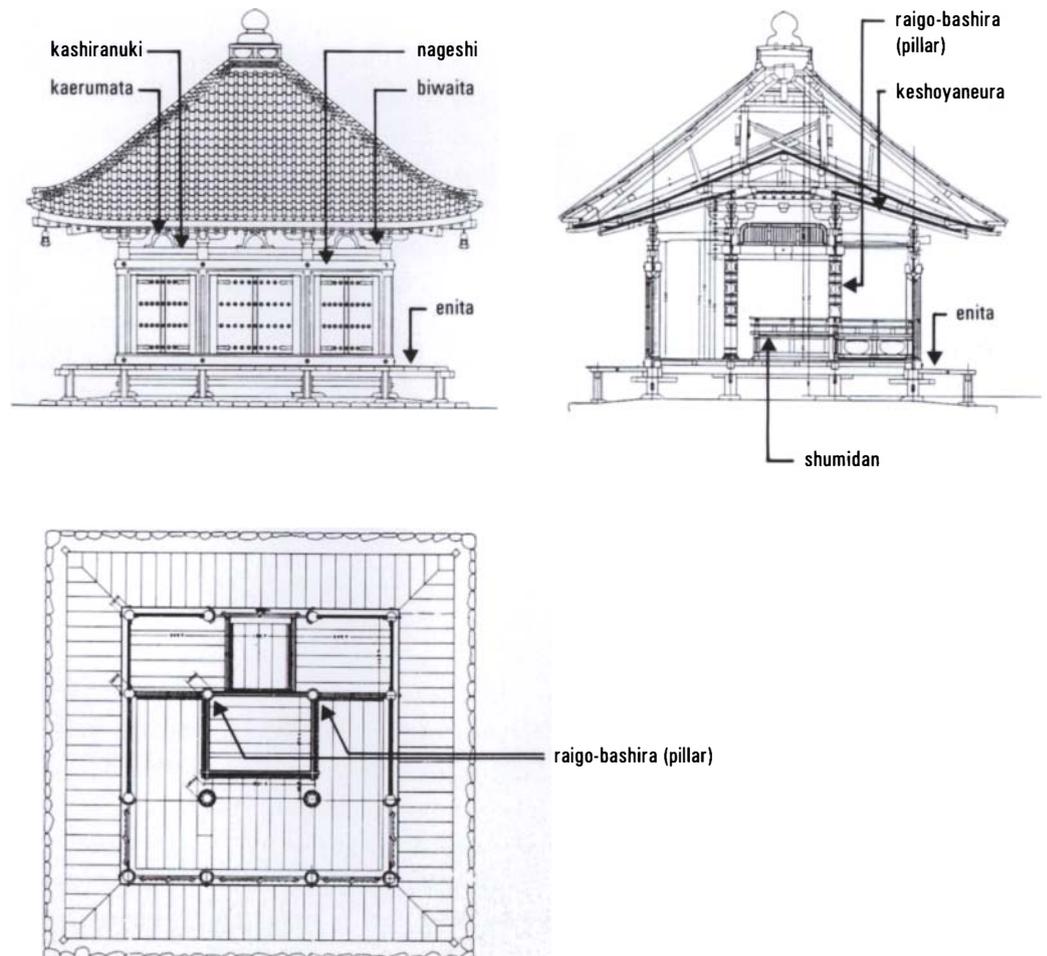


Figure 8. Taimadera hondo.



The Taimadera *hondo* was constructed in the early Heian period (794–929) and was largely remodeled in 1161 (Eiryaku 2). The building (Fig. 8) is 21.1 m wide and 18.0 m deep and is composed of an inner and an outer sanctuary. The framework of the inner sanctuary, including the pillars and the roof structure, was left as it was originally, and the outer sanctuary was remodeled. Repairs of various kinds were made on nine subsequent occasions. The *raigo-bashira* (columns; see Fig. 7) of the inner sanctuary, which had been plain wooden pillars, were coated with vermilion urushi around 1386 (Shitoku 3). Urushi-coated columns and altars, like those in the main building of Taimadera, are commonly found in medieval architecture.

From the Momoyama period (late sixteenth century) urushi began to be used for coating the exterior as well as the interior of buildings. Moreover, the *kaerumata* (frog-leg struts), the *biwaita* (wooden plates placed between bracket complexes) and other structural elements (see Fig. 7) were decorated more and more with carvings of flowers and birds, and the carvings were painted in rich colors.

As has been made clear, until the Middle Ages urushi was used only for *raden*, *makie*, or with gold leaf for buildings. Moreover, its application was limited to small areas inside the rooms such as altars and shrines. The technique of urushi work at that time was, therefore, like a craftwork. The extension of urushi to the interior of large buildings, like Chusonji Konjikido and Rokuonji Kinkaku in Kyoto (1398, Oei 5), was made possible because the responsible official at that time had great financial power.

The application of urushi to the exterior of buildings came as a result of the realization that, as a protection against weathering, urushi is superior to pigment dissolved in liquid glue. Although urushi was, and still is, much more expensive than glue, the use of urushi was made possible by the financial strength and influence of those in power during this period.

The following are some representative urushi-coated buildings from the Momoyama period that exist today.

1. The *honden* (main hall) of the Tsukubusuma shrine (Chikubujima, Shiga prefecture; Fig. 9). This shrine consists of a building erected in 1567 (Eiroku 10) and a building removed from the Fushimijo castle and reconstructed in 1602 (Keicho 7). The main framework of the shrine is believed to have been brought from Fushimijo. *Hiramakie* was applied on black urushi for the framework (Fig. 10), including the pillars, and flowers of the four seasons were drawn in color on the ceiling.

2. Hagonji *karamon* (gateway; Chikubujima, Shiga prefecture). The gate was removed from the Hokokubyo *karamon* and reconstructed in 1603 (Keicho 7). Its framework, the pillars, the *daiwa* (architrave; Fig. 11), and the doors were coated with black urushi. Carvings fitted into the doors and the walls, as well as the bracket complexes on the top of the pillars, were painted in rich colors.

3. Osaki Hachiman shrine *honden, ishinoma, haiden*; Sendai, Miyagi prefecture; Fig. 12). The shrine was constructed in 1607 (Keicho 12) and is an early example of a building in which urushi was applied on both the interior and the exterior. On the outside the gableboards were coated with black urushi; the eaves above the *koryo* (rainbow-shaped beam) and the *uchinori-nageshi* (horizontal wooden plank) of the *kohai* (roof over steps) were painted with colors. A dragon was carved on the *kohai-bashira* (pillars); celestial nymphs were carved on the *biwaita* (Fig. 13) between the bracket complexes. These carvings were also painted in rich colors. Parts of the *hafuita* (decorative wooden piece on the gable), the *taruki-koguchi* (rafter ends) and the *koran* (balustrade) were decorated with gold-plated metal fittings.



Figure 9. Tsukubusuma shrine honden.

Figure 10. Hiramakie on black urushi used in the honden of Tsukubusuma shrine.

Figure 11. Hagonji *karamon* (gateway).





Figure 12. Osaki Hachiman shrine honden.

Figure 13. Carved and painted decoration on the biwaita of Osaki Hachiman shrine.



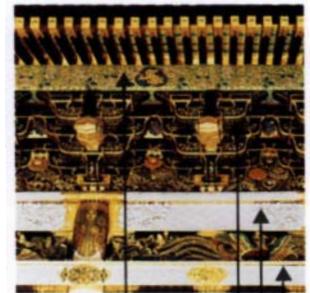
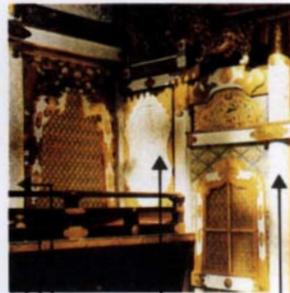
biwaita

nageshi

Figure 14. Toshogu honsha and honden.

Figure 15. Toshogu honden showing the use of black urushi and makie.

Figure 16. Urushi-haku used in Toshogu honden.



jimonbori

koran

itado

enmawari-koshigumi

sankarado

kesho-uraita

nokimawari-kumimono

kashiranuki ukibori

nageshi

The painting technique using urushi for the *hafuita* and lower parts of the building, and attractive colors for the *nokimawari* (eaves) above the *nageshi* (Fig. 13) in order to make the building more colorful, was often used until the end of the Edo period. It makes sense, as the *hafuita* and the lower parts of the building are subjected to wind and rain.

The *shaden* of Nikko Toshogu (Fig. 14) serves to represent the architecture of the early Edo period (the first half of the seventeenth century). The present Toshogu *shaden* was built between 1635 and 1636 (Kanei 12–13). The carvings, urushi coating, color painting, and metal ornaments used on the inside and the outside of the main building represent the highest level of architectural decoration at the time.

The building was richly decorated with *jimonbori* (carving done directly onto an entire surface; Fig. 15) and *ukibori* (embossed carving; Fig. 16) added to the pillars, *nageshi*, and *kashiranuki* (uppermost beam), which were finished with *gofun*; the bracket complexes of the *nokimawari*, *taruki* (rafters), *enmawari-koshigumi* (balcony brackets; Fig. 15) and *koran* were coated with black urushi. *Urushi-haku* was used abundantly in many places such as the *kesho-uraita* (visible wooden ceiling board; Fig. 16), *nokimawari-kumimono*, *madomawari* (windows and frames) and so on. *Sankarado*



Figure 17. Richly painted kashiranuki (uppermost beam) at Shizuoka Sengen shrine.

Figure 18. The haiden of Shizuoka Sengen shrine.

Figure 19. Details of the decoration of the haiden shown in Figure 18.



kashiranuki

kashiranuki

kumimono

hafuita

kumimono

kashiranuki

nosisaki-gawara

(frame-and-panel doors) and *itado* (doors of slab construction; Fig. 15) were decorated with *makie*. Carvings on the round beams and the walls were painted in rich colors and the *chuto* (column tops) and the *nageshi* were decorated with gold-plated metal fittings. The door with *makie* decoration follows the example of the urushi-coated buildings of the Momoyama period.

There is a view that the *gofun*-painted parts that are seen today, including the pillars, the *nageshi*, and the *kashiranuki* on the exterior, were not originally painted; instead the beauty of the grain of the zelkova tree was used to decorative effect.

From the seventeenth century onward, many buildings, modeled after the example of Toshogu and painted with urushi and colors, were built in various parts of the country. The painting technique for these buildings, however, was not as fine as that employed in lacquer vessels, since the purpose of using urushi on buildings was for protection from wind and rain. Fine techniques like *makie* and *raden*, therefore, were not found in the buildings of the Edo period.

As an example of urushi-coated and color-painted buildings of the late Edo period (nineteenth century), the *shaden* of the Shizuoka Sengen shrine may be mentioned. The present building complex was rebuilt between 1813 and 1851 (Bunka 10-Kaei 4). While black urushi was used for coating the pillars, walls, and doors of the *kanbe* of the Sengen Ryosha *honden*, which forms the center of the shrine, *shu-urushi* and *bengara-urushi* (urushi colored with cinnabar and red ocher, respectively) were used for coating the *kohai-bashira*; the carvings and bracket complexes placed over the *kashiranuki* (Fig. 17) were painted in rich colors. Furthermore, urushi leaf was used to decorate the *kesho-uraita*, the boards of the *shitomido* (shutters), and the *nokisaki-gawara* (eave end tiles); gold-plated fittings and fittings finished with urushi leaf or *nikurome* (metal with black patina) were put on doors, *chuto*, and *hafuita* for decoration. Colors in the adjoining buildings such as the *haiden* (Fig. 18), *kairo* (roofed corridor), and *romon* (two-storied gate) were comparatively modest. They were painted red with *bengara-urushi*, except for fittings like doors and *shitomi*, which were coated with black urushi. *Urushi-haku* was used only for a few areas, including the *nokisaki-gawara*, and colors used for the carvings and the *kumimono* (Fig. 19) above the *kashiranuki* were also plain. Such decorative techniques are typical of urushi coating and color painting techniques employed in buildings in the Edo period.

Method of urushi coating

There is a detailed description of the old method of urushi coating for buildings in the report on repairs to Chusonji Konjikido, issued in 1968. The report shows the original techniques used in the early twelfth century.

For outer eaves and the ceiling of the outer sanctuary, *suki-urushi* (raw urushi) was applied once or twice directly over *kokusogai* made of a mixture of flour and linen fibers, without any *kijigatame*; gold leaf was applied over the urushi. Urushi was used on areas under the beams both inside and outside the temple following these steps: *kokusogai*, *kiji-jinokozuke*, *nunokise*, and *jinokozuke*. Gold leaf was then applied over the urushi. The four to seven steps used for priming are a relatively simple process.

The report says that the upper surface of the roof of the Taimadera *hondo zushi* originally had *nunokise* (cloth reinforcement) for urushi-coated parts, but the priming was relatively thin.

The *urushi-shitaji* (ground) of the Osaki Hachiman shrine was also thin (see the report on repairs, 1968). The gold leaf was adhered with glue directly on the *biwaita* and the carvings of the *haiden* inside the *ishinoma*. *Suri-urushi* (thinned raw urushi) was directly applied to the *biwaita* outside the *ishinoma* and finished with gold leaf. According to the report, therefore, the grain of the wood showed clearly through the gold leaf.

Although the *Zoeicho* (a record of how the building was made) of the present building complex of Nikko Toshogu *honden* issued in 1636 makes comments on *nunokise* and *roiro-sinnuri*, the process of *shitaji* remains unknown. According to the report on the repairs issued in 1966, there were three layers of priming for the final coating, which was considered to be the original urushi coating of the temple; the bottom layer was a double layer of thinly applied coarse and fine *shitaji* followed by a coat of raw urushi. It is also reported that the sequence for the process of *nunokise* was: *kiurushi-gatame*, *nunokise*, *nunomedome*, *shitaji*, *kurourushi-nuri*. The *shitaji* was a little thicker in the first recoating with urushi and a thick *shitaji* was used in the second recoating, according to the report.

The *Hondocho* (a similar record) issued in 1797 and owned by Nikko Toshogu may be mentioned as an early record of the urushi coating process. Since the document states the cost of urushi involved in each step of *urushi-nuri*, the sequence of priming can be identified: “*kijigatame*, *kokusogai*, *nunokise*, *mefusagi*, *ji*, *kiriko*, *jigatame*, *sabi*, *nakanuri*...” Thus the three layers of *shitaji*—*ji*, *kiriko*, and *sabi*—were all coarse *shitaji*.

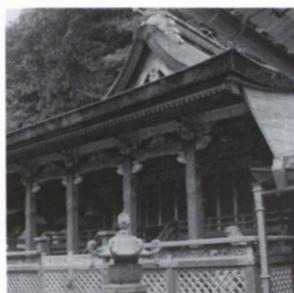
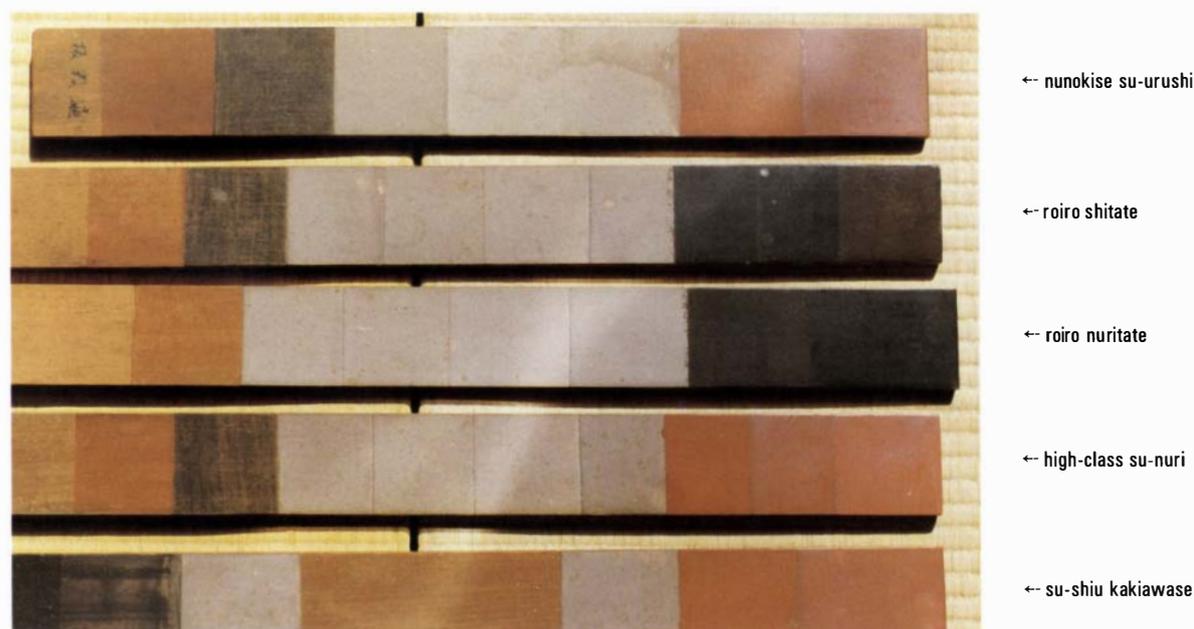


Figure 20. Danzan shrine honden.

Figure 21. Urushi-coated sample boards prepared for the rebuilding of Danzan shrine in 1850.



Eight urushi-coated sample boards for Danzan shrine (Fig. 20) in Nara prefecture give detailed examples of the method in the late Edo period. These boards were made as samples of urushi coating when the present main building of the shrine was rebuilt in 1850 (Kaei 3). Urushi was coated on the boards in layers from the *shitaji* to the final coating to show the order (Fig. 21). There was also a detailed explanation of the process in a document accompanying the boards. For example, the process of *shitate-roiro*, according to this document, was done in the sequence: *kokuso*, *honji-gatame*, *sarashinuno*, *urushizuke*, *mefusagi*, *honjizuke* (first *jizuke*), *nidome-jizuke* (second *jizuke*), *jitogi*, *kirikozuke*, *sabitsuke*, *sabitogi*, *sabi-suri-urushi*, *nakanuri*, *muranaoshi*, *suri-urushi*, *uwanuri*, *roiro-togi*.

This process is basically the same as the process mentioned in the *Hondocho* of Toshogu. It should be noted, however, that *jizuke* was done twice in this process. This is similar to the repair process employed for the *shaden* of Toshogu in the 1870s and to standard methods of repairing architectural monuments in current use. In other words, the existing method of repairing these buildings has been handed down from the late Edo period.

As described above, the method of urushi coating for buildings developed notably at the beginning of the modern age. Urushi was first applied to the exterior of buildings and the *shitaji* gradually became thicker with every periodical recoating, since the substrate had to be smoothed out.

Like the *Zoeicho* of Nikko Toshogu, the *Kanjocho* of Shizuoka Sengen shrine issued in the same period says “*nunokise-kuro-nuri*, *shu-nunokise*, *haku-shitaji-nuri*, *shin-kakiawase-nuri*.” *Gushikenki* (Vol. 9, *Sho Tsumori*), which was famous as a carpenter’s manual in the Edo period, also mentions “*nunokise-roiro*, *roiro*, *nunokise-joshin*, *joshin*, *tome-nuri*, *shinno-kakiawase*, *kakiawase-nuri*.” A postscript reading “*Kanbun 7–8 [1167–1168] kogi shufuku nyusatsu [official bid for restoration]*” is added.

Although the technical terms mentioned in documents and manuals up to that time had not been standardized, the Nikko Onmiya Narabi Owakidosha Kekko-sho (official records) issued in 1753 (Horeki 3) used terms that are still in use today, such as *nuritate-roiro*, *shitate-roiro*, *shin-kakiawase-nuri*, *shippaku*, *tame-nuri*. These terms were also used for the urushi coating of Shizuoka Sengen shrine and Danzan shrine. This is an indication that around 1753 the shogunate standardized both the urushi coating method and the terminology.

Conclusion

Pigments dissolved in liquid glue were used for the interior and exterior of buildings until the Middle Ages, and urushi was only applied to limited areas inside the building, such as altars and pillars. Urushi started to be used for the exterior of buildings from the beginning of the sixteenth century, while the carvings increasingly made to decorate both the inner and outer walls and the *kumimono* (bracket complexes) of the *nokimawari* (eaves) were painted in colors. Moreover, metal fittings with urushi leaf, *nikurome* finish, and gold plate were used to decorate the *hafuuta* (gables), *nageshi* (horizontal wooden planks), and *chuto* (column tops). Decorations both inside and outside the buildings, therefore, became very bright.

On the other hand, unlike lacquer vessels, the exteriors of buildings required periodic recoating with urushi because of exposure to rain, wind, and direct sunlight. Besides, the coated area is much larger than that of lacquer vessels. Therefore the urushi coating technique is very different from those used on lacquerware, which have developed in a more delicate way.

Bibliography

- 1967 **Committee on the Preservation of Cultural Property of Nikko Nisha Ichiji**
National Treasure Toshogu Honden, Ishinoma, Haiden: Report on Repairs.
- 1956 **Committee on the Preservation of Horyuji National Treasure**
National Treasure Horyuji Kondo: Report on Repairs.
- 1968 **Committee on Repairs for Preservation of the National Treasure Chusonji Konjikido**
National Treasure Chusonji Konjikido: Report on Repairs.
- 1968 **Committee on the Restoration of the National Treasure Osaki Hachiman Shaden Shrine**
National Treasure Osaki Hachiman Shrine Shaden: Report on Repairs.
- 1960 **Department of Preservation of Cultural Properties, Board of Education, Nara**
National Treasure Taimadera Hondo: Report on Repairs.
- 1937 **Office for the Repair of the National Treasure Tsukubusuma Shrine**
National Treasure Tsukubusuma Shrine Honden: Report on Repairs. Shiga.
- 1976 **Daiichi Hoki Shuppan**
Lecture on Cultural Properties, Japanese Architecture 4, Modern Period 1 (Architecture and Urushi).

Architectural glossary

<i>biwaita</i>	a wooden plate placed in the space between bracket complexes
<i>chuto</i>	a column top; a capital
<i>daiwa</i>	an architrave; lowest division of entablature resting immediately on the capital of the column
<i>enmawari</i>	a balcony around the building
<i>hafuita</i>	a decorative wooden piece at the gable of a roof
<i>haiden</i>	a free-standing building for public worship, in front of a sanctuary
<i>honden</i>	the main hall of a Shinto shrine
<i>hondo</i>	the main hall of a Buddhist temple
<i>ishinoma</i>	a room or hall connecting the main shrine and a hall for worship
<i>itado</i>	a door of slab construction
<i>jikido</i>	a refectory
<i>jimonbori</i>	carving done directly onto an entire surface, usually of uniform pattern
<i>kaerumata</i>	straddle-legged shaped wooden piece in the entablature, usually a decorative piece; frog-leg strut
<i>kairo</i>	a roofed corridor or peristyle
<i>kashiranuki</i>	the uppermost beam that runs through the columns
<i>karamon</i>	a Chinese-style gateway
<i>kesho-uraita</i>	a visible wooden ceiling board behind the visible rafter (<i>kesho-taruki</i> , q.v.)
<i>kesho-yaneura</i>	a roof-structure visible from the interior
<i>kesho-taruki</i>	a visible rafter
<i>kodo</i>	a lecture hall
<i>kohai</i>	a roof built over the steps leading up to a building
<i>kohai-bashira</i>	pillars of the <i>kohai</i>
<i>kondo</i>	the central sanctuary building of a Buddhist temple, usually houses the most sacred images
<i>koran</i>	a balustrade
<i>koryo</i>	a rainbow-shaped beam that connects two columns
<i>koshigumi</i>	bracket complexes under balconies
<i>kumimono</i>	bracket complexes

<i>madomawari</i>	a window and frame
<i>nageshi</i>	a horizontal wood plank, usually near the top of a room, resembling a beam between posts
<i>nikurome</i>	a black metal ornament, patinated with potassium sulfide and smoke
<i>nokimawari</i>	eaves
<i>nokisaki-gawara</i>	a tile at the end of the outermost part of the roof
<i>raigo-bashira</i>	a pair of columns standing at the corners of the altar (<i>shumidan</i>)
<i>romon</i>	a two-storied gate
<i>sankarado</i>	a door of frame-and-panel construction
<i>shaden</i>	the building complex of a Shinto shrine
<i>shitomido</i>	wooden latticed shutters
<i>taruki</i>	a rafter
<i>taruki-koguchi</i>	a rafter end
<i>toto</i>	the eastern pagoda
<i>ukibori</i>	deep carving done directly onto an entire surface, usually of uniform pattern, creating a relief; embossed carving
<i>zushi</i>	a small shrine placed in the inner sanctuary