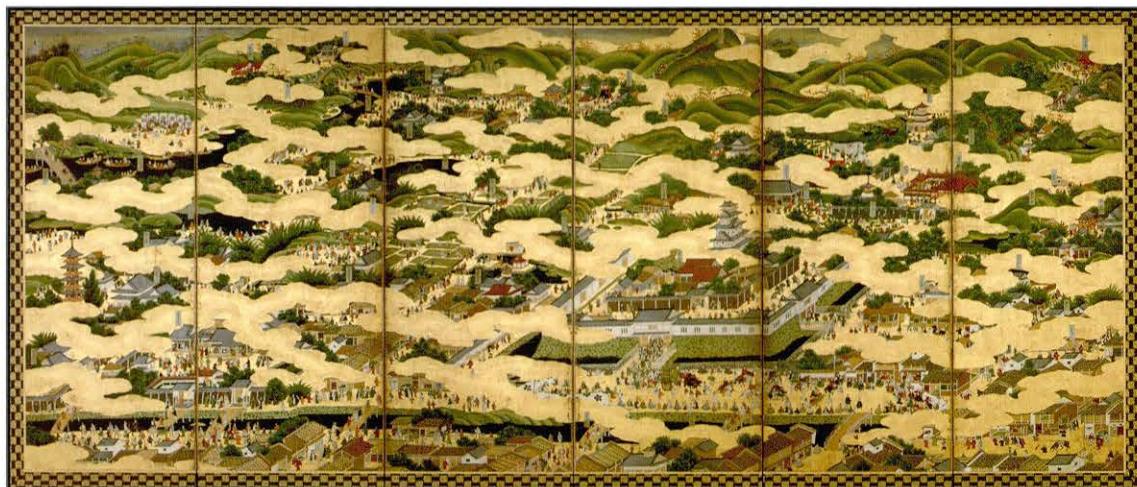




5 - 1. 洛中洛外図屏風 修理前 (ロイヤル・オンタリオ美術館)

Views of Kyoto and Its Environs (Before Treatment) (Royal Ontario Museum, Toronto)



6 - 1. 修理後

(After Treatment)



5 - 2.



6 - 2.



7. 修理前 左隻第5・6扇

Before Treatment: The entire images of fifth and sixth panels of left screen



8. 修理後
After treatment



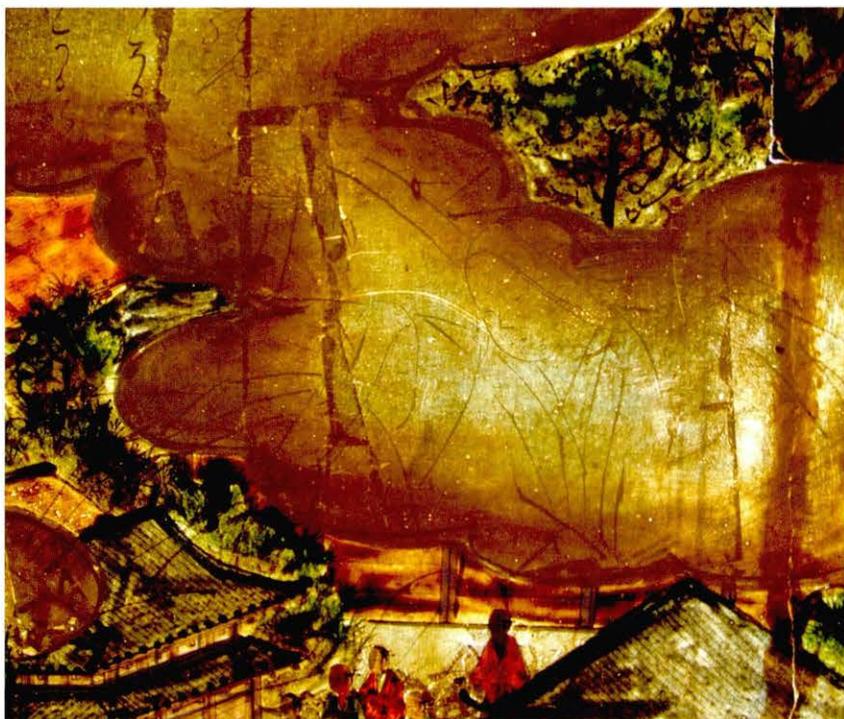
9. 左隻第5扇 透過光による画像

Images under transmitted light: Fifth panel of left screen

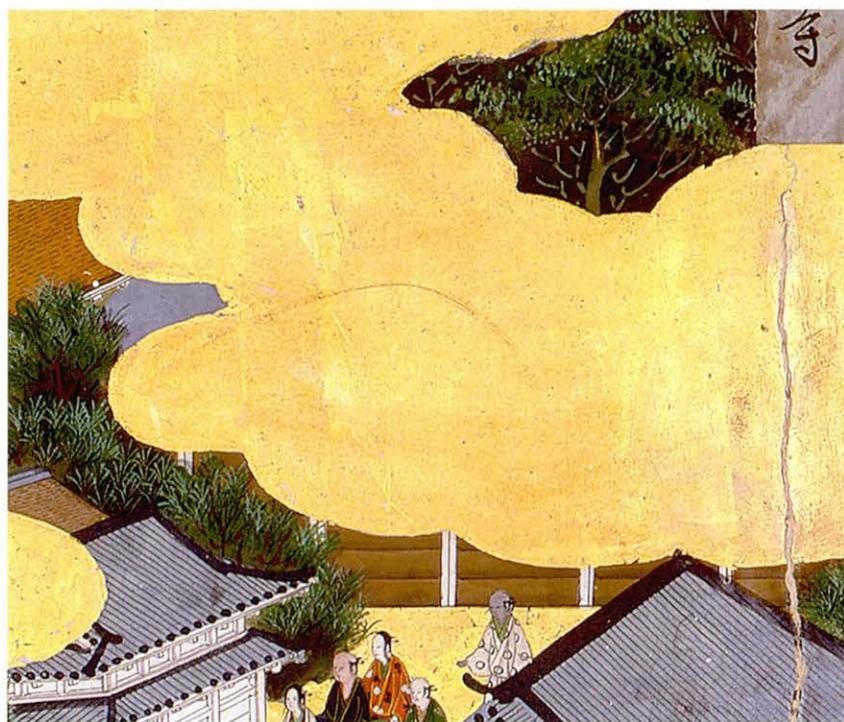


10. 同上 修理前

Before Treatment



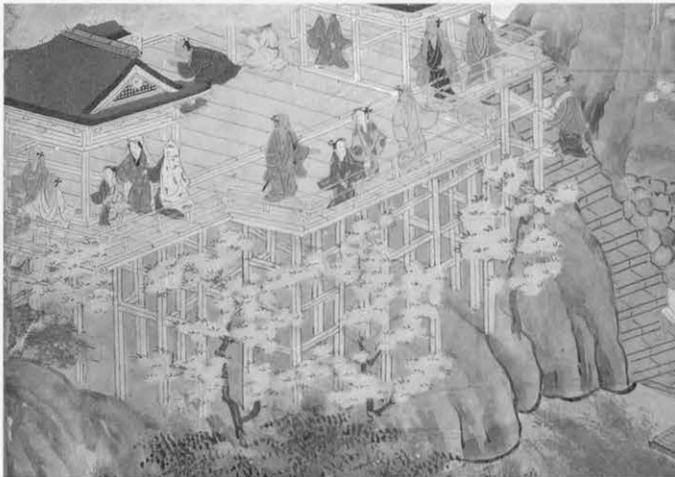
11. 左隻第6扇 透過光による画像
Images under transmitted light : Sixth panel of left screen



12. 同上 修理前
Before Treatment

洛中洛外図屏風

平成 18 年度修復事業



品名：洛中洛外図屏風
所蔵：ロイヤル・オンタリオ美術館

洛中洛外図屏風

修理報告

(株)墨仁堂
山口聰太郎

I. 文化財の名称等

1. 名称、員数 洛中洛外図屏風 6曲1双
2. 所有者 ロイヤル・オンタリオ美術館

II. 工期及び工費

1. 工期 平成18年度
2. 場所 静岡県焼津市栄町5丁目8-5
株式会社 墨仁堂

III. 文化財の構造

1. 本紙寸法
別表参照
2. 表装

修理前

- a. 形式 屏風6曲1双
- b. 表装裂地
 緑：鼠地小花文緞子 小緑：納戸菱地桐文金襴 襲木：黒漆塗角縁
 屏風裏：萌黄雀型
 飾金具散らし鋳あり

修理後

- a. 形式 屏風6曲1双
- b. 表装裂地
 緑：納戸地角龍文金襴（新調） 小緑：白茶地小牡丹唐草文金襴（新調）
 襲木：蠟色黒漆塗山丸縁（新調）
 屏風裏：雀型唐紙（鼠具引きに鼠雲母押〈新調〉）
 飾金具散らし鋳：クリーニングし元使い

IV. 修理前の状況

第12扇の画面中央に非常に大きな破れが見られた。ほぼ画面の2分の1程度の縦の破れは、過去の応急処置によって、亀裂の小口が止められていた。大きな亀裂であることから、亀裂の左右に引っ張られて歪み、画面の表面は波打っていた。

奥尾背部分に沿って、虫損や破れが見られた。

付箋の劣化や欠失が著しかった。これは下に描かれている緑青の酸性化によって、紙が劣化し、破

れや部分欠失につながったものと思われる。

過去の補修紙には金色で補彩している箇所が多く見られた。それらは金無地部でも、絵具による着色箇所でも同じように金で埋められているため、違和感があった。

本紙の継ぎ手に、糊の劣化による剥離が見られた。

蝶番のゆとりが無いと、屏風開閉の際に奥尾背に力が掛かって起きたと思われる、強い皺や絵具の剥落が見られた。

蝶番部分で絵のつながりにずれがあった。

縁裂にも虫損や欠失、解れが多かった。

縁は割れや凹み傷が多かった。

飾り金具は、煤けて汚れていた。

V. 修理概要

1. 修理方針

〈絵具の剥落止め〉

修理前は、絵具の発色が非常に美しかった。しかし、所々で剥落が見られ、絵具層と基底層との固着は不安定であった。そのため、まず絵具の剥落止めをすることにした。(全体的な煤汚れや、水によって大きく動いて染みを作るような汚れは無いと判断したため、まず絵具の剥落止めをし、修理前の絵具の状態を留めることに主眼を置いた。)

剥落止めの湿りによって、本紙が収縮して絵具層が不安定になるのを防ぐため、常に仮貼りをして固定し、伸縮を最小限に抑えた状態を保って、膠を塗布する作業をおこなった。ただし、本紙が緊張しすぎないように必ず具合を確かめながら調整をした。

〈亀裂部分について〉

本紙中央の亀裂を直すことが今回最も大きな修理のポイントであった。大きな亀裂は第12扇のみであった。そのため、第12扇のみ、亀裂を繋ぎ合わせる作業が加えられることになるのだが、その際に、修理工程中の水分量や乾燥具合が他の扇と比べて異なると、画面の風合いや絵具の発色に影響を及ぼす恐れがあった。よって、第12扇とその他のバランスを見ながら、作業を進めることとした。

〈浮け紙、旧裏打紙の除去〉

全体的なバランスを見ながら、常に仮貼りをして固定し、伸縮を最小限に抑えた状態で、スプレーにて浄水を本紙裏面より噴霧し、浮け紙及び旧裏打紙を除去した。

第12扇は、裏面から旧補修の帯や補強の紙が当てられていた。よって、すべて除去した後、養生のための紙の帯をあてて仮固定した。

〈旧補修紙について〉

旧補修紙には、部分的に金色に補彩してあるところや、金地ではない部分にも関わらず金色に補彩してあるところなどがあつた。よって、すべて除去し本来の地色に合わせた補修を新たに行うこととした。本紙の紙質検査を行い、その結果に基づいて補修紙を選択することとした。

〈付箋について〉

下に描かれた緑青によって、付箋の酸性劣化が進み、剥落や破れが著しかった。また絵具の上に貼られた付箋は、外すときに絵具がそのまま付箋裏面に付いてしまうため、しっかりと貼られている付箋については無理に剥がすことをやめ、付箋を合い剥ぎにして表面のみを取り外し、欠損箇所を修理して元の位置に貼り戻すことにした。酸性を中性に移行するように、裏

打紙には炭酸カルシウム入りの紙を用いた。

〈絵の繋がりについて〉

絵の繋がりによれが生じていた。各扇ごとに絵が繋がらない部分は、貼り込む際に調整しながら全体の絵が繋がるよう貼り込むこととした。

〈蝶番について〉

修理前は蝶番が固いために、奥尾背付近の画面の破損の原因になっていた。全体的に絵具層が厚いため、今回は蝶番にゆとりを多く持たせ、画面同士で圧迫しあわないようにした。

〈下地について〉

旧下地は木が細く、歪みが生じており、それが画面のしかみに繋がっていた。よって下地を新調することとした。奥尾背付近では、どうしても圧力が生じ、画面表面に負担が掛かることから、下地を修理前よりも少し大きめに新調し、奥尾背部分の絵が下地角にあたらないようにした。また、奥尾背部分の絵具が圧迫し合わないよう框の返りを多くとった。

〈隅金具、散らし鉾について〉

すべて揃いで残っていたため、クリーニングをして元使いすることにした。

2. 修理仕様

- ・剥落の危険性が高い絵具層の浮き上がりや、本紙片の合い剥ぎが生じている部分には、布海苔、膠、新糊などを用いて剥離部分に注入し剥落止めを行う。
- ・通常の写真撮影のほかに、絵具粒子の顕微鏡写真、本紙透過写真、赤外写真を撮影する。
- ・絵具の発色が修理前後で変わることが無いよう、チェックするため、分光測色計にて修理前の色を計測する。計測結果については担当官に報告をする。
- ・採寸及び損傷等の調査を行い、現状を記録する。
- ・詳細な損傷地図を作成する。
- ・修理工程において使用する水に絵具層が耐え得るか、少量の水で絵具の変化を事前に見る。
- ・絵具層を固着するため、兎膠水溶液にて剥落止めを行う。
- ・絵の繋がりを見ながら、第1 2扇の大きな亀裂を繋ぎ直す。
- ・旧補修紙、補筆の除去については、損傷地図にて現状を確認の上で担当監督官と所有者との協議の上で決定する。
- ・下地（杉白太隅止絵柄構造）、襲木（蝨色黒漆塗山丸縁）を新調する。
- ・下地には6工程8層（骨縛り、胴貼り、蓑掛け〈3層〉、蓑縛り、下浮け、上浮け）の下貼りを行なう。
- ・飾金具は修理して元使いする。
- ・縁裂、屏風裏唐紙を新調する。
- ・保存袋を新調する。

3. 修理工程

1. 工房に搬入後、修理前の写真撮影をした。（普通光、斜光、赤外線照射）
2. 修理中に危険と思われる絵具や本紙片の部分的な剥離には、事前に応急的に布海苔と膠、小麦粉澱粉糊などの混合液を差して止めた。
3. 襲木を取り外した。
4. 尾背金を取り外した。
5. 1扇ずつに解体した。
6. 本紙の損傷状況が一覧できる損傷地図を作成した。

7. 筆を使って、本紙表面に付いている埃などを除去した。(ドライクリーニング)
8. 分光測色計を用いて、本紙の色を計測した。
9. 顕微鏡写真撮影を行って絵具の状態を記録した。
10. 屏風を解体し、本紙を取り外した。
11. 兎膠水溶液にて絵具の剥落止めをした。そのまま10日間ほど乾燥させた。
12. 少量の水で湿しながら付箋を除去した。その際、無理に除去せず合い剥ぎになるように除去した。
13. 仮貼り乾燥のための縁紙を取り付けた。
14. 表に浸透しない程度の湿りによって本紙を伸ばし、浮け紙を除去した。除去後はすぐに仮貼乾燥した。その後透過写真を撮影した。
15. 第12扇の亀裂部裏面に貼られてある補強紙を除去した。その後すぐに仮止めの紙帯を当てて止めた。
16. 本紙裏面全体に、スプレーを用いて少量の水を噴霧し、肌裏紙と補修紙を除去した。
17. 紙質検査を行い、その結果に基づいて補修紙を用意した。
18. 小麦粉澱粉糊（以下新糊）と布海苔の混合糊を用いて、本紙欠損箇所に補修紙を添付した。
19. 本紙亀裂部分には細く切った帯を裏面から当てて補強した。特に第12扇については表面から絵の繋がりを確認しながら、破れ目がしっかりと合うようにした。
20. 本紙継ぎ手の浮いている部分に糊を差した。
21. 美濃紙にて新糊を使用し肌裏打ちをおこなった。
22. 肌裏打ち後すぐに仮貼りをして乾燥させた。
23. 美濃紙にて新糊を使用し、増裏打ちをおこない、そのまますぐに仮貼り乾燥させた。
24. 黒漆塗襲木、下地を新調した。下地には6工程8層の下貼りをおこなった。
25. 表面の金の補修紙を除去した。
26. 裏用唐紙を新調し、下地の裏面に貼り込んだ。
27. 本紙を下地に貼り込んだ。
28. 縁裂を新調し裏打ちをして、下地に貼り込んだ。
29. 付箋の欠損箇所を紙質検査の結果に基づいた補修紙にて補修した。すぐに裏打をして仮貼乾燥させた。
30. 付箋を元の位置に貼り戻した。
31. 襲木を取り付けた。
32. 隅金具、散らし鋏をクリーニングし、襲木に取り付けた。
33. 保存袋を新調し、納入した。
34. 修理後に旧状と比較できる写真撮影をおこなった。

4. 各工程における材料使用法

名 称		材 料	使 用 法
本紙	肌裏紙	美濃紙	無染色
		新糊	水：新糊 = 3：5 PH 6～7
	増裏紙	美濃紙	無染色
		新糊	水：新糊 = 3：5 PH 6～7
	補修紙	間似合紙	矢車染、媒染、水洗いした
		布海苔、 新糊	布海苔：新糊 = 1：1 PH 6～7
下貼	骨縛り 蓑掛け 蓑縛り	楮紙	無染色
	胴貼り	間似合紙	無染色
	上浮け	石州紙	無染色
	下浮け	石州紙	無染色

名 称	材 料	使 用 法
縁裂	紺地角龍文金襴	
小縁裂	白茶地小牡丹唐草文金襴	
尾背	金箔平押鳥の子紙	
屏風裏唐紙	雀型唐紙（鼠具引きに鼠雲母押）	
保存袋	綿布	無漂白・糊抜き済み

5. 使用材料

材 料	種 別	製造元および販売元	
紙	美濃紙	岐阜県美濃	
	間似合紙 (補修用)	兵庫県名塩	
	間似合紙 (下貼り)	高知県伊野	
	楮紙	福岡県八女	
	石州紙	鳥根県	

糊	小麦粉澱粉糊	長田産業株式会社製	700 g の小麦粉澱粉糊を 2L の水に溶かし、強火で 20 分間焚く。一晩冷ましてからする。
	布海苔	韓国製	布海苔 7 g を水洗いして塩抜きし、700cc の水を加えて、布海苔が溶けるまで約 15 分間加熱する。その後二重ガーゼで濾過して、冷却する。
補彩用絵具	藍棒、洋紅、藤黄	京都	
	墨	奈良	
染料	矢車	京都	
下地		京都 黒田製	総杉白太陽止総柄構造
襲木		京都 黒田製	蝸色黒漆塗山丸縁
屏風裏唐紙		京都 唐長製	4 寸雀型唐紙（鼠具引きに鼠雲母押）

VI. その他

1. 繊維分析結果

〈本紙〉

水の吸水はゆっくり、繊維の分散は困難。巾の広い扁平な雁皮紙に、糊化した米澱粉を多量に塗布した。

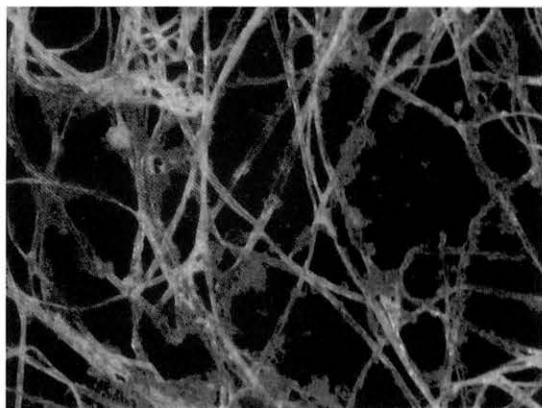


図1 洛中洛外図屏風の繊維

Fig. 1 Fiber sample from the Rakuchū Rakugai-zu Byōbu

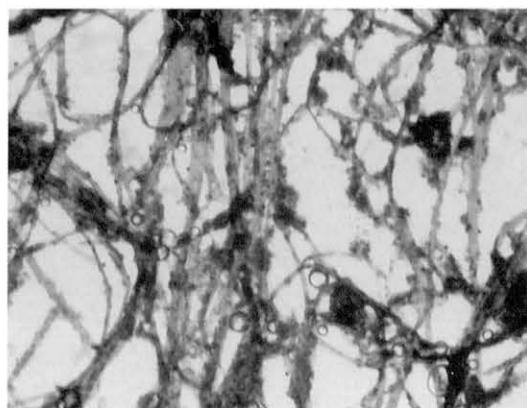


図2 洛中洛外図屏風の繊維 C 染色液染色

Fig. 2 Fiber sample from the Rakuchū Rakugai-zu Byōbu C-stain solution

〈付箋〉

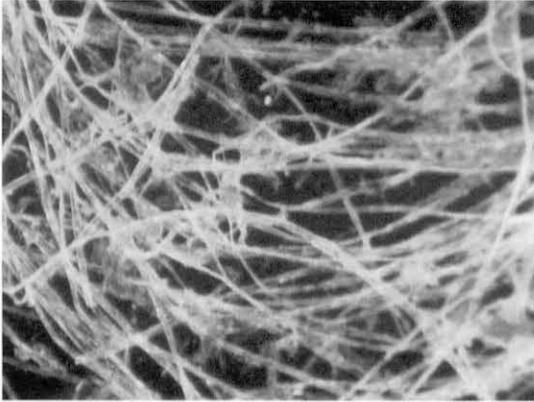


図3 洛中洛外図付箋の繊維
Fig. 3 Fiber sample from the paper tags on Rakuchu Rakugai-zu

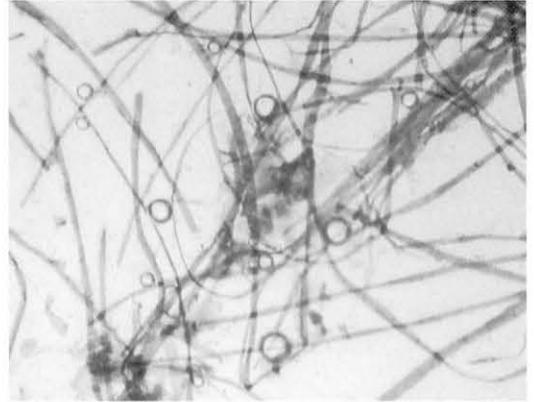


図4 洛中洛外図付箋の繊維 C 染色液染め
Fig. 4 Fiber sample from the paper tags on Rakuchu Rakugai-zu C-stain solution

よく洗滌された雁皮の紙にニカワが塗布されている。

繊維分析：宍倉ペーパーラボ 宍倉佐敏

2. 新発見

肌裏除去後、透過光をあてると、絵具層の下に本紙とは全く違う絵が描かれている部分があることがわかった。



図5 第12扇
Fig. 5 Twelfth panel



図6 第11扇
Fig. 6 Eleventh panel

3. 新下地構造

総杉白太下地を新調した

框の返りを大きくとって、下地の棧の影響がでないようにした。

4. 旧下地構造

隅が止め構造ではないため、四隅のしかみの原因になっていた。よって、そのしかみを予防するために、四隅を斜めに切って、ゆとりを持たせるようにしていた。本紙にも同様に斜めに切れ込みが入っていた。

5. 旧補修紙の状態

修理前は金色の補修紙が当たっていた。しかし、それらは過去の修理の際に肌裏紙を取り替えず、そのままその上に金色の補修紙を当てた状態であった。よって、補修部分と周囲の本紙との凹凸のバランスが悪く目立っていた。よって、担当者・所蔵者と協議の上除去することとした。



図7 修理前
Fig. 7 Before treatment



図8 修理後
Fig. 8 After treatment

6. 画面に当てられた補強の金紙について

第12扇中央に大きな亀裂があり、その上には大きな金紙による補強が画面の上から当てられていた。美観を損ねることから、除去することとした。



図9 修理前
Fig. 9 Before treatment



図10 修理後 表の金の補強紙を除去した
Fig. 10 After treatment The gold mending paper on the front was removed

7. 亀裂部分について

第12扇中央に大きな亀裂があった。裏面から当てられている補強紙を除去し、表の絵の繋がりを見ながら、再度亀裂を繋ぎなおした。亀裂部には細く切った美濃紙の帯を二重に重ねて補強とした。



図11 修理後
Fig. 11 After treatment



図12 修理前
Fig. 12 Before treatment

8. 下に描かれた緑青によって、付箋の酸性劣化が進み、剥落や破れが著しかった。また絵具の上に貼られた付箋は、外すときに絵具がそのまま付箋裏面に付いてきてしまうため、しっかりと貼られている付箋については無理に剥がすことをやめ、付箋を合い剥ぎにして表面のみを取り外し、欠損箇所を修理して元の位置に貼り戻すことにした。

9. 飾り金具をクリーニングし元使いした。
尾背金紙は本紙の色味に合わせて新調した。

10. 屏風裏唐紙について

旧屏風裏唐紙は破れや擦れが多かった。色合いも白地に黒い文様で、強い印象であったため、今回は所有者と相談の上柔らかい色合いの鼠地に鼠雲母の文様とした。新しい唐紙は、楮紙に鼠色の具引きをし、4寸の雀型を鼠雲母で押した。それらは5段の段貼りにして貼り込んだ。旧下地には、下にもう一層唐紙が貼ってあった。過去に、上に貼り重ねてるだけの簡易な修理が行われたことが判明した。

「修理前後色計測結果比較」は省略した。



図13 修理後
Fig. 13 After treatment



図14 修理前
Fig. 14 Before treatment



図15 修理後
Fig. 15 After treatment



図16 修理前
Fig. 16 Before treatment



図 17 修理後
Fig. 17 After treatment



図 18 修理前
Fig. 18 Before treatment



図 19 修理後
Fig. 19 After treatment



図 20 修理前
Fig. 20 Before treatment



図 21 修理後
Fig. 21 After treatment



図 22 修理前
Fig. 22 Before treatment



図 23 修理後
Fig. 23 After treatment



図 24 修理前
Fig. 24 Before treatment



图 25 修理後
Fig. 25 After treatment



图 26 修理前
Fig. 26 Before treatment



图 27 修理後
Fig. 27 After treatment



图 28 修理前
Fig. 28 Before treatment



图 29 修理後
Fig. 29 After treatment



图 30 修理前
Fig. 30 Before treatment



图 31 修理後
Fig. 31 After treatment



图 32 修理前
Fig. 32 Before treatment



图 33 修理後
Fig. 33 After treatment



图 34 修理前
Fig. 34 Before treatment



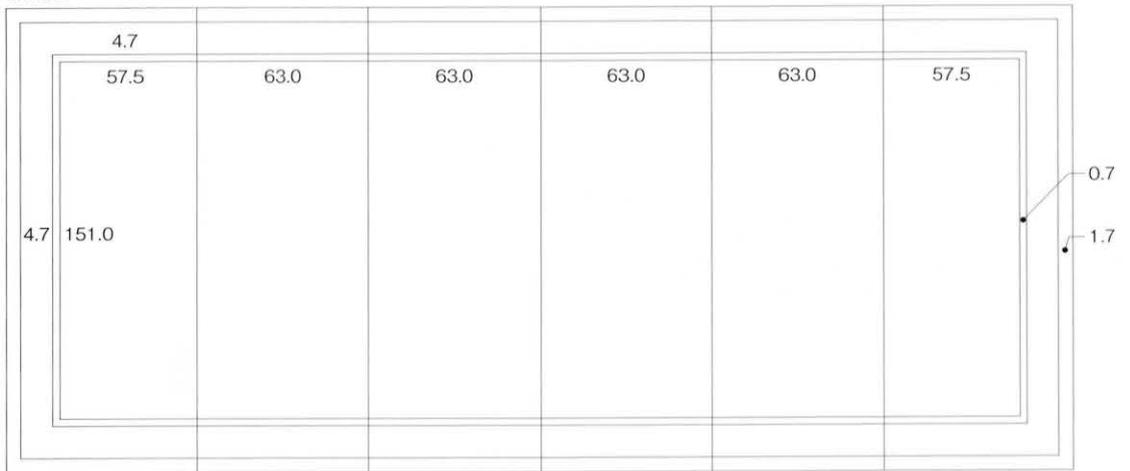
图 35 修理後
Fig. 35 After treatment



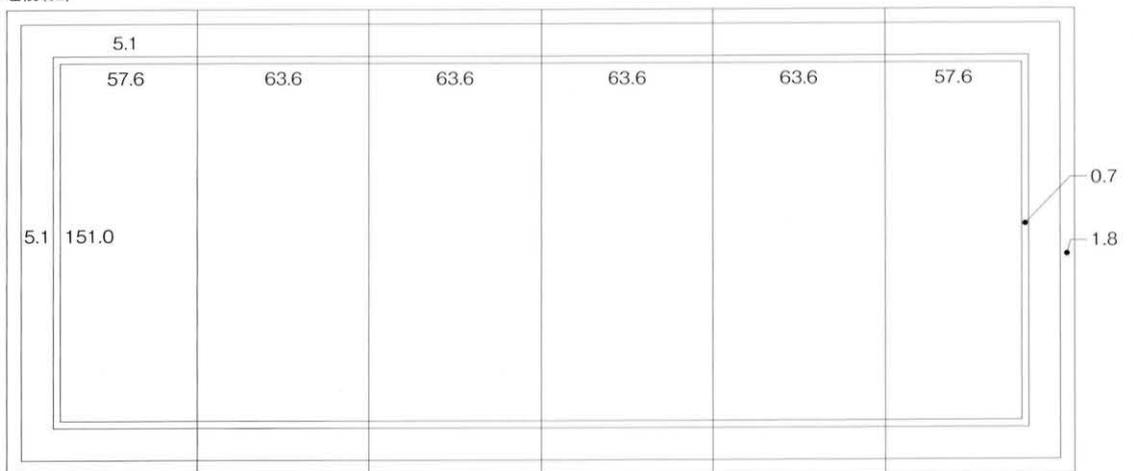
图 36 修理前
Fig. 36 Before treatment

洛中洛外図 寸法表

修理前 (cm)



修理後 (cm)



Treatment Report

Sōtaro Yamaguchi
Bokunindo Co.,Ltd.

I . Description and title of cultural property

1. Title, format: *Views of Kyoto and Its Environs*; Pair of six-panel folding screens
2. Collection: Royal Ontario Museum

II . Treatment period and location

1. Treatment period: 2006
2. Location: Bokunindo Co., Ltd., 5-8-5 Sakae-machi, Yaizu-shi, Shizuoka Prefecture

III . Structure of the cultural property

1. Dimensions

See separate chart

2. Mounting

Before treatment

- a. Format: pair of *six-paneled byōbu*
- b. Mounting fabrics

Outer border: Donsu (damask weave) silk with a small flower motif on a gray background

Inner border: Gold brocade with a paulownia pattern on a peacock-blue diamond background

Frame: Black lacquered frames

Backside of the screens: Yellow-green sparrow roundel patterned paper

Decorated with metal ornaments and studs

After treatment

- a. Format: Pair of *six-paneled byōbu*
- b. Mounting fabric

Outer border: New gold brocade with *kakuryū* (square dragon) pattern on a peacock-blue background

Inner border: New gold brocade with a small peony and arabesque pattern on a pale brown background

Frames: New *rou-iro* black lacquered frames with rounded edges

Backside of the screens: New *karakami* with a sparrow roundel pattern (pattern printed with mica mixed

with gray ink on a soft gray pigment background)

Metal ornaments and studs: Original pieces were cleaned and reused.

IV . Condition before treatment

An extremely large tear was found at the center of the screen on the twelfth panel. The tear, which runs half of the length of the screen, had been mended in the past as an emergency measure. Because of the large size of the tear, the left and right sides had contracted and became warped, causing cockling on the surface of the screen.

Insect damage and tears were found along the inner portion of the paper hinges.

The deterioration and loss of *fusen*, or paper tags (written labels that indicate different locations in the scene and are considered part of the artwork), were extensive. This is believed to have been due to the oxidation of the malachite green pigment applied underneath, which caused the paper to deteriorate and tear or partially disintegrate.

Inpainting of gold pigment was found on many of the mending papers applied in the past. Because gold pigment was used regardless of whether the mending papers had a plain gold background or had been colored with paint, they were visually distracting.

Some paper joints of the painting had separated due to the weakening of the adhesive.

There were severe creases and loss of pigments, presumably caused by the lack of room for movement around the hinges which placed a strain on the inner portion of the paper hinges when opening and closing the *byōbu*.

The images were out of alignment at the hinges.

There were many areas with insect damage, losses, and fraying on the border fabric. Many cracks and dents were found on the outer frames.

The metal ornamental fittings had become blackened with soot.

V . Outline of treatment

1. Method of treatment

Consolidation of paint layer

The colors of the pigments before treatment were very beautiful. However, pigments had flaked off in some parts and the adhesion between the paint layer and the support was unstable. Therefore, the first

step was to consolidate the paint layer. (Since it was determined that the migration of stains or creation of tidelines with the addition of moisture was unlikely, the main focus was placed on stabilizing the pre-treatment state of the pigments by consolidating the paint layer.)

To prevent destabilization of the pigment layer the paintings were fixed on a *karibari* throughout the consolidation process to ensure that any stretching or shrinkage caused by the moisture in the animal skin glue consolidant would be kept to a minimum. The condition of the paintings and tension were constantly checked and adjusted to prevent overstretching.

Repair of the large tear

The largest issue in this treatment was to repair the tear at the center of the painting. The large tear was contained within the twelfth panel only. Therefore, a necessary extra step to mend this tear was added to the treatment for this panel only. However, in so doing, there was fear that the difference in the amount of moisture and drying needed for this panel compared to the other panels would affect the overall look or colors of the pigments. Therefore, treatment of this panel was carried out with constant vigilance of the balance between this panel and other panels.

Removal of *uke* paper and old linings

While ensuring the overall balance was maintained by keeping the paintings attached to *karibari* to minimize expansion and contraction, purified water was sprayed onto the reverse sides of the paintings to remove the *uke* paper and old lining.

Old mending strips and reinforcement papers were found attached to the reverse side of the twelfth panel. After removing all of these, strips of paper were applied temporarily for protection.

Old mending paper

Some of the old mending papers were only partially colored with gold pigment. Some old mending papers applied to non-gold areas were also colored with gold pigments. Therefore, it was decided that all of the mending papers would be removed and replaced with those that match the background color. Fiber analysis of the paper used for the painting support was conducted, and mending papers were selected based on the results.

Paper tags

The malachite green pigment applied underneath was causing the paper tags to oxidize, leading to flaking and tearing. In addition, removing the paper tags pasted over the pigments would cause the pigments attached to the reverse side to be removed with them. Therefore, it was decided that the firmly fixed paper tags would not be forced off but be split into layers, and only the top layers would be removed. After repairing the missing parts, the paper tags would be pasted back in their original places. Paper containing

calcium carbonate was used to neutralize the acidity of the oxidizing malachite pigment underneath.

Alignment of the images

The image was out of alignment in between panels. For areas where the image did not align correctly from panel to panel, positions of the paintings were adjusted when reattaching them to make sure the entire image was continuous.

Hinges

The paper hinges found on the *byōbu* before treatment were tight, causing damage on the screens near the inner portion of the hinges. Since the paint layer is thick overall, the hinges prepared in this treatment were attached in a manner to create some space to prevent the panels from pulling on each other.

Wooden core structure

The wood of the core structure was thin and warped, causing cockling in the screens. Therefore, it was decided that new wooden core structures would be prepared. Mindful of the inevitable pressure around the inner portion of the paper hinges which create a strain on the surface of the screens, the core structures were to be made slightly larger than before in order to prevent the edges of the painting near the inner portion of the paper hinges from extending to the edges of the base structure. Moreover, the outer frames were made slightly thicker so that the pigments near the inner portion of the paper hinges would abrade each other.

Metal corner fittings and metal studs

Since all of the metal pieces were still intact, they were to be cleaned and reused.

2. Treatment specifications

- Consolidate the areas where the pigments have lifted and are in danger of defoliating or areas of the painting support that have split into layers by inserting adhesives such as seaweed glue, animal skin glue, or wheat starch paste.
- In addition to taking standard photographs, also take photomicrographs of pigments, radiographs of the paintings, and infrared photographs.
- To check that the colors of the pigments before and after the treatment remain the same, measure the reflectance of the pigments before treatment using a spectroscopic colorimeter. Report the measurement results to the director.
- Take dimensions and examine the damaged areas of the screens and record the findings.
- Create a detailed map of the damaged areas.
- Examine changes in the quality of the pigments by testing with a small amount of water before treatment to determine whether the paint layer will be able to tolerate a wet treatment.

- Treat and consolidate the paint layer with rabbit skin glue solution to prevent flaking.
- Repair the large tear on the twelfth panel while ensuring the image is in alignment.
- Determine whether or not to remove the old mending papers and inpainting by first checking the map of damaged areas and then consulting with the director and owner.
- Construct new lattice cores (white cedar constructed with mitered corners and mortise and tenon joints) and outer frames (*rou-iro* black lacquered frames with rounded edges).
- Apply eight layers of paper to the wooden lattice cores (six processes: *honeshibari*, *doubari*, *minokake* (three layers), *minoshibari*, *shitauke* and *uwauke*)
- Repair and reuse the metal ornaments.
- Prepare new *karakami* for the reverse side of the *byōbu* panels.
- Prepare a new storage bag.

3. Treatment process

1. The *byōbu* was brought into the studio and pre-treatment photographs were taken under natural light and raking light. Infrared photographs were also taken.
2. Areas with flaking pigments and lifting support material that were in danger of detaching during treatment were temporarily fixed with mixed solution made of seaweed glue, animal skin glue and wheat starch paste.
3. The outer frames were removed.
4. Metal hinges were removed.
5. The screen was separated into each individual panels.
6. A diagram mapping the damaged areas was created so that the condition of the painting could be determined at a glance.
7. Dust was removed from the surface of the paintings with a brush (dry cleaning).
8. The colors of the painting were measured using a spectroscopic colorimeter.
9. The condition of the pigments was recorded by taking photomicrographs.
10. Panels were disassembled and paintings were removed from the old wooden lattice cores.
11. Pigments were consolidated using rabbit glue solution. The paintings were allowed to dry for about 10 days.
12. Paper tags were removed while dampening them with small amounts of water. In doing so, the paper

tags were not forced off, but were removed in layers.

13. Mounting paper was attached to the paintings to temporarily dry them on a *karibari*).

14. The paintings were flattened using minimal moisture to keep the water from soaking through to the front, and *uke* paper was removed. Afterwards, they were dried on *karibari*. Radiographs were taken.

15. Reinforcement paper pasted on the reverse side of the large tear on the twelfth panel was removed, after which a strip of paper was promptly placed as a temporary measure.

16. A small amount of water was sprayed over the entire back surface of the paintings and the first lining and mending papers were removed.

17. Fiber analysis was conducted and based on the findings, mending paper was prepared.

18. Mending paper was applied to lost parts of the painting with a mixture of wheat starch paste and seaweed paste.

19. A long, thin strip of reinforcement paper was applied to the torn areas of the paintings from the reverse side. Particular care was taken in treating the large tear on the twelfth panel, during which the image was checked from the front to make sure it was in alignment.

20. Paste was applied to areas where the paper joints of the paintings had lifted.

21. A first lining made of *Mino* paper was applied using wheat starch paste.

22. Immediately following the application of the first lining, the paintings were dried on *karibari*.

23. A final backing made of *Mino* paper was applied using wheat starch paste, and the paintings were dried immediately on *karibari*.

24. New black lacquered outer frames and wooden lattice cores were prepared. Eight layers of paper were applied involving six processes to the wooden cores.

25. Gold mending papers on the front surface of the paintings were removed.

26. New *karakami* designed for the reverse side were prepared and applied to the back surface of the papered cores.

27. The paintings were attached to the papered cores.

28. A lining was applied to the newly prepared border fabrics, which were attached to the papered cores.

29. Missing parts of paper tags were fixed using mending paper selected based on fiber analysis results. A lining was applied immediately following and the pieces were dried on *karibari*.

30. The paper tags were then attached to their original locations.

31. The outer frames were attached.

32. Corner metal ornament and studs were cleaned and attached to the outer frames.

33. The *byōbu* was stored in the newly prepared storage bag.

34. Photographs were taken to allow the treated screens to be compared with their pretreatment state.

4. Materials and their usage at each process

Painting/Mounting Structure	Process	Material	Specifications
Painting	First lining	<i>Mino</i> paper	Undyed
		Wheat starch paste	Water/starch ratio: 3:5, pH 6-7
	Subsidiary lining	<i>Mino</i> paper	Undyed
		Wheat starch paste	Water/starch ratio: 3:5, pH 6-7
	Mending	Mixed fiber paper	Dyed with <i>yasha</i> , fixed with mordant, and washed
		Seaweed glue and wheat starch paste	Seaweed glue/wheat starch paste: 1:1, pH 6-7
Underlining of the lattice core	<i>Honeshibari</i> <i>Minokake</i> <i>Minoshibari</i>	<i>kozo</i> paper	Undyed
	<i>Doubari</i>	<i>Maniai</i> paper	
	<i>Uwauke</i>	<i>Sekishu</i> paper	
	<i>Shitauke</i>	<i>Sekishu</i> paper	
Border fabrics	Outer border	Gold brocade with <i>kakuryū</i> (square dragon) pattern on navy blue background	
	Inner border	Gold brocade with small peony and arabesque pattern on a white-brown background	
Hinge		Gilded <i>torinoko</i> paper	
Decorative backing paper		<i>Karakami</i> with sparrow roundel pattern	Pattern printed with mica mixed with gray ink on gray colored surface
Storage bag		Cotton	Unbleached, starch removed

5. Materials and supplies

Material	Classification	Origin/Manufacturer/Distributor	Specifications
Paper	<i>Mino</i> paper	Mino, Gifu Prefecture	
	<i>Maniai</i> paper	Najio, Hyogo Prefecture	For mending
	<i>Maniai</i> paper	Najio, Hyogo Prefecture	For underlining
	<i>Kōzo</i> paper	Yame, Fukuoka Prefecture	
	<i>Sekishu</i> paper	Shimane Prefecture	
Paste	Wheat starch paste	Nagata Sangyo, Corp	100g of wheat starch is dissolved in two liters of water and cooked over high heat for 20 minutes. It is cooled overnight before use.
	Seaweed paste	Made in South Korea	Salt is removed from 7g of seaweed glue by rinsing with water. 700cc of water is added and cooked for 15 minutes until the seaweed dissolves. It is filtered with a double layer of gauze and cooled.
Pigment used for inpainting	<i>Aibou</i> (indigo sticks), <i>youkou</i> (carmines), <i>touou</i> (gamboges)	Kyoto Prefecture	
	<i>Sumi</i> ink	Nara Prefecture	
Dye	<i>Yasha</i>	Kyoto Prefecture	
Wooden lattice core		Made by Kuroda, Kyoto Prefecture	White cedar constructed with mitered corners and tenon and mortise joints
Outer frames		Made by Kuroda, Kyoto Prefecture	<i>Rou-iro</i> black lacquered frames with rounded edges
<i>Karakami</i> for the back side of the screens		<i>Karakami</i> for the back side of the screens	New <i>karakami</i> with 4-sun (12.12cm) sparrow roundel pattern (pattern printed with mica mixed with gray ink on gray colored surface)

VI . Additional notes

1. Paper fiber analysis results

Painting support

Water absorption is slow. Dispersion of fiber is poor. Ample quantity of rice starch paste was applied to wide, flat *gampi* paper.

Paper tags

Animal skin glue is applied to thoroughly cleaned *gampi* paper.

Fiber analysis conducted by Satoshi Shishikura, Shishikura Paper Lab

2. New findings

After removal of the lining for the painting, under transmitted light, images that differ completely from the current painting were discovered underneath the paint layer.

3. Construction of the new wooden lattice core

New cores made of white cedar were prepared. The outer frames were made slightly thicker to prevent the inner cross pieces from protruding.

4. Construction of the old wooden lattice cores

Because they did not have mitered corners, cockling was occurring at the four corners. In order to prevent this cockling, the four corners were cut diagonally to create extra space. Diagonal incisions had also been made in the support of the painting.

5. Condition of the old mending paper

Before treatment, gold mending papers were found. They had been applied during a past treatment without changing the first lining. This caused unevenness between the treated areas and their surrounding areas causing the treated areas to appear visually distracting. Therefore, upon consultations with the director and the owner, it was decided that the mending papers would be removed.

6. Gilded reinforcement papers on the surface of the painting

There was a large tear at the center of the twelfth panel on top of which a large gilded piece of paper had been attached for reinforcement. As it was not aesthetically pleasing to the eye, it would be removed.

7. The torn area

There was a large tear at the center of the twelfth panel. The reinforcement paper applied to the back was removed and the tear was mended while checking the alignment of the image on the front. To mend the tear, two layers of thinly cut strips of *Mino* paper were applied as reinforcement.

8. Significant flaking and tears were found on the paper tags due to oxidation caused by the malachite green pigment that had been applied underneath. In addition, because removing the paper tags attached to the top of the paint surface also removed the attached pigments underneath, it was decided that the firmly attached tags would not be forced off but would be split into layers. Only the top layers were removed, missing parts were mended, and the tags were reattached to their original positions.

9. Ornamental metal fittings were cleaned and reused.

New gilded paper hinges were prepared in the same shade to match the paintings.

10. *Karakami* for the back side of the screen

There were many tears and abrasions on the old *karakami* found on the backside of the *byōbu*. It had black patterns on a white background which appeared too overpowering. Therefore, upon consultation with the owner, a sparrow pattern printed with mica mixed with gray ink on soft gray colored background was selected for this treatment. Gray ink was applied onto *kōzo* paper then decorated with 4-sun (12.12cm) sparrow roundel patterns. This paper was pasted on in five rows.

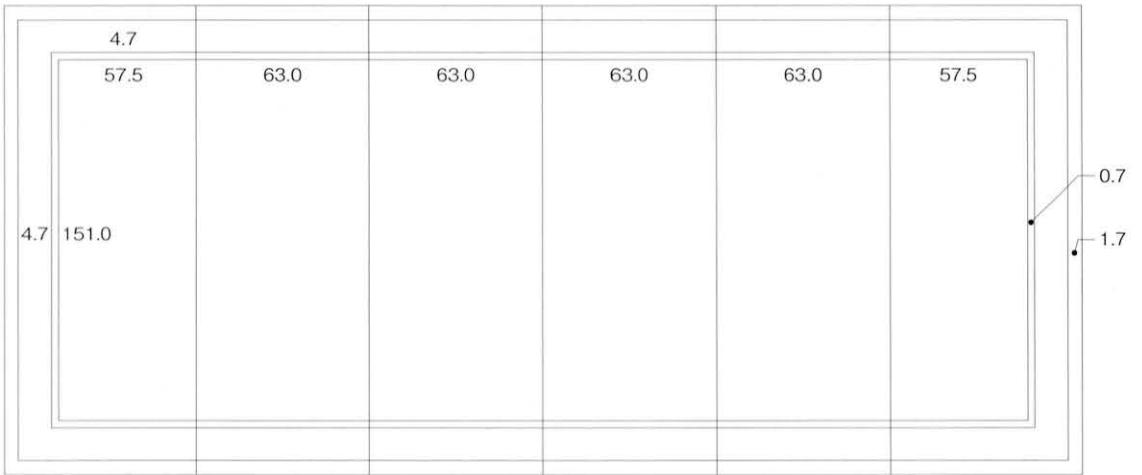
On the old wooden core, another layer of *karakami* was found underneath. It was discovered that a treatment had been conducted in which linings were simply layered on top of each other.

Comparison of colorimeter measurement results for before and after treatment has been omitted for this report.

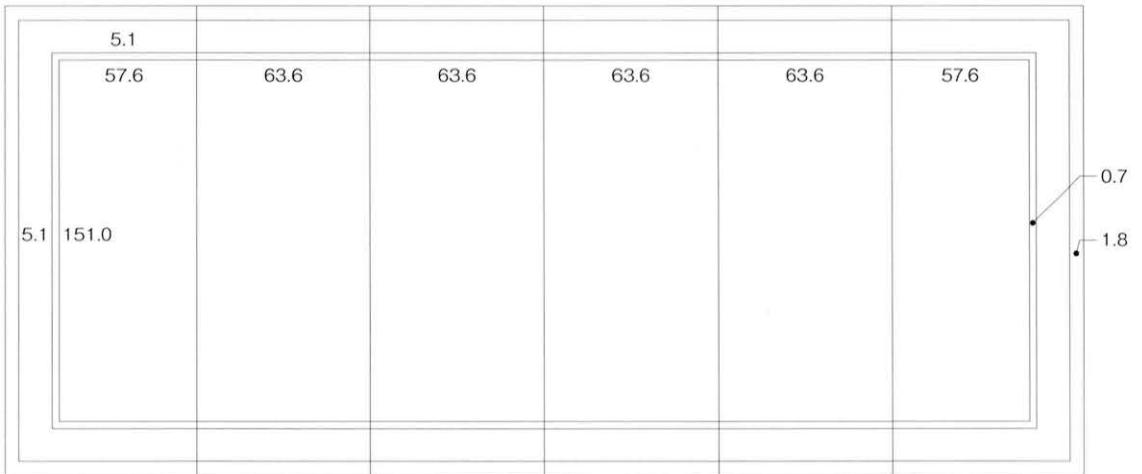
Translated by Amy McCaleb (Urban Connections), edited by Yasuhiro Oka and Regina Belard.

Views of Kyoto and its Environs Dimensions chart

Before treatment (cm)



After treatment (cm)



洛中洛外図屏風

作品解説

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洛中洛外図は京都の中心部と郊外の情景を描いたもので、百点以上の作例が確認されている。現存最古の作例をはじめ室町時代（16世紀前半）に制作された作品群を〈初期洛中洛外図屏風〉と称するのに対し、江戸時代以降に制作された作品群を〈第二定形洛中洛外図屏風〉と称し、本図はこの〈第二定形洛中洛外図屏風〉に分類できる。右隻右側から順に表現描写についてみてゆきたい。第一、二扇には桜の咲く豊国社の鳥居付近で扇を持って舞う男たちの陽気な様子を表し、慶長17年（1612）に豊臣秀頼が再建した方広寺大仏殿では金色の台座蓮弁のみが扉からのぞき、大仏を見上げる人物を添える。三十三間堂では定型化した通し矢が描かれ、その傍らには元和元年（1615）、大坂夏の陣の引き金となった梵鐘が描かれる。鴨川には船曳の夫が曳く物資の積まれた船が三艘描かれ、川の西側には慶長7年（1602）に建立された東本願寺が描かれる。第二、三扇上方には桜の見物客、参拝客で賑わう清水寺が描かれるが、音羽の滝に打たれる人物は、その表情を描こうとしたためか、社殿に尻を向けてしまっている。第三扇上方、正法寺付近では赤い幔幕を張り、歌舞に興じる宴席の様子が表され、八坂の塔、祇園社門前の松林には、茶店の女が客引きをする様子が描かれる。鴨川の五条大橋を急ぎ渡る人々の行く先には、祇園祭の山鉦巡行の熱気溢れる様子が大きく表され、第四扇下方には長刀鉦が先頭を進み、それを見物しようと慌てたのか、第三扇下方には転倒した女までもが描かれ、臨場感のある表現となっている。第四扇中央には見物客で賑わう四条河原の芝居小屋が表され、釣り人の姿も見える。第五扇には上方に南禅寺、永観堂、鴨川の三條大橋を隔てて、誓願寺、戒光寺などを描く。戒光寺は安貞2年（1228）に八条堀川の地に建立されたが、応仁の乱により堂舎を焼亡、一条戻橋付近に移転、さらに天正18年（1590）に三条京極に移った後、正保2年（1645）に後水尾帝により泉涌寺塔頭となり現在に至る。他作例のうち、狩野永徳筆上杉家本洛中洛外図屏風において戒光寺は東寺の北、八条に描かれている。本図において戒光寺が三条に描かれていることは、八条から移転した後、泉涌寺塔頭となる前の16世紀末から17世紀前半にかけての同寺の景観を表していると言える。第六扇には石不動、金戒光明寺、下鴨神社などが社寺、中央には桜の咲く内裏が描かれる。

左隻上部には鞍馬、衣笠山、愛宕などの遠山にいずれも赤く色づく紅葉を配しており、右隻が春と夏の情景を表すのに対して、左隻では秋から冬にかけての季節を示している。第一扇には鞍馬、千本釈迦堂、大徳寺、妙覚寺、小川観音などが描かれる。第二扇は紅葉の衣笠山を背景に、金閣、北野社などが描かれる。北野社の右近の馬場には馬が疾走する情景ではなく、今まさに抜刀して喧嘩をする男たちやその喧嘩に慌てふためく人々が描かれる。第二扇から第四扇にかけて中央に大きく二条城を描き、その前の堀川通りには八人の騎馬の公家衆に先導されて、六つ星の家紋をつけた牛車が参内を終えて城外に出てくる行列を表し、その南側には神泉苑が描かれる。第三扇から第四扇にかけて参詣人で賑わう清涼寺、天龍寺などの嵯峨野の社寺が描かれ、第五扇には法輪寺、松尾社、西芳寺、大井川、広隆寺などの社寺を表す。第六扇には、上方に石清水八幡宮の塔、淀の大橋、大坂を往来する船が描かれ、中央には塔が高くそびえる東寺、下方には第五扇にまたぐように西本願寺が描かれる。

本図全体の構図や景観と類似する作品としては大阪市立美術館所蔵本（六曲一双）があげられる。豊

臣と徳川の象徴である方広寺と二条城、また東本願寺と西本願寺などを右と左に対比させることや、洛中からは離れた淀や八幡までの景観を捉える点などが類似するほか、二条城前に行く牛車の輿に描き込まれた六つ星紋のような細部にまで認めることができ、これらの共通点は、制作年代や制作背景を考える上で重要な手がかりとなろう。また表現上の特徴としては、遠山の稜線、人物の衣紋線には金泥によって描き起こされ、社寺の朱塗りの柱や壁などは平板に塗るのではなく、濃淡をつけるなど、随所に繊細な描写を認めることができる。

なお右隻には33枚、左隻には44枚の場所を指し示す付箋が貼られており、下の絵具による影響や傷みが生じていたため、今回の修理では全ての付箋を取り外してクリーニングを行った。このうち左隻第二扇方広寺大仏殿前の耳塚を示す「み、つか」の付箋は、他のものに較べて大きさ、紙質、筆跡が異なり、後補の可能性が考えられていた。本工程中、付箋の下に人物の足が描かれていることが判明したが、制作当初から著しく時代が異なるものとは考えにくく、作品の持つ情報として尊重して現状のままとした。右隻には611人、左隻には717人の総勢1328名の人物を描く。本図は近年ますます活況を呈している洛中洛外図屏風研究においても重要な作例と言えよう。

〈参考文献〉

- ・狩野博幸『洛中洛外図 都の形象—洛中洛外の世界』京都国立博物館、1997年5月。
- ・『第二定形洛中洛外図屏風の総合的研究』（平成14～16年度科学研究費補助金基盤研究（A）、研究代表者 黒田日出男）2005年3月。

Views of Kyoto and Its Environs

Description of Artwork

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The Screens Illustrating *Views of Kyoto and Its Environs* shows the sceneries and activities within the city of Kyoto and its surroundings. There are over a hundred versions of paintings done on this subject matter, which can be classified into two categories. Those created during the Muromachi Period (the first half of 16th century), including the oldest of this kind still in existence, are called “Early Generation Screens Illustrating Views of Kyoto and Its Environs.” By contrast, those created in the Edo Period or later are called “Second Generation Standard Screens Illustrating Views of Kyoto and its Environs.” The screens introduced here belongs to the latter category. Let us take a look at the expressions and depictions in order, starting from the right end of the right screen. On the first and second panels are men cheerfully dancing with fans in their hands near the gate of the Hokokujinja Shrine under fully bloomed cherry blossoms. Through the doorway of the Daibutsuden of Hokoji Temple, which was rebuilt by Hideyori Toyotomi in 1612, only the gold lotus-shaped pedestal can be seen. In front are people looking up at the great statue of Buddha. At Sanjusangendo, the stereotypical archery competition is depicted. To the side of that is the temple bell which triggered the Summer Battle of Osaka in 1615. On the Kamo River which stretches across the center of the screen, three boats loaded with goods are being pulled by boat pullers. To the west (the underside) of the river is Higashi Hongwanji Temple, which was built in 1602. In the top part of the second and third panels is Kiyomizudera Temple crowded with temple visitors and those who have come to view the cherry blossoms. The man under the Otowanotaki (Otowa Waterfall) is shown facing his backside toward the shrine insolently, though this was perhaps done for the purpose of showing his facial expression. In the upper part of the third panel, areas around Shohoji Temple are decorated with red curtains and a banquet involving singing and dancing is taking place. In the pine grove in front of the Yasaka Pagoda and the gate of Gion Shrine is a woman from a tea house soliciting customers. People are rushing across the Gojo Ohashi Bridge on the Kamo River to see the Gion Festival Parade of *hoko* and *yama* Floats, which takes up a large area of the screen to show the air of excitement. A *Naginata-hoko* leads a parade at the bottom of the fourth panel, while a woman is even shown falling over at the bottom side of the third panel, perhaps for being too hasty in trying to catch the spectacle, creating a realistic atmosphere. At the center of the fourth panel is a theater of Shijogawara crowded with playgoers. There are also people fishing nearby. At the top of the fifth panel are Nanzenji Temple and Eikando Temple. On the other side of the Sanjo Ohashi Bridge are Seigwanji Temple and Kaikoji Temple. Kaikoji Temple had originally been built in Hachijo Horikawa in 1228, but after it lost some of its buildings in *Onin* War, it was moved near Ichijo Modoribashi Bridge. It was moved again in 1590, this time to Sanjo Kyogoku. In 1645, Emperor Gomizuno-o designated it as the *tacchū* (sub-temple) of Sen’nyuji Temple and it has remained in this location till today. In other works on the same subject matter, those of the Uesugi collection painted by Eitoku Kano show Kaikoji Temple positioned in Hachijo, to the north of Toji Temple.

As this screen shows Kaikoji Temple as being located in Sanjo, it is presumably depicting the landscape surrounding this temple of around the end of the 16th century through the first half of the 17th century, after it was moved from Hachijo, but before it became *tacchū* of Sen'nyuji Temple. On the sixth panel are such temples and shrines as Ishifudo, Konkai Komyoji Temple, and Shimogamo Jinja Shrine. At the center of this panel is the Imperial Palace where the cherry blossoms are in bloom.

Across the top of the left screen are the distant mountains of Kurama, Kinugasayama, and Atago, all colored with fall foliage. While the right screen is decorated with spring and summer landscapes, the left screen shows views of autumn to winter seasons. The first panel shows Kurama, Senbon Shakado Temple, Daitokuji Temple, Myokakuji Temple and Kokawa Kannon. The second panel shows Kinkakuji Temple and Kitano Tenmangu Shrine against the background of fall-colored Kinugasayama. The riding ground named Ukon of Kitano Tenmangu Shrine is not depicted with galloping horses, but with men drawing their swords, about to engage in a fight, and others running around in a panic in reaction to the commotion caused by the men. A large image of Nijojo Castle is painted across the second through the fourth panel. On Horikawadori street in the foreground is a procession of an oxcart adorned with six-star crest, led by eight members of *kuge-shu* (aristocrats) on horseback. They have just visited and are leaving the castle. To the south stands the Shinsen-en. Across the third and fourth panels are temples and shrines of Sagano including Seiryoji Temple and Tenryuji Temple, which are bustling with visitors. On the fifth panel are Horinji Temple, Matsuotaisha Shrine, Saihoji Temple, Oigawa River and Koryuji Temple. At the top of the sixth panel is the pagoda of Iwashimizu Hachimangu Shrine, Yodo Ohashi Bridge and boats coming from and going to Osaka. At the center of the panel are Toji Temple and its tall pagoda, and at the bottom is the Nishi Hongwanji Temple running across the fifth and sixth panels.

Artwork that bears great resemblance to this one in terms of the overall composition and landscape is the pair of six-paneled screens in the collection of the Osaka Municipal Museum of Art. Similarities include the way in which the sites that are considered symbols for Toyotomi and Tokugawa such as the Hokoji Temple and Nijojo Castle, and Higashi Hongwanji Temple and Nishi Hongwanji Temple, are positioned opposite of each other on the left and right sides of the screens; how the landscape is mapped out to include regions such as Yodo and Yawata which are quite far away from the city center of Kyoto; and details such as the six-star crest drawn on the side of the oxcart. These similarities provide valuable hints regarding the time and background in which the painting was created. As for the characteristics of painting style, delicate attention is paid in various parts throughout the painting. For example, the ridge lines of the faraway mountains and lines in the people's clothing are traced with gold pigment, and the vermilion columns and walls of temples and shrines are not painted in flat, solid colors, but are rendered with shading.

Thirty-three paper tags indicating the various sites were found on the right screen, while forty-four were found on the left. Since some damage was observed on them caused by the pigments that lay underneath, they were all removed and cleaned during this treatment. Of these paper tags, the one that is inscribed "Mimizuka," indicating the monument in front of the Hokoji Temple found on the second panel of the left screen, was smaller and different in terms of paper quality and handwriting compared to the others, and therefore, presumed to have been attached at a later time. During the treatment process, legs of a figure were found drawn underneath the paper tag. As it was quite unlikely that the legs were drawn in significantly

later than the time the painting was created, it was decided that the area would be preserved as it was found, seeing it as part of the artwork's history. A total of 1,328 figures (611 in the right screen, 717 on the left screen) are painted on these screens, which are considered a valuable resource for the research being conducted on the subject of "screens illustrating views of kyoto and its environs", which has become more and more active in recent years.

Reference:

Kano, Hiroyuki. KYOTO—Grand Views of the Capital. Kyoto National Museum, May 1997.

Kurokawa, Hideo, et. al. Comprehensive Research on "Second Generation Screens Illustrating Views of Kyoto and Its Environs."(Research (A) Supported by FY 2002-2004 Grant-Aid for Scientific Research). March 2005

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