

Henri Matisse's *The Swimming Pool*: Conservation and Exhibition

ABSTRACT

The conservation of *The Swimming Pool* by Henri Matisse¹ was a multiyear project culminating in the 2014–2015 exhibition at the Museum of Modern Art, *Henri Matisse: The Cut-Outs*, and catalog of the same name. This exhibition was the first time at the museum that a conservator, the author of this paper, was also a cocurator, working with Jodi Hauptman, now senior curator for drawings and prints. This collaboration led to a new approach for the installation of cut-outs.

INTRODUCTION

During the last decade of Matisse's life, from the mid-1940s to his death in 1954, the artist turned to a new form of making art—the cut-out. The development of this technique, however, began much earlier in the artist's career. In the early 1930s, while working on *The Dance* for his American patron Alfred Barnes, Matisse realized that the laborious process of painting and wiping out paint to change compositions could be simplified by cutting and pinning sheets of painted paper to the working surface.

In 1952, as the now famous story goes, Matisse asked his assistant Lydia Delectorskaya to call a car and take him to his favorite pool in Cannes to sketch divers. When they arrived, it was so sunny that there were no swimmers, and he said, "I will die from the heat, take me home. I will make my own Pool." This is exactly what he did. Delectorskaya pinned long sheets of white Canson paper to create a frieze around the walls of the dining room at Matisse's apartment in Nice. Matisse cut swimmers and sea creatures that were pinned onto, above, and below the white frieze. The work remained on the walls of the dining room until the artist's death in late 1954 (Buchberg et al. 2014, 62–67).

In 1975, the Museum of Modern Art (MoMA) acquired *The Swimming Pool*. This work was subsequently included in the landmark Matisse cut-out exhibition of 1977 and was then consistently on view at MoMA. In 1996, curators and

conservators reevaluated the condition of *The Swimming Pool*. It was decided that the altered and fragile condition of the work precluded further exposure.

MATISSE'S CUT-OUT TECHNIQUE

Matisse would visit his preferred art suppliers in both Paris and Nice and choose tubes of gouache, both for color and freshness. Large batches of gouache would be prepared by his assistants and be applied by them onto sheets of either French artists' papers or sheets cut from large rolls of paper, most often Canson and Montgolfier. Painted papers would then be dried and stored. During the early part of the cut-out phase, Matisse would work in bed, at a desk, or in a specially designed chair. For these earlier small works, he would pin the cut shapes directly onto a board. Later, when he was working on larger compositions, he would hand a cut shape to an assistant and direct her to pin the shape onto a wall of the studio. This pinning allowed for quick placement and equally quick rearrangement of both shapes and whole compositions. Period photographs of Matisse's studios in Paris, Nice, and Venice show that cut-outs pinned onto the studio walls were moved, rearranged, or removed with considerable frequency.

MOUNTING

Matisse was introduced to the firm of Lucien Lefebvre-Foinet, art suppliers and restorers, by the artist Marc Chagall, and it was in Paris that they mounted the large majority of cut-outs, both during the artist's lifetime and after his death. To transfer a cut-out from the studio to the mounters at Lefebvre-Foinet, a cut-out was unpinned from the wall and traced so that the important relationship between one cut shape and the next would be preserved exactly. The unpinning was sometimes a two-step process. The pins used to attach a cut-out to the wall would protrude too far to allow an accurate tracing. One-by-one, a pin would be removed and another would be inserted in a flat orientation, creating two holes (one going in and one coming out). Complex cut-outs were sometimes numbered on the verso of each section.

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In the Matisse dining room, *The Swimming Pool* occupied two long walls perpendicular to the left and right of the entry door and four smaller walls: two on either side of the entry door and two on either side of the window occupying the wall opposite the entry door. Together these sections total a length of 647 in.

After the death of the artist in 1954, *The Swimming Pool* was sent to Paris for mounting. At this point, the height and width of each panel needed to be decided. The four small sections were mounted to the exact width of their original dining room walls. The two long walls, however, were too long to be mounted each as one section and were therefore divided into sections: one wall into two sections and one wall into three sections. In this configuration, the final nine panels could be more easily stored, shipped, and exhibited.

Prior to the actual mounting, Madame Matisse, the widow of the artist, made two crucial decisions: the height of the panels and the fabric to be used to recreate the walls of the dining room. In documents supplied to MoMA after its acquisition of the work, Madame Matisse said that she considered the space between the ceiling and the top of the fireplace mantelpiece to be the area *The Swimming Pool* originally occupied (Buchberg et al. 2014, 62-63). Therefore, a panel height of 7 ft. 6 in. was stipulated. She also said that burlap, the wall covering of the dining room, was the only fabric honest to the original conception of the work. The mounters sourced new burlap.

CONSERVATION PROPOSAL

In the intervening 56 years between the creation of the work and the 2008 conservation proposal, each of the three elements of the work had altered: the blue cut-outs, the white paper frieze, and the burlap mount. The proposal had three goals.

COLOR BALANCE

The first was to return the work to its original color balance of blue, white, and tan. The decision to remove the burlap and replace it was the first and conceptually most simple decision. The burlap used during the 1955 mounting was not original to the dining room. It was severely altered, now a dark orange-brown and very brittle with a noticeably textured surface. A sample of the mounting burlap sent from Lefebvre-Foinet to the author's predecessor, Antoinette King, and stored in the dark showed that the burlap was originally light tan, quite supple, and smooth surfaced. In consultation with Sarah Lowengard (a private textile conservator in New York) and the staff at Testfabrics Inc., new burlap was sourced knowing that it is a material with inherent liabilities.

The white paper frieze was considerably damaged. Localized yellow-brown spots of varying size were scattered

unevenly over all nine panels. It had always been assumed that the mounting adhesive had penetrated the paper and caused stains. Documents from Lefebvre-Foinet said that the mounting adhesive used for the cut-outs was a complex mixture of rye flour, wheat flour, water, animal glue, linseed oil, and Venice turpentine. Seen on many other cut-outs, it is a dark amber color. It had been assumed, incorrectly, that it was this adhesive that was used on *The Swimming Pool*. Chris McGlinchey, a conservation scientist at MoMA, analyzed the adhesive, which proved to be methyl cellulose. King had heard that an adhesive called *colle Mohican* had some role in the mounting. An Internet search provided additional information on the probable product: Mohican Teinture, La Colle Mohican, and Peinture Mohican. This information cast doubt on the theory that adhesive staining was the principal cause of the uneven discoloration. After the burlap removal was complete, stained areas were examined from both the recto and verso. Staining was not evident spot for spot on the verso, nor did the adhesive look at all discolored. The amount of moisture used in the lining process and the components within the burlap were probably the likely issues. Considerable deformation in some areas of the white frieze and uneven acid-induced decolorization in blue cut shapes mounted directly to the burlap are both physical evidence of considerable moisture during the original mounting.

The firm of Lefebvre-Foinet applied an uneven layer of white paint to the white paper support after the blue cut shapes had been mounted, as can be seen in UV-induced visible fluorescence. As this is seen in many of the cut-outs, they apparently felt that the whiteness of the paper should be preserved. Matisse's white paper supports were never painted white in his studios. In addition, discrete applications of white paint mask localized discolorations that must have occurred during the mounting process.

The next decision was whether or not to replace the white frieze that had been provided by the Parisian mounting firm and was not original. Delectorskaya, who after the death of Matisse remained one of the major experts on the cut-outs, had written to King and others that the white mounting papers could be replaced, as they did not carry the hand of the master. The only exceptions would be when Matisse actually drew, usually with charcoal, on the white ground papers. It was decided not to replace the white paper because as damaged as it was, it was almost the same age as the blue cut shapes and new paper would have been a stark contrast.

Conservation scientists at MoMA confirmed that the blue pigment in the cut shapes was ultramarine. The ultramarine, which loses color in contact with acidic conditions, had decolorized unevenly over time due to its contact with the white paper frieze and the burlap. Environmental conditions must also have played a role, as one stretcher bar in the center of a very wide panel had protected both the burlap and ultramarine from alteration.

INSTALLATION HEIGHT

The second goal was to install the work at a proper height. Photographs show the work as installed at MoMA in 1977 with a center line perhaps at chest height. Period photographs of the work confirm that the work was originally created at eye level or slightly higher. Both Pierre Matisse, representing the Matisse family, and Delectorskaya, Matisse's assistant who most likely did most of the pinning, wrote to MoMA to say that the work had been installed too low. Pierre Matisse went so far as to say that he would rather have the work deinstalled than remain at the inappropriate height.

New panels, recreating the full height of the Matisse dining room, were made for each of the nine sections. These panels allowed the cut-outs to be positioned at the proper height and also rebalanced the amount of burlap at top and bottom.

ROOM DIMENSIONS

The third goal was to design the architecture of the installation to reflect the original dimensions of the dining room at the Matisse apartment. MoMA files included a floor plan of the apartment and an elevation of the dining room. As originally installed at MoMA, one entered the room, viewed cut-out panels at left and right, and exited through a door opposite the entrance. This facilitated the flow of patrons through the galleries. The 2014–2015 installation was in a self-contained room. One entered through a door and was immersed in the cut-outs and then exited through the same door, as would have been the case during Matisse's lifetime.

It was decided early on not to adhere the cut-outs solidly onto the new burlap-covered panels. The acidity of the burlap had originally caused damage, and the author did not want to repeat this situation. It was at this point that the collaboration with Hauptman, the cocurator for the Matisse exhibition, most clearly informed the conservation protocol. Hauptman was most fascinated by the act of pinning; what was pinned could easily be unpinned. Period photographs of Matisse's studios showed that that this did indeed happen. In addition, examination of most Matisse cut-outs shows numerous pinholes, indicating the act of pinning and repinning.

It was then decided to explore the idea of pinning the work onto new burlap-covered panels. To do this, a full-scale mock-up of one of the panels was made. The result was shown to MoMA curatorial staff and members of the Matisse family. Somewhat startling at first, the idea gained traction and became the final plan. This radical installation approach returned to the work some of the three-dimensionality and liveliness that it had originally.

STORAGE

The cut-outs were pinned to the new burlap-covered panels only during exhibition. When not on view, each cut-out panel

was fitted into a large drawer that slid into a custom-designed crate.

RESEARCH

In addition to visual examination of *The Swimming Pool* and scientific analysis carried out by MoMA conservation scientists, extensive archival research contributed valuable insight into exactly how the cut-outs were created.

The Archives Matisse, housed in Paris, provided written and photographic documentation, including many unpublished notes made by Delectorskaya, who had hoped to write a book on the cut-outs, as she was Matisse's chief studio manager for the entire cut-out period. Madame Matisse and Delectorskaya wrote letters to cut-out owners, MoMA included, about the cut-out technique, the mounting technique, and their thoughts on how the cut-outs should be treated in the future. The mounting firm of Lefebvre-Foinet sent King information on their techniques, and this was stored in the existing treatment files. Two of Matisse's studio assistants who were still alive were interviewed to capture their memories of working with Matisse on the cut-outs. Claude Duthuit, the artist's grandson, shared his memories of the artist.

Conservation treatment of *The Swimming Pool* at MoMA was undertaken at the same time as the Fondation Beyeler in Switzerland was treating their large cut-out, *Acanthuses*. Chief conservator Markus Gross and paper conservator Stephan Lohrengel conducted extensive research in preparation for their treatment (Buchberg et al. 2014, 253–265).

The Matisse family donated to MoMA a set of 79 painted paper samples from Matisse's studio, which demonstrates the wide range of color used by the artist. Ana Martins, a conservation scientist at MoMA, has done extensive research on this sample set. The first set of data was fadeometer testing on each sample. The light sensitivity of each sample is now known, and each sample has been analyzed for pigment and dye components. The results have been reported by Ana Martins in a separate presentation.

CONSERVATION TREATMENT

Each panel, previously stored in an individual travel frame, was placed on a large table. The tacks holding the cut-out to the stretcher were removed. The burlap/cut-out unit was lifted off the stretcher, which left the linen loose lining still attached to the stretcher. The burlap/cut-out unit was turned over and placed facedown on a clean blotter and glassine covered table. The burlap was then cut along the top and bottom edge of the back of the white frieze, and a microspatula was used to release the burlap from the paper. This created two sections of burlap for each of the nine panels. These burlaps sections were rolled and stored, partly as a document and partly as a nod to reversibility.

The removal of the burlap from the verso of the white paper was the next hurdle. The original hope was that the adhesive might have weakened enough over time to allow the burlap to be pulled back manually. This was not the case; the Canson paper delaminated with this pressure to an unacceptable degree. Moisture was then tried, but the paper was too weak to allow moisture to be used without considerable delamination of the verso. The decision was then made to remove the burlap manually. On some panels the burlap was unwoven strand by strand, and when even this was too harsh on the paper, the structure of the burlap fabric was disrupted with a Dremel rotary tool and a small spatula was used to scrape the remaining fibers. Very fine sandpaper was used to remove any remaining fibers from the verso. This removal of the burlap support was completed without introducing any moisture. The panels were then turned faceup on the table, and the white paper was surface cleaned using white vinyl erasers.

Stain reduction on the white papers was remarkably unsuccessful. Neither water nor alcohol had any appreciable effect on the staining. The use of suction had no effect. In 1977, King completed a conservation treatment on *The Swimming Pool* to reduce staining using Fuller's earth poultices with organic solvents. When this was not adequate, she bleached with hydrogen peroxide or chloramine-T. Over the years the staining returned, and it was decided not to bleach the already degraded paper.

Many of the blue shapes had been inpainted at some point in the past, and some inpainting to mask scratches was done during the previous MoMA treatment. However, the delicacy of King's treatments could not be matched with the crudeness of some areas of the extant inpainting. In the center of the very widest panel, there was extensive overpaint. Almost certainly the mounters, when confronted with a 123-in. panel, encountered difficulties and then had to mask the results. In this severely overpainted section, later gouache additions were removed, both with moisture applied with swabs and also mechanically using very fine scalpels. Stabilo CarbOthello pastel pencils were used on several panels to tone-in or tone-back individual areas.

The tacking margins at the left and right of each white paper section were reinforced with Japanese paper and wheat starch paste. New extensions, made of a Japanese paper and Tyvek sandwich, were added to each tacking margin. It is through these new extensions that the cut-outs are tacked to back of the new panels; no holes were added to the somewhat fragile original tacking margins.

MOUNTING AND INSTALLATION

New medium-density fiberboard (MDF) panels were fabricated for each of the nine cut-out sections. Each panel was

built of three smaller sections bolted together on the verso. When disassembled, the smaller sections can be more easily stored. Each section was first covered with cork to provide a suitable surface for the ultimate pinning. The cork was then treated with a sealant. This was painted with a white layer to provide luminosity under the burlap. The new burlap was cut to size and adhered to the new panels.

MoMA carpenters built a room structure designed to the exact measurements of the panels, with space to support the ultimate glass glazing. The new MDF panels were placed, one by one, onto sawhorses. Each cut-out was then placed onto its custom-size burlap-covered panel. Pinning started from the center and worked toward the edges to minimize cockling. The original pinholes in the blue cut shapes were again used for the pinning. Originally, the white paper frieze would have had pin holes, but as this white paper was a replacement at the time of the 1955 mounting, no pinholes existed. The author decided that no new holes should be introduced; the number of pins through original holes was sufficient. The original tacking margins were folded around the new panels, and the Tyvek extensions were tacked to the back of the panels.

Each stainless steel pin was first soaked in acetone to ensure that any oil used in manufacture was removed. A collar of heat-shrink tubing was placed on each pin and heated into place. This collar prevented the cut-out from moving up the shaft of the pin during the months of the exhibition. After each panel was lifted into place, large glass panels were inserted to protect the gouache cut-outs during exhibition.

The treatment, from start to finish without the research component, took approximately 2000 hours.

THE EXHIBITION

The planning for this elaborate treatment was the genesis of the exhibition, *Henri Matisse: The Cut-Outs*. When the first proposal was made in 2008, *The Swimming Pool* had been off view for 15 years. Hauptman and Buchberg thought that the reinstallation of *The Swimming Pool* would be an appropriate time to mount a small exhibition. This initial idea grew to become the largest exhibition ever of Matisse cut-outs. Approximately one-half of all known cut-outs were included in the exhibition, which was a collaboration between MoMA and Tate Modern. In October 2014, the exhibition opened at MoMA—the first instance of a conservator as cocurator.

NOTE

1. *The Swimming Pool*, late summer 1952. Maquette for a ceramic (realized 1999 and 2005). Gouache on paper, cut and pasted, on painted paper, overall 185.4 cm x 1643.3 cm (73 in. x 647 in.). Installed as nine panels in two parts on burlap-covered walls. See Buchberg et al. 2014, 222.

REFERENCE

Buchberg, K., N. Cullinan, J. Hauptman, and N. Serota. 2014. *Henri Matisse: The Cut-Outs*. New York, NY: Museum of Modern Art.

FURTHER READING

Neufeld, L. 2014. Conservation of Henri Matisse's *The Swimming Pool*. Museum of Modern Art, *Inside/Out: A*

MoMA/MoMA PS1 Blog. https://www.moma.org/explore/inside_out/2014/10/07/the-conservation-of-henri-matisse-the-swimming-pool/.

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