

# Conservation Documentation with Digital Mapping

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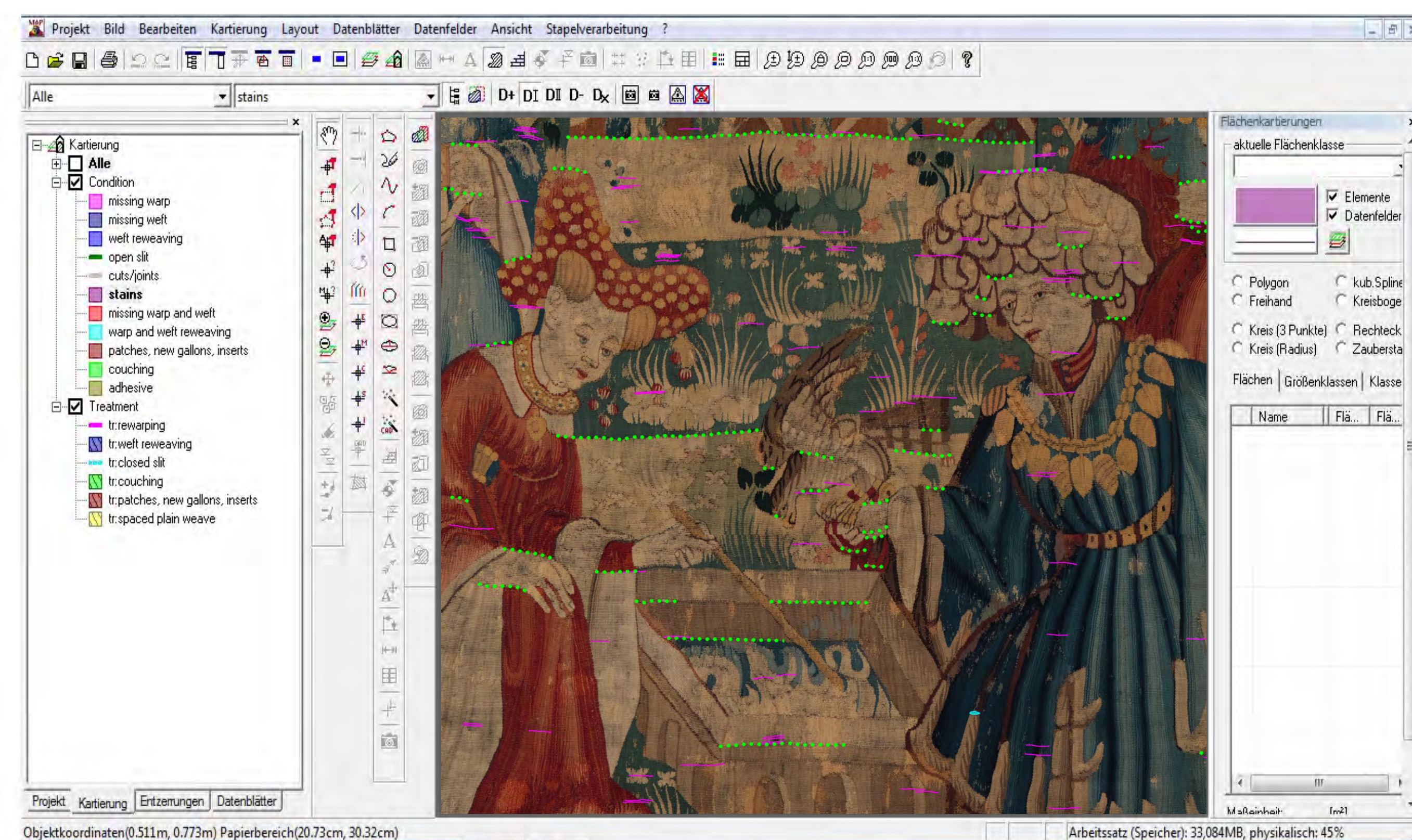
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## Introduction

In 2011, The Metropolitan Museum of Art acquired a medieval tapestry, *The Falcon's Bath*. For its age, this early fifteenth-century tapestry is in good condition. After a thorough condition check, a conservation treatment was performed to strengthen the tapestry for display at The Cloisters, the Museum's branch devoted to medieval art. During this process, a digital mapping technique was adopted to comply with an increased need for digital documentation.

## Method

Digital mapping can be achieved by using any imaging program (e.g. Adobe Photoshop). However, specialized digital mapping programs offer important features that help users to create and manage visual annotation more precisely and efficiently, particularly for large-scale projects. This project was completed with the Metigo MAP software program produced by Fokus GmbH of Leipzig, Germany.

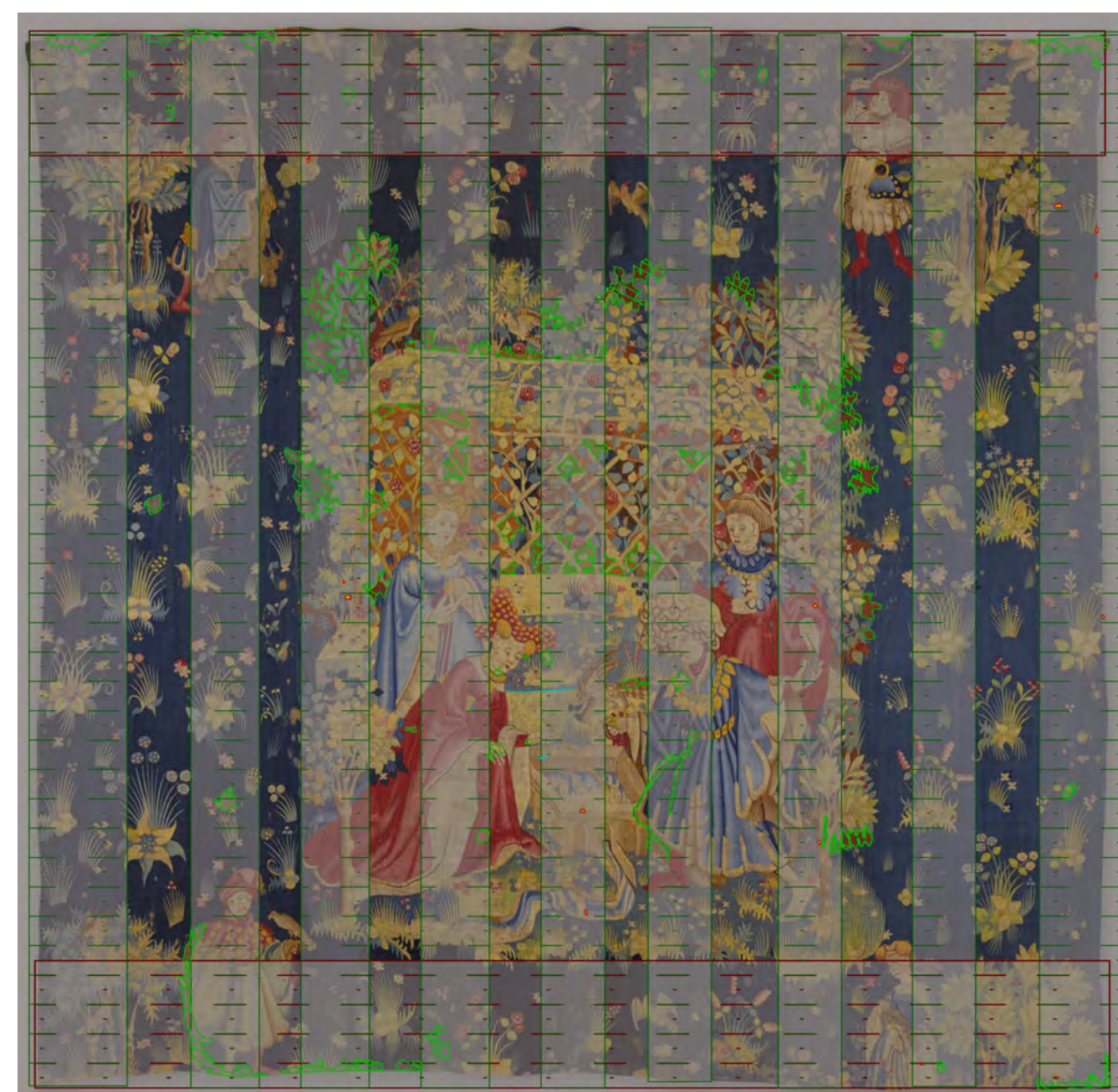


Screen shot of Metigo MAP 3.0 during mapping

Categories for condition and treatment were created with visually different codes. These codes were marked individually on the rectified image of the tapestry and managed as layers that could be retrieved as integrated, and also separated by category, by group, or by history.



Layer1: Conservation treatment



Layer2: Condition + Layer3: Hanging system

## The Falcon's Bath

The Metropolitan Museum of Art, The Cloisters Collection (2011.93), Southern Netherlands, ca. 1400–1415, wool warp and wool weft. 137.5 x 145.5 inches

## Before Treatment Documentation

High-resolution photographs of the tapestry's obverse and reverse were taken. These high-resolution images show condition and technical information larger than true-to-scale. The size of each image is approx. 2 gigabytes in TIFF format, preferred for archival quality.

## Treatment Documentation

After thorough surface cleaning with a slow suction vacuum cleaner, fragile areas were consolidated. The tapestry was then prepared for display in The Cloisters' galleries with appropriate supporting materials, and a hanging system.

The digital mapping technique was used to record the changes performed on the tapestry during treatment. The technique was especially efficient in recording changes as small as treatment on a single warp or weft element. Some treatment details were not visually distinctive, while reinforcing damaged elements structurally, but these subtle changes could be effectively recorded using the mapping technique.



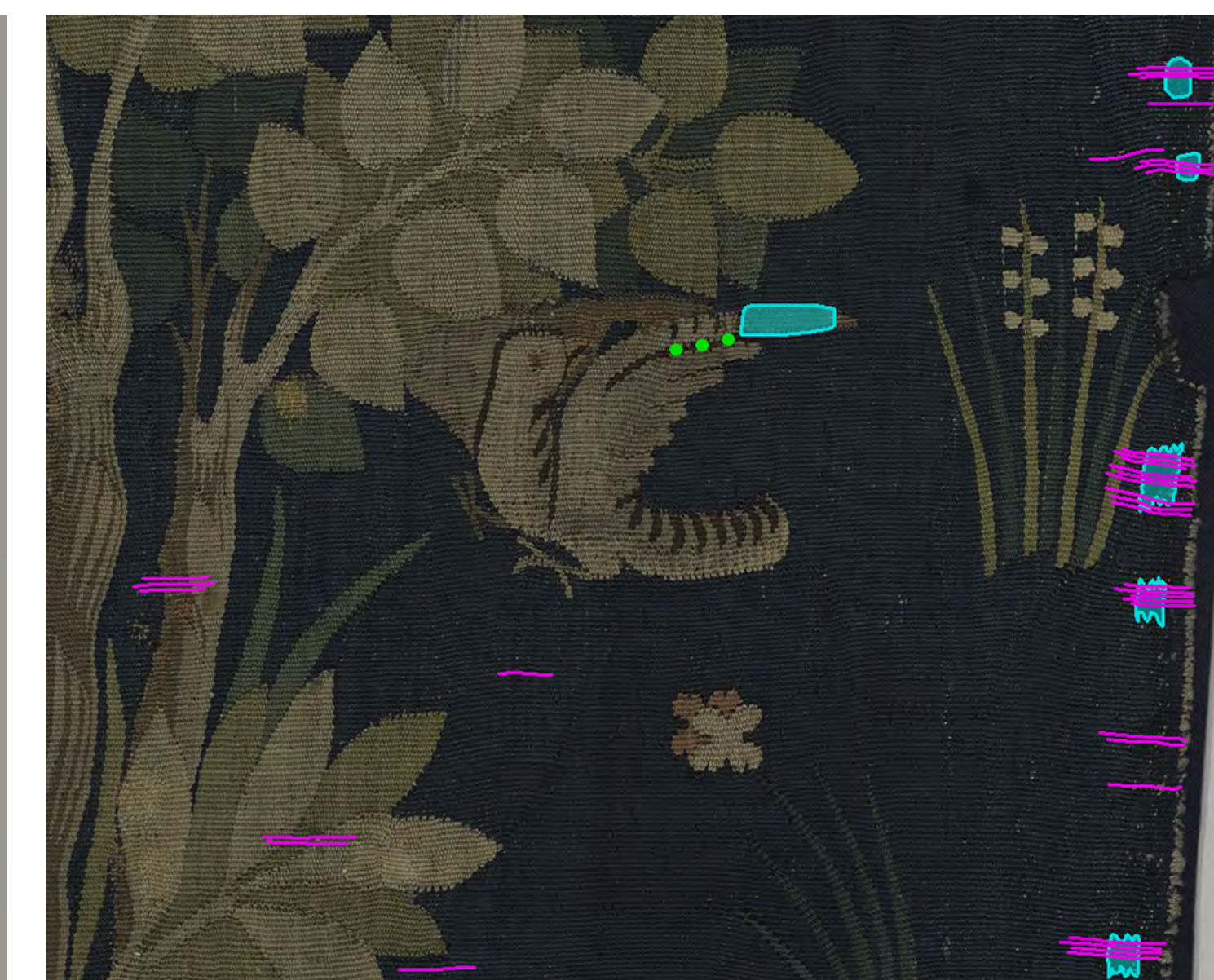
The Metropolitan Museum of Art, The Cloisters Collection, 2011 (2011.93). © The Metropolitan Museum of Art.



Before Treatment (detail)



After Treatment (detail)



Treatment Record (detail)

Rewarping  
Weft Reweaving  
Slit Closing

The Metropolitan Museum of Art, The Cloisters Collection, 2011 (2011.93). Photograph by Kisook Suh, Department of Textile Conservation. © The Metropolitan Museum of Art.

## Pros and Cons of Digital Mapping

**Pros:** Highly precise visual annotation is possible on the image itself. The annotation of different phases in different scales can be recorded systematically and integrated. This digitized information can be retrieved and used for communication more efficiently than conventional diagrams.

**Cons:** The specialized software program is required. It takes time to record conservation information by manually marking on the digital image.

## Applications of Digital Mapping in the Future

**Monitoring:** The main advantage of using a digital mapping technique is the potential for the long-term monitoring of large-scale artworks. With layers of information integrated by the mapping technique, certain condition changes and the effects of conservation treatments over time can be more precisely monitored.

**Assets for Digital Interface:** Digitized conservation documentation would enable further comparative studies, and allow for exchange of information among institutions. Analyzing and tracking the visual documentation of related works of art from different collections would be helpful in assessing and comparing their conditions, as well as evaluating treatment methods.

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