A Cut Above: The Crayola™ Cutter as Conservation Tool

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Introduction

The Crayola™ Cutter, although marketed as a children’s toy, has great potential as a conservation tool. It consists of a stylus with a pulsating needle at the tip and a hard foam mat for cutting. Using the Crayola™ Cutter to draw a perforated line makes it easy to cut out complex shapes from a sheet of paper. It can achieve results ranging from a soft, feathered edge for a hinge to a precisely crafted fill or inlay, depending on the type of paper and the speed of the drawing motion.

The Crayola™ Cutter was compared to more traditional tools for creating fills, inlays, and hinges (e.g., scalpel, needle, water and brush). A variety of shapes and sizes were cut from various thicknesses of both western and Japanese papers. Factors considered in the comparison included the ability of the tool to achieve a desired result and the difficulty and time necessary to do so.

This poster summarizes the findings of these tests and presents case studies demonstrating the Crayola™ Cutter as an effective new tool for paper conservators.

Case Study 1: Inlay

1. Tracing the outline of the drawing onto the inlay paper (a Japanese paper of similar weight) with graphite pencil.
2. Following 1/16” within the traced line with the Crayola™ Cutter to create a slightly smaller perforated outline of the drawing.
3. Pulling the perforated line apart to release the inlay. Moving the stylus at a fast, consistent speed creates wider perforations and more feathering.
4. Using the cut-out center of the inlay as a mask to paste up the edge of the drawing with wheat starch paste before attaching it to the inlay.
5. The drawing adhered to the inlay.
6. A detail of the verso showing the feathered edge of the inlay.

Case Study 2: Fills

1. An intaglio print (17.8 x 26.6 cm.) with an irregularly shaped loss in the upper left quadrant.
2. A detail of the loss, recto.
3. A detail of the loss, verso. A tracing of the loss was made using water and a needle.
4. Tracing the mylar template onto a thin, western, laid paper with a graphite pencil on the light table.
5. Following the pencil line with the Crayola™ Cutter to create a perforated outline.
6. The fill adhered to the print with wheat starch paste. The hinge was created quickly and was ready to be used as detachable hinges.
7. The fill adhered to the print with wheat starch paste.
8. A detail of the fill, recto.
9. A detail of the fill, verso. The edges of the fill were pared down and feathered further using water and a needle.

Case Study 3: Hinges

1. Using the Crayola™ Cutter to create a series of perforated lines on a medium weight Japanese paper to be used as detachable hinges.
2. Pulling one of the perforated lines apart.
3. A lightweight Japanese tissue hinge adhered to the verso of the print with wheat starch paste. The hinge was created quickly using the Crayola™ Cutter.
4. A medium weight Japanese tissue hinge adhered to the verso of the print with wheat starch paste. The hinge was created quickly using the Crayola™ Cutter.

Acknowledgements

Margaret Holben Ellis, New York University
The Conservation Center, Institute of Fine Arts, New York University
The Morgan Library & Museum
The Foundation of the American Institute for Conservation

Tips

1. If a larger cutting surface is required, a sheet of Vellum® over a hard surface works well as a substrate. Note: The Crayola Cutter™ does not perform as well on hard surfaces.
2. The space between perforations depends on the speed of the drawing motion; wider perforations are achieved by moving the stylus faster.
3. At least two models of the Crayola Cutter™ exist. There are minor operating differences; the needle in the “new and improved” (purple and orange) version pulsates more quickly than in the original version (blue and yellow).
4. Depending on the project, using the Crayola Cutter™ in conjunction with other methods may be beneficial. For example, once a shape is cut, a needle can be used to increase feathering as desired.

Technique Advantages Disadvantages Notes

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<tr>
<th>Technique</th>
<th>Advantages</th>
<th>Disadvantages</th>
<th>Notes</th>
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<tbody>
<tr>
<td>Crayola™ Cutter</td>
<td>• Can cut complex shapes accurately • Fast • Good for most paper types • Creates good feathered edges on thin papers</td>
<td>• Cannot use on light table • Minor feathering on many papers • Wetting perforation allows for more feathering</td>
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<tr>
<td>Needle</td>
<td>• Can cut complex shapes by perforating • Fast when scoring thin papers • Can create feathered edges when scoring thin papers • Can use on light table</td>
<td>• Very slow when perforating • Does not create an even feathered edge • Can be difficult to create fine edges when perforating • Wetting perforation allows for better feathering</td>
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<tr>
<td>Brush and water</td>
<td>• Can create feathered edges on all paper types • Fast when making straight lines • Can use on a light table</td>
<td>• Difficult and slow to cut complex shapes accurately</td>
<td>• Rest on thin papers</td>
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<tr>
<td>Scalpel</td>
<td>• Can cut complex shapes accurately • Fast when cutting straight lines • Can use on light table • Can be used on all paper types</td>
<td>• Slow if attempting complex shapes • No feathering</td>
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Needle
• Can cut complex shapes by perforating
• Fast when scoring thin papers
• Can use on light table
• Creates good feathered edges

Crayola™ Cutter
• Can cut complex shapes accurately
• Fast
• Good for most paper types
• Creates good feathered edges on thin papers

Brush and water
• Can create feathered edges on all paper types
• Fast when making straight lines
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Scalpel
• Can cut complex shapes accurately
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Needle
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• Fast when scoring thin papers
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Tips
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