

## A Cut Above: The Crayola Cutter as Conservation Tool

### 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 time necessary to do so. The Crayola Cutter was then used in three case studies: making an inlay for a drawing, creating a fill for a complex loss in an etching, and making hinges.

The following is a summary of the findings of these tests and demonstrates how the Crayola Cutter is an effective new tool for paper conservators.

### COMPARISON WITH CURRENT TECHNIQUES:

How does the Crayola Cutter measure up to other current practices? The Crayola Cutter was tested against three common tools currently employed by conservators: scalpel, brush and water, and needle. All methods were evaluated for their speed, ease of use, effectiveness on various paper thicknesses, and ability to feather edges. The results are organized in table 1.

### CASE STUDIES

#### 1. Inlay

The time it takes to create an inlay is significantly decreased by using the Crayola Cutter instead of another tool to cut and feather an inlay paper. First, the outline of a drawing is traced onto the inlay paper. Next, the Crayola Cutter is used to follow the traced line to create a perforated outline. The perforated line can easily be pulled apart to release the inlay. Moving the stylus at a fast, consistent speed creates wider perforations and more feathering. See figures 2–5.

#### 2. Fills

The Crayola Cutter can be used to create a variety of fills for losses ranging from simple to complex in works on paper. In this case, the precision of the Crayola Cutter allowed a fill to be cut quickly and easily for a small, complex loss. See figures 6–11.



Fig. 1. The Crayola Cutter

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Technique	Advantages	Disadvantages	Notes
Crayola™ Cutter	<ul style="list-style-type: none"><li>•Can cut complex shapes accurately</li><li>•Fast</li><li>•Good for most paper types</li><li>•Creates good feathered edges on thin papers</li></ul>	<ul style="list-style-type: none"><li>•Cannot use on light table</li><li>•Minor feathering on many papers</li></ul>	<ul style="list-style-type: none"><li>•Wetting perforation allows for more feathering</li></ul>
Needle	<ul style="list-style-type: none"><li>•Can cut complex shapes by perforating</li><li>•Fast when scoring thin papers</li><li>•Can create feathered edges when scoring thin papers</li><li>•Can use on light table</li></ul>	<ul style="list-style-type: none"><li>•Very slow when perforating</li><li>•Does not create an even feathered edge</li></ul>	<ul style="list-style-type: none"><li>•Can be difficult to create fine edges when perforating</li><li>•Wetting perforation allows for better feathering</li></ul>
Brush and Water	<ul style="list-style-type: none"><li>•Can create feathered edges on all paper types</li><li>•Fast when making straight lines</li><li>•Can use on a light table</li></ul>	<ul style="list-style-type: none"><li>•Difficult and slow to cut complex shapes accurately</li></ul>	<ul style="list-style-type: none"><li>•Best on thin papers</li></ul>
Scalpel	<ul style="list-style-type: none"><li>•Can cut complex shapes accurately</li><li>•Fast when cutting straight lines</li><li>•Can use on light table</li><li>•Can be used on all paper types</li></ul>	<ul style="list-style-type: none"><li>•Slow if attempting complex shapes</li><li>•No feathering</li></ul>	

Table 1.



ABOVE, LEFT TO RIGHT  
Fig. 2. Following the traced line with the Crayola Cutter to create a perforated outline of the drawing  
Fig. 3. Pulling the perforated line apart to release the inlay  
Fig. 4. Pasting up the edge of the drawing with wheat starch paste before attaching it to the inlay  
LEFT  
Fig. 5. The drawing adhered to the inlay





Fig. 6. An etching with an irregularly shaped loss in the upper right quadrant



Fig. 7. A detail of the loss, recto. A template, made by tracing the loss onto polyester film, was used to make an outline of the fill to be cut from a thin western laid paper



Fig. 8. Following the pencil line with the Crayola Cutter to create a perforated outline



Fig. 9. The fill after it has been pulled away from the rest of its sheet



Fig. 10. The fill adhered to the print with wheat starch paste



Fig. 11. A detail of the fill, recto. The edges of the fill were pared down and feathered further using water and a needle





Fig. 12. Using the Crayola™ Cutter to create a series of perforated lines on a medium-weight Japanese paper to be used as detachable hinges

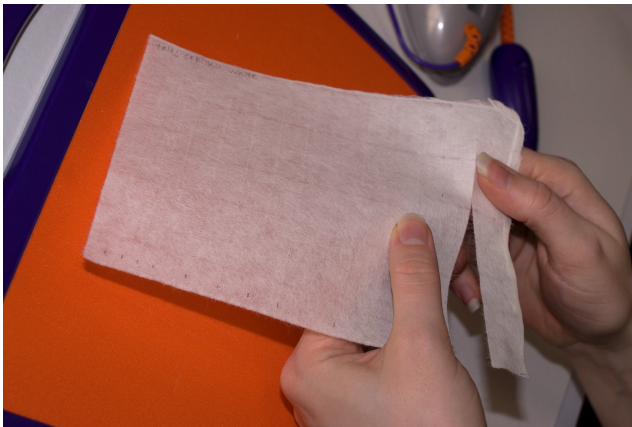


Fig. 13. Pulling one of the perforated lines apart

### 3. Hinges

Hinges made from a variety of papers can be created quickly using the Crayola Cutter. Both feathered and non-feathered edges are achievable depending on the speed at which the stylus is drawn across the sheet. See figures 12–13.

### TIPS

1. If a larger cutting surface is required, a sheet of Volara foam over a hard surface works well as a substitute. The Crayola Cutter does not perform as well directly 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 wet brush helps to pull the shape apart from the paper and a needle may be used to increase feathering as desired.

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