

## TECHNIQUES FOR EMULATING TEXTILES: GOLD AND ITS ALTERNATIVES

Lesson Plan

16-Adult



From left to right: Giotto, *Madonna and Child*, tempera and gold on panel, ca. 1320-1330 (National Gallery of Art, Washington DC); Taddeo di Bartolo, *Madonna and Child*, tempera and gold on panel, 1410 (Philbrook Museum of Art, Tulsa).

### Summary

Throughout the ages, artists have come up with a variety of techniques to emulate the elaborate designs and embellishments found on textiles worn by religious and civic figures of great importance. These costly fabrics often incorporated gold threads and designs. Painters often used gold leaf or simulated gold threads found on expensive fabrics with illusionistic painting techniques. Examples of the use of gold leaf can be found in Giotto's *Madonna and Child*, *The Creation of Eve* by Maestro Bartolomé, and *Madonna and Child* by Taddeo di Bartolo. In this lesson participants will learn to recreate these textiles using mordant gilding and *sgraffito*. These techniques will also be contrasted with approaches used by northern oil painters of the 15<sup>th</sup> and 16<sup>th</sup> centuries.

**Age group:**

16 to adult.

**Length of lesson:**

3 lessons (300 minutes total).

**Objectives:**

- Introduce the students to the Kress Collection.
- Deepen the student's understanding of how Old Masters emulated textiles.
- Enable creative exploration and discovery.

**Materials:**

- A projector.
- A screen.
- Black chalk or 4B pencils for each participant.
- A metal stylus for each participant.
- Two 8x8 in. prepared wooden panels (purchased with ground already applied) for each student. See the section on [ground preparation](#) on this website if you wish to prepare the ground yourself.
- Half of the panels should be prepared with red bole ahead of time. (see the section on [gilding](#) on this website)
- Blue, red, and yellow ochre egg tempera paint. See the section on [egg tempera paint](#) on this website.
- Materials for gilding (see [gilding](#) on this website)
- Brushes for each participant.
- Quick setting gold size. A synthetic modern size such as Wunda Size will be easiest.
- Cotton balls.
- Small round sable brushes.

**Lesson Day 1:** (40 minutes)

1. Explain with a slideshow how Giotto used mordant gilding to create the embellishment of the Madonna's mantle (See the reconstruction of the *Madonna and Child* on this website). Compare it with Maestro Bartolomé's *The Creation of Eve*.
2. Introduce to the students the *sgraffito* technique by showing them some examples of the *Madonna and Child* by Taddeo di Bartolo. Explain the technique using a slideshow.

**Lesson Day 2:** (120 minutes)

## Samuel H. Kress Reconstruction Project

- 1 Ask the participant to draw a sketch of the figure of the Madonna from the painting *Madonna and Child* on two different prepared panels. These can be pre-prepared by the instructor ahead of time.
- 2 The students will apply blue and black tempera paint to the mantle of the Madonna on one panel (Panel A)
- 1 The students should mordant gild the areas to receive *sgraffito* on panel B. When the mordant is almost dry, students will apply gold leaf and press it into place with a cotton ball.
- 3 Explain to the participants how this differs from water gilding (which is too difficult to master for the present workshop). Allow this to dry overnight

### **Lesson Day 3:** (120 minutes)

- 1 The students will brush away the excess of gold leaf from panel B.
- 2 Students will draw the design on the edge of the mantle of the Madonna on panel A using chalk.
- 3 Students will apply gold size to the chalk design on panel A.
- 4 When the mordant is almost dry, students will apply gold leaf and press it into place with a cotton ball.
- 5 Ask the students to add red tempera to the gilded section of panel B. When the paint is dry, students should draw the design into the tempera paint (scratch away) using a stylus to reveal the gold underneath.
- 6 Ask the student to brush away the excess of gold leaf from panel A. The decoration of the border of the mantle should be gilded.



Detail of Giotto's *Madonna and Child* showing the mordant gilding.



Detail of Maestro Bartolomé's *The Creation of Eve* using sgraffito (or estofado)

combined with incised lines.



Detail of Maestro Bartolomé's *The Resurrection* showing the emulation of gold using oil paint.



Detail of Taddeo di Bartolo's *Madonna and Child* showing *sgraffito* combined with punchwork.

## **Glossary:**

**Gilding:** The technique of applying metal leaf or powdered metal as a pigment to the surface of a panel. Gilding was commonly done with gold foil, although other materials were also used.

**Ground:** A foundation layer used to prepare a support material (panel or canvas) for the application of paint. Grounds provide a smooth, uniform, and nonporous surface.

**Panel:** Any flat, rigid support, usually made of wood, prepared with ground layers for painting upon. Until the adoption of canvas, most movable paintings in Europe were painted on panel.

**Sgraffito:** A technique in which paint is applied over gold or silver leaf and then partially scraped away.

## **Resources:**

Pre-primed gesso panels: <http://www.truegesso.com/main2-13.html>

*Cameo: Conservation & Art Materials Encyclopedia Online*, last accessed August 22, 2013, <http://cameo.mfa.org>.

Cennini, Cennino D'Andrea. *The Craftman's Handbook*. Translated by Daniel V. Thompson Jr. New York: Dover Publications, 1933.

Dunkerton, Jill, Susan Foister, Dillian Gordon and Nicholas Penny. *Giotto to Dürer. Early Renaissance Painting in The National Gallery*. New Haven and London: Yale University Press, 1991.

Kirsh, Andrea and Rusting S. Levenson, ed. *Seeing Through Paintings*. New Haven and London: Yale University Press, 2000.

*Oxford Art Online*, last accessed August 22, 2013, <http://www.oxfordartonline.com>.

[Reconstruction of Taddeo di Bartolo's \*Madonna and Child\*](#)

[Reconstruction of Giotto's \*Madonna and Child\*](#)

[Reconstruction of \*The Creation of Eve\*](#)