

Author: Melchiorre Gioja  
Title: Nuovo Galateo (volumes 1 and 2)  
Imprint: 1830  
Dimensions (binding): 14.8 cm x 9.9 cm x 3.5 cm  
Dimensions (text block): same (boards missing)  
Collection: Kilgarlin  
Examination Date: 9/9/07  
Treatment Date: September – December 2007  
Conservator: Sarah Norris  
Instructor: Chela Metzger

### **Treatment Objective**

The goal of this treatment is to explore disbinding, washing, bleaching, sizing, and guarding in order to learn new techniques on a book discarded from the UT Library System. The volume will then be re sewn and rebound.

### **Background**

Melchiorre Gioja (1767 – 1829) was an Italian author who wrote on topics of philosophy and political economy. Worldcat does not show any other copies of this book published in Italian in 1830. It lists editions printed in 1802, 1820, 1827, 1829, 1832, 1833, 1836, and 1845. Ten copies from these various printings are held in US institutions. RLIN also shows ten copies of the book, one of which was printed in 1830 (held at the University of Pennsylvania.) In the listed editions, it seems common that the two volumes were bound together and that the book was relatively small (14 – 15 cm height) in size. The publisher of the 1832 edition was Lugano, Ruggia, e c. , and the publisher of the 1833 edition was Lugano: Tipografia Ruggia e C.

### **Condition**

**Binding:** The sections are sewn two-on on sawn-in cord supports. The boards and spine covering are missing. Several strips of deteriorated leather remain adhered to the spine.

**Text block:** The text block is made of flexible, handmade paper, which displays some foxing, staining, tears, and accretions. This paper is cream colored, approximately 70# in weight, and moderately textured. The remaining endpapers are thicker and stiffer than the text block paper; they are creased, and display losses and grime. The text is printed in black letterpress printer's ink with visible type impression.

The text block features gentle rounding and backing, which has remained roughly symmetrical. Deteriorated, stuck-on, machine-made cloth endbands remain at the head and tail of the spine, but no longer overhang from the spine's edges. The spine shows evidence of adhesive consolidation, a paper lining, and a leather covering, but the remnants of all three layers are chipped and brittle. Adhesive consolidation has failed and the text block displays multiple preferential openings. The head, tail, and foreedge are all very evenly cut, with some abrasion visible at the head and tail.

Five sawn-in indentations appear in the spine; three are for cord supports at single sewing stations and two are for kettles at the head and tail. The supports are made of

hemp cord and the sewing thread is thin hemp or flax, presumably s-twist. The weakened sewing is all-along and original.

### **Treatment Proposal**

As a teaching treatment, the goal is to try several different techniques on one volume:

1. Disbind.
2. Wash portions of text block.
3. Bleach several folios with sodium borohydride.
4. Size one section with gelatin.
5. Rebuild damaged folds.
6. Re-sew.
7. Make boards and endbands.
8. Re-cover.
9. Explore tooling and labels as possible.

### **Materials Used**

- Methyl cellulose (MC) 2.5% dispersed in hot then cold distilled water (Fisher 4000 cps.)
- Ethanol
- Polyester sheets (Remay)
- Saturated calcium hydroxide solution for alkaline bath.
- Sodium borohydride 1% solution for bleaching.
- Gelatin bath (1%) for sizing.
- Usumino tissue (Hiromi)
- Usui-useumino tissue (Hiromi)
- Tengujo tissue (Hiromi)
- Machine-made Kozo tissue (Hiromi)
- Irish linen thread
- Three-strand linen cord
- Handmade paper
- Cotton textile
- Liquitex Professional Acrylics
- Lascaux 498HV (Talas)
- Colored pencil
- Alum-tawed leather
- 120-grain sandpaper
- 10 point lignin-free board
- Blue museum board
- Elvace PVAc 45675 (Poly vinyl acetate adhesive)
- Precipitated wheat starch paste mixed 1:4 with distilled water, cooked 20 minutes (Colophon)
- Calfskin leather
- Marbled paper
- Small piece of line and double line tools for blind tooling

- Lascaux spray fixative

**Treatment Steps** (total time: 52 hours)

1. Removed animal glue from spine with methyl cellulose poultice.
2. Disbound volume.
3. Washed sections 2 - 7 (skipping front matter.) Pre-wet with 50/50 ethanol/water and used two 20-minute baths conditioned to pH 8.0 with calcium hydroxide. Dried on polyester sheets on drying rack in open air.
4. Washed sections 8 - 15. Pre-wet with 50/50 ethanol/water and used two 20-minute baths conditioned to pH 8.0 with calcium hydroxide. Washed front matter separately and separated pages in bath. Dried on polyester sheets on drying rack in open air.
5. Sized section 5. Placed in 1% warm gelatin bath for five minutes. Dried on polyester sheets on drying rack in open air.
6. Bleached section 2 in 1% sodium borohydride bath for 10 minutes. Rinsed section in water bath conditioned with calcium hydroxide to pH 8.0. Dried on polyester sheets on drying rack in open air.
7. Guarded 22 sections with ¼" strips Usumino tissue and dry wheat starch paste.
8. Rebuilt spine folds in section 10 with one layer Usui-usumino and one layer Tengujo tissue, adhered with dry wheat starch paste.
9. Lined front endpapers (first folio of textblock) with Usumino tissue and dry wheat starch paste. Dried under weight 1 day.
10. Rebuilt folds and stubs in front matter with Usumino tissue and dry wheat starch paste.
11. Resewed text block with linen thread on three, three-strand linen supports. Attached new handmade-paper double-folio endpapers and followed original two-on sewing pattern.
12. Built new endbands with linen cord core and cotton textile toned with acrylic paint. Adhered to text block with Lascaux.
13. Trimmed endpapers.
14. Applied raw umber colored pencil to new endpaper edges for integrated appearance.
15. Cut alum-tawed spine lining and adhered to spine with Lascaux. Sanded with 120-grain sandpaper to reduce support profile.
16. Built new boards with two layers of 10-point board sandwiching a museum board core, adhered with PVAc.
17. Cut boards to size.
18. Punched and cut boards for lacing and laced them onto the text block.
19. Cut brown calf spine leather and pared.
20. Covered spine and boards with pared calf adhered with wheat starch paste for quarter-style binding. Emphasized cap edges and let dry overnight.
21. Cut marbled paper and adhered to boards quarter-style with wheat starch paste mixed with a small amount PVAc. Dried under weight overnight.
22. Cut outer endpapers into pastedown stubs. Cut second endpapers into pastedowns with even squares on the boards. Adhered stubs and then pastedowns on both boards with wheat starch paste mixed with a small amount of PVAc, letting each adhesion dry with the board open for 1 hour.

23. Toned Usumino tissue and adhered two layers with dry wheat starch paste to visually fill losses on original front endpaper. Adhered fills over Usumino lining applied in step 9.
24. Opened book a few pages at a time to introduce controlled creases to new leather linings.
25. Blind tooled leather on boards and spine.
26. Created label template in Photoshop using Century Schoolbook bold font (MS Word) and late 18<sup>th</sup> century Italian decorative elements scanned from Updike.<sup>1</sup> Printed on laser printer.
27. Xeroxed label template onto handmade, cream-colored paper. Fixed ink with Lascaux spray fixative applied on both sides of paper.
28. Cut labels to fit spine and lined with machine-made Kozo tissue and small amount PVA.
29. Sanded spine with 120-grain sandpaper for adhesion.
30. Adhered labels with Lascaux.

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<sup>1</sup> Updike, Daniel Berkeley. *Printing Types: Their History, Forms, and Use*. 2001: Oak Knoll Press. Plate 132.