

How can you resist?

Blue and White Resist-Printed Textiles

by Linda Eaton

Blue and white is a color combination that has been popular for centuries, particularly for ceramics and textiles. While the history and technology of blue and white ceramics are well understood, a group of European and American blue and white resist-printed textiles remain somewhat of a conundrum.

Often referred to as “indigo resist” or “reserve,” eighteenth-century American newspaper advertisements indicate that these fabrics were then known as “paste work.”¹ The term refers to the technique most commonly used in Europe to create the designs, which involves block printing a paste, generally made from pile clay, gum arabic, and copper sulfate, on the parts of the fabric intended to remain white, and dipping the cloth into an indigo dye vat. Other resist techniques include shibori (where fabric is knotted, stitched, tied, twisted, and/or folded to create a pattern) and batik (a South-East Asian technique that uses wax rather than paste to resist the dye).

Printing with a resist is a very old technique of applying pattern to cloth; an example of indigo resist-printed cotton from India excavated from Fostat, in Egypt, has been dated to the second half of the tenth century. Surviving examples and documentary evidence suggest that resist dyeing with indigo was introduced in Europe in the seventeenth century, and by the eighteenth century was common throughout present-day Germany, Hungary, Poland, the Czech Republic, Switzerland, Holland, Sweden, France and England. In the mid-nineteenth century, when technological and chemical advances made multicolored chintz widely available, indigo resists became associated with conservative, rural folk traditions. Today only a handful of artisans in Europe continue to use traditional resist techniques, although the designs characteristic of these fabrics are once again in fashion for both furnishings and clothing.

Early twentieth-century collectors used these blue and white fabrics to decorate their homes. Examples also found their way into many museum collections. A large number of indigo resists were found in the Hudson River Valley, and, due to their often naïve design, were thought to have been printed in America. In 1956, when a group of curators, designers, collectors, and dealers came together at the Cooper Union Museum to pool their knowledge about blue resist, a 1766 British excise mark on a set of bed hangings belonging to the Albany



Curtain from a partial set of bed hangings from the late 1700s. Scholars have associated designs with large areas of white ground with England. The same animal and plant motifs appear in combination with different designs on two other fabrics in Winterthur's collection. Museum Purchase. (1966.124.5)



This late-1700s design, with large areas of very dark indigo, has been associated with Rouen, a major center of paste work in France. Museum Purchase. (1967.106)

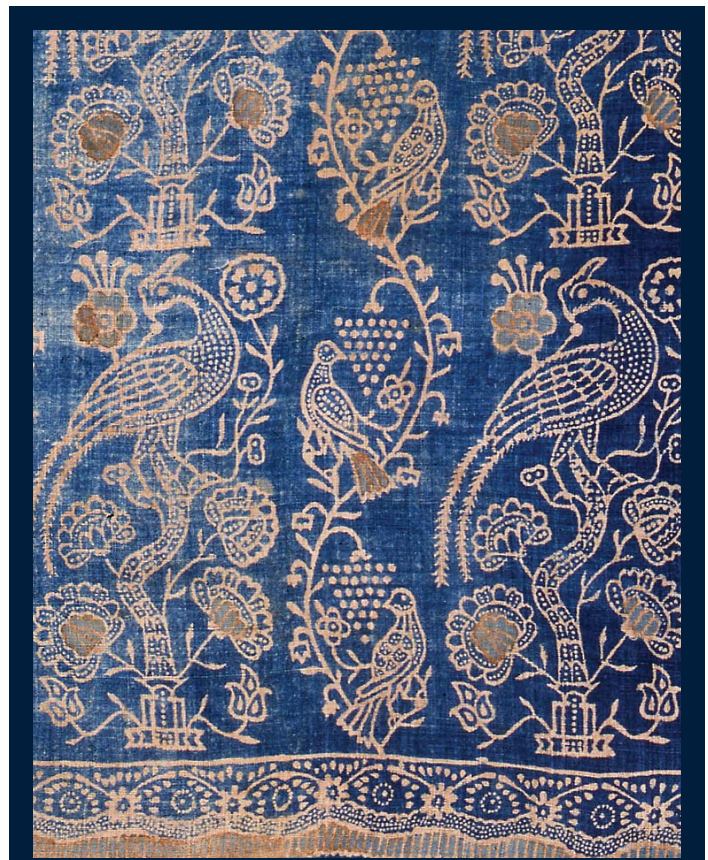
Institute of History and Art convinced most participants that the blue resist fabrics found in this country were imports.²

Recent research indicates that the cultural and geographical origin is a bit more complicated. Newspaper advertisements document the presence of artisans in America printing blue and white patterns from the 1740s through the 1790s, and include men of German, Scots and English descent. These same sources also show that “paste work” fabrics and handkerchiefs were being imported from England, as well as Scotland and Silesia.³ While some resist-printed fabrics can be linked to a country or region of origin through makers’ marks or design, attributions for many remain unclear. The problem is exacerbated by the fact that textiles were traded extensively between all parts of Europe and America. A few designs have been found in English sample books but few, if any, examples of the fabrics seem to have survived in that country.⁴ The lack of evidence of the use of this type of fabric in Britain as well as the international nature of the trade makes documenting the origins of surviving examples very difficult.

A question that has long perplexed those interested in indigo resists from the eighteenth century is the technique used to print two shades of blue. The standard explanation is that areas intended to be either light blue or white were printed over with paste and dipped in the dye vat a few times (it takes up to ten dips to achieve a dark blue). The cloth was then washed and re-printed with paste only where it was intended to be white. The dark blue is therefore dipped more times than the lighter blue areas.⁵ Many examples of resist designs with the sharp edges separating the two shades survive, suggesting they were printed by this method. But other examples in Winterthur’s collection suggest that the light blue color might have been achieved by dyeing the cloth a dark blue, then bleaching out areas by hand with a brush or similar tool. Plans are afoot to attempt to mimic this process which, if successful, would move us one more step towards solving the puzzle of paste work. [AFA](#)

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1. See advertisement placed by Peter R. Livingston in the *New-York Mercury* May 23, 1763. *America’s Historical Newspapers*, <http://infoweb.newsbank.com.proxy.nss.udel.edu>. The term “paste work” appears in newspaper advertisements in the 1750s. By the 1780s the term is used for both textiles and jewelry.
2. The excise mark is illustrated in Florence M. Montgomery, *Printed Textiles: English and American Cottons and Linens 1700–1850*, The Henry Francis du Pont Winterthur Museum, 1970,), 199. The issue continued to puzzle scholars into the 1970s, see Florence H. Pettit, *America’s Indigo Blues: Resist-printed and Dyed Textiles of the Eighteenth Century*, (New York: Hastings House, 1974).
3. For Scotch paste work see advertisement placed by John Ray in the *New-York Gazette*, April 13, 1761. For Silesia paste work see advertisement placed by Gilbert and Lewis Deblois, *Boston Evening Post* December 12, 1755. Handkerchiefs are mentioned in the advertisement placed by Gideon and John Wanton in the *Newport Mercury*, October 22, 1764. <http://infoweb.newsbank.com.proxy.nss.udel.edu>.
4. Mary Elizabeth Gale, “Indigo-Resist Prints from Eighteenth-Century America: Production and Provenance.” Master’s thesis, University of Rhode Island, 2001.
5. See Thomas Cooper, *A Practical Treatise on Dyeing and Callico Printing* (Philadelphia: T. Dobson, 1815). Kyle Hassler attempted to reproduce this technique with limited success. See Kyle Hassler, “Printing Procedures for the Historic American Blue Resisted Cloths.” Master’s thesis, University of Delaware, 1986.



Detail of a curtain from a partial set of bedhangings, possibly Berks County, Pennsylvania, late 1700s or early 1800s. A handkerchief with the same border pattern is in a private collection. Gift of Mr. & Mrs. Richard Flanders Smith. (1985.162)



This detail shows the application by hand of either a paste resist or some form of bleaching agent with a brush. Family tradition records that this fabric was used in the Joshua Smith house in Hauppauge, New York. Gift of Mr. Charles E. Rockwell, in memory of Marcia Lawrence Rockwell. (1980.109.2)