

## *Beneath the Surface*

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Plant pounding, reverse appliqué, free-motion stitching, natural dye

**Purpose.** A particularly cold winter had me pondering the historical quilted petticoat. Created as both a thermal undergarment and decorative skirt (Cunningham & Cunningham, 1992), temperature-controlled environments have removed the need for such skirts. However, with energy consumption awareness growing, an underlying purpose was to create a thermal and decorative skirt that applied and expanded on methods in my repertoire (plant pounding, free-motion stitching, natural dyeing) while exploring techniques new to me (reverse appliqué).

**Contextual Review.** Chanin's (2012) reverse appliqué method involves stenciling a pattern with paint on a cotton jersey top layer, hand-stitching around the pattern to a backing layer, then cutting away some of the shape within the painted stencil revealing the backing fabric. This technique inspired me to combine my knowledge of plant pounding and free-motion stitching to create a textile revealing the print through reverse appliqué. This transfer of plant imagery from direct and forceful contact has been explored aesthetically (Aycock, 1996; Flint, 2008; Haar, 2010/2011, 2011a, b; 2012, 2014; Martin, 2001; Rudkin, 2011) and for colorfastness properties (Haar & Doty, 2017; Rekebya, Salem, & Nassar, 2009). Free-motion stitching, embroidery, painting, sketching, or quilting is machine sewing with the feed dogs lowered, allowing the stitcher to control the stitch direction. From quilting, enhancing a painted design, to fully stitched cloth, this technique has been widely explored (Haar, 2004, 2008; Hollis Chatelain, n.d.; Walters, 2012).

**Process.** Plant pounding created the imagery on jersey knit (bamboo, cotton, spandex) that was pre-mordanted in an aluminum acetate aqueous solution. The piece was a reject from a previous plant bundle attempt. Plant parts of coreopsis varieties and Persian shield were sandwiched between the fabric and hammered using a soft faced hammer with a domed edge to extract the plant chromophores onto the fiber (Figure 1). This allowed for capturing both sides of the petal, the more intense top side, and subtler underside. The fabric was steamed to assist with fastness (Haar & Doty, 2017; Rekebya et al., 2009). Washing removed much of the Persian shield, most likely due to its anthocyanins; however, the color loss was more than expected from prior work on cotton print cloth, silk crepe, and silk shantung (Haar, 2011a, 2011b, 2012, 2014).

Undyed wool jersey knit was hand-basted in a five-inch grid to the plant pounded bamboo knit. The plant pounding and overall nature of the bamboo jersey contributed to dimensional change; thus, the basting not only served to prepare the layers for free-motion stitching but provided blocking to some of the stretched areas. Plant prints were outlined with two rows of free-motion stitching in orange thread. In order to see the print, the outline stitching was done from the backside of the bamboo knit. See Figure 1. The remaining space was free-motion stitched in a meandering stipple pattern on the wool knit face side. The reverse appliqué consisted of cutting

away the upper layer of fabric within the outline stitching to reveal the plant prints. The fabric was then washed to curl the cut edges of wool knit to further expose the print.

The jersey knit (bamboo, cotton, spandex) used for the garment top and pearl cotton used for the jacket embroidery were immersion dyed with cosmos and coreopsis petals using the pre-mordant method (Haar, Schrader, & Gatewood, 2013). The wool and nylon knit brown skirt hem pieces were dyed with an ‘all-in-one’ combined chestnut extract and mordant (Haar, Patwary, Doty, & Green, 2018). The skirt, top, and shrug jacket patterns used both drafting and draping methods. The shrug jacket fabric was a cotton warp sweater knit, and the hand embroidery a tied herringbone stitch (Barnden, 2003). Garment edges were both unfinished, to blend with the cut edge of the reverse appliqué and finished with facings and hems to create repeating horizontal elements across the garments.

Figure 1. Process of Plant Pounded Reverse Appliqué

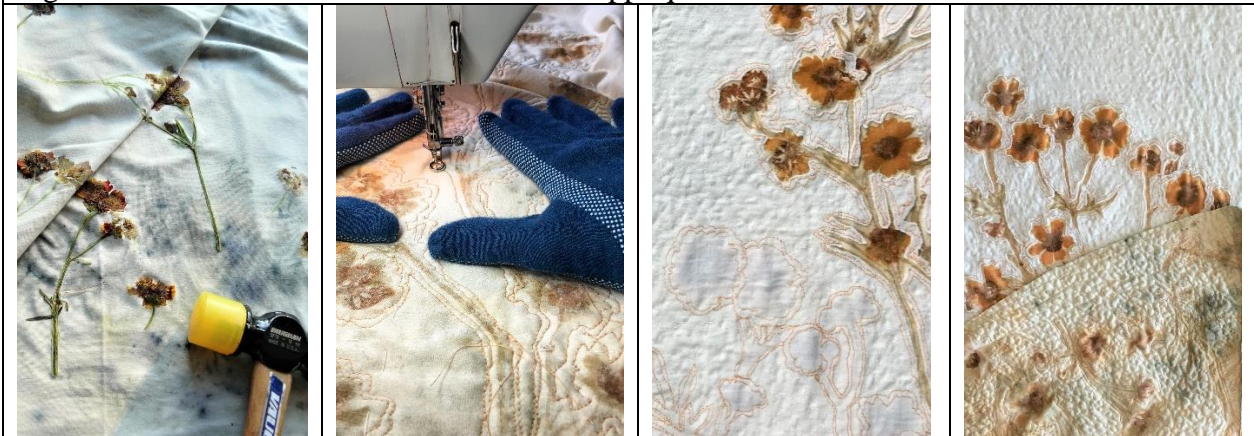


Figure 1. a) Plant pounding of coreopsis. b) Free-motion stitching from the reverse side with gripper gloves. c) Stitched and stitched-and-cut face side. d) Final face and reverse sides. Photos by Sherry Haar.

Contribution: Even though I had knowledge in both plant pounding (Haar, 2010/2011, 2011a, 2011b, 2012, 2014; Haar & Doty, 2017) and free-motion stitching (Haar, 2004, 2008), I grew in my application skills and understanding of how knit fabrics respond to these techniques. The coreopsis flower has a large seed head that when pounded, bursts across the fabric covering the petal print. To resolve this domination, while maintaining the plant’s natural appearance, I hammered from the outer edges of the petal inward and cut away half of the seed head. Color findings were that the red coreopsis and red centers of the yellow plains coreopsis, remained darker, but took on a khaki color. This color shift is similar to other red and violet plants that I have pounded or dyed with. My observations for plant pounding on knit were that the soft, relatively thick knit structure, compared to flat woven fabrics, readily absorbed the plant pigment. However, the bamboo jersey was not as dimensionally stable as woven plain weaves

and tended to stretch out of shape. It is recommended to analyze various knit structures and fiber types for color strength and stability.

The stable wool knit upper layer basted to the ‘stretched-out’ bamboo jersey along with free-motion stitching provided a means to block the bamboo jersey, which resulted in a dimensional (e.g., bubbly) appearance for the bamboo base and a relatively smoother surface for the upper wool fabric layer. See Figure 1.d. Washing the textile created a rolled edge that could be further explored by varying the amount of fabric from the cut edge to the stitching.

Reverse appliqué using free-motion stitching and surface cutting to reveal plant pounded prints was a means to explore Chanin’s (2012) stenciled reverse appliqué using methods in my repertoire to generate surface design. Plant pounding and free-motion stitching on knit fabrics added to my understanding of these techniques. The historical quilted petticoat inspired the project, the layered bamboo and wool knits provided thermal comfort, while the surface design conceptually portrays what is *beneath the surface* of winter’s frozen ground.

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