



Half Scale, Full Engagement: Uniting Art, History and Technology to Teach Patternmaking

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Keywords: Half-scale, Patternmaking, Art Deco, Pochoir

**Introduction:** In today's image rich, fast paced, electronically connected world, it can be difficult to create nuanced and complex projects that engage apparel students who are learning patternmaking skills. With this project we found that connecting with powerful images from another period can encourage student engagement. Introducing historical artifacts, discussing world and fashion history, and connecting to important art movements added depth to the experience. The use of custom made half scale dress forms introduced lessons about changes in the 'fashionable' body over time and how body shapes, silhouette and pattern shapes interact.

**Methods:** To engage freshman students in a beginning patternmaking class we created a project using art deco and pochoir art of the late teens and early 1920s. Students used half scale forms to drape silhouettes depicted in these graphic images. As an outcome, students also learned about an important time in both world and fashion history. The use of half scale forms allowed each iteration to take a quarter of the muslin and a fraction of the time necessary for full scale models, encouraging students to create multiple iterations to perfect fit and proportions of their models.

The project was initiated by a librarian who provided 85 images from the library collections of issues of *Gazette du Bon Ton* and *Vogue* published between the years 1917 and 1923, including work by Lepape, Brissaud, and Benito among others. The images ranged from detailed illustrations of couture fashions, to abstract creations inspired by fashion silhouettes. The images were graphically strong; sophisticated shapes were simplified due to the pochoir technique, a hand stenciling process. Each student chose one of the images. They then created the silhouette from their illustration using patternmaking and construction techniques of the period.

We created half scale dress forms for the project from a body scan that was modified to reflect the boyish figure popular in the late teens and early 20s. The forms were created from 1/2" laser cut foam slices, registered by threading onto dowels, and covered with a knit fabric. We flattened the bust area of some forms with an elastic bandeau styled after popular 1920s underwear. Materials for each form cost about \$20, and each took about 2 hours to cut and assemble.

The class initially discussed events in France and the US in this period; the end of WWI and the transition to peace. The effects of war on French couture designers, and the importance of the relationship between French fashion publisher Lucien Vogel and the American company Condé

Nast were discussed. To learn appropriate silhouettes, fabrics, and construction methods, students examined period garments from the university's historical costume collection. Patternmaking books from the period were also made available, and to understand the fashions generally available in the US students surveyed Sears and Roebuck catalogs from the period. A demonstration on draping a dartless torso pattern was conducted and recorded for the class. To make their final model students pinned sleeves and other tight areas in place by stabbing pins directly into the form, and edges were finished with a simple turn-and-stitch or surging. The idea was to create a silhouette with minimal sewing of the half scale garment.

**Results:** The project's success was visible through student energy and excitement while working with the historic materials and strong, graphic images. Initially most of the student work was not well proportioned, but they all corrected their work when shown how to judge the proportions, achieving a learning outcome of the project. Self-reported lessons learned from the project included greater knowledge of body and garment proportions and overall increased confidence.

We distributed a questionnaire to students to test results. Students commented they liked the long torso, which 'helps create a more elegant silhouette', and observed that the patternmaking techniques necessary to make this different body type look good are different from those used today. Students felt the graphic images gave them freedom to create their models. They appreciated working with the historic sources; as one student said they gave him a 'sense of the style and aesthetics of the period'. One student said she got the sense of how in this period the clothing 'celebrated the natural body while maintaining simplicity and modesty'. Feedback on the use of half scale was mixed. Students commented on the ease of seeing proportions; as one student said she could 'hold the form and really be able to engage with the proportions while looking at it all at once'. Most students mentioned both the economic use of fabric and the ease of making changes. Most students also commented on the need for greater precision, though one student said she liked the requisite precision. One student summed up the half scale experience as 'fun, but not as easy as expected. It forced me to work slower and pay attention to details.'

**Discussion:** The success of this project has inspired us to investigate graphic fashion images from other periods. We would also like to make resources available to institutions with no access to body scanning for similar projects by sharing files for cutting the slices for the 1920s form, or providing pre-cut slices at cost for those who do not have access to a laser cutter.

**Conclusions:** Overall we felt that this project was beneficial to the students, as they had the opportunity to engage in creative pattern cutting through investigation of a different era, body type, and methodology for making clothing. Students gained confidence and learned that current patternmaking methods and aesthetics are not the only way to produce fashionable clothing.