

Bat-wing Denim Dress

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Concept statement: This dress was made in response to a challenge among several design researcher/ educators to create original designs based on specific guidelines. By using three yards of denim as the primary fabric, we collaboratively established the main challenge to be avoiding traditional seam placement in an effort to spur creative pattern cuts; the seams on the garments should not mimic seams of a dress form. Additionally, we encouraged incorporating technology into the designing or making of the garment. Denim is one of the most worn fabrics in the world. How the researchers realized new and creative designs that use the familiar fabric but avoid the traditional seam placement was the main goal for the larger project.

Aesthetic properties and visual impact: The idea for my dress emerged from my associations of the denim fabric with western wear as well as from the nontraditional seam placement challenge. Vintage western shirts have “bat-wing” shaped yoke seams with scallops and points similar to the seams in this denim dress (Figure 1). The seams and edges are all topstitched with two rows of the golden hued thread found on most blue jeans today. The contrast color of the thread emphasizes the unique shapes of the seam lines and neckline. The denim was left raw, or unwashed, to maintain the crisp hand and uniform dark color.



Figure 1

Process, technique, and execution: Because of the seam placement challenge and to incorporate technology, I decided to do my designing and patternmaking exclusively using V-Stitcher, a 3D visualization program. This was a risk I assumed since I had not previously executed an original design exclusively using V-Stitcher. After importing basic bodice and skirt blocks from Modaris, I began drawing the new design lines along the front bodice. The process began to bring to mind Shingo Sato’s ribbon dress (Sato & Ericson, 2012) since I was creating new seam lines while trying to maintain the fit of the bodice. While working in V-Stitcher, I video screen captured the work as a way of documenting the design process. Figure 2 shows a visualization of the dress in the beginning stages of the pattern work. The video will provide insights into the progression of the design and decisions made for fit and aesthetic purposes. Using the 3D technology allowed me to work through ideas quicker than traditional pattern draping and sewing and also conserved materials. The software could

assemble the garment without seam allowance, but I knew sewing the lapped seams I designed would potentially be a challenge.

One half prototype was constructed in muslin to confirm the fit and sewing details. The pattern pieces were exported from V-Stitcher and imported into Adobe Illustrator to prepare for laser cutting. The lapping sequence of the seams was planned out so that every cut line and shape fit within the 18"x32" bed of the laser cutter; for example, the front skirt piece was not cut by laser since it exceeded the bed size. The side skirt pieces and waist pieces all lapped over the front skirt. To provide the support of a facing at the neckline and armhole areas, I fused two pieces of denim together and then laser cut the thicker piece. For the back opening along the left side back, denim was also fused prior to cutting along the edges where the zipper and snaps are placed.



Cohesion: The continuity of the scallops and points along all seam lines provides a cohesive look to the garment. The shapes are echoed in the neckline and armhole edges as well. The contrast stitching relates the dress to the plethora of denim garments in the market today. With the exception of the hem, all visible edges are laser cut, and all seams are lapped seams.

Significance, rationale, and contribution: Denim enjoys high consumer demand and many applied technological advancements, such as laser etching, are used to manufacture denim garments. Since the challenge for this design was to be innovative with seam placement, I utilized technologies new to me, laser cutting and V-Stitcher, to create the solution. Initially I limited myself to designing in V-Stitcher to learn the program better. I needed to go beyond simple tasks used in assignments given to students. Doing so pushed my creativity and presented me with many problems to solve using V-Stitcher. The problems I encountered may be similar to problems my students will encounter and I can pull from this experience to assist them. The added benefit to designing completely on the computer was discovered when I did video screen capture. The video serves as a much more thorough documentation of the design process than anything I have drawn and written in the past.

Originality and innovation: The innovative visual features of this dress are the original seam shapes and placements. Additionally, the fusing of two fabrics prior to laser cutting worked well as an alternative to sewing on a facing at opening and neckline edges. The two unseen innovations are the use of 3D software to design the dress and the video screen capture for documenting the process.

References

Sato, S., & Ericson, S. (2012). Transformational reconstruction. St. Helena, Calif.: Center for Pattern Design.

