

Water Prism

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Both origami and architecture are frequent inspirations for fashion designers when working with three-dimensional shape (Hodge & Mears, 2006). Trompe l'oeil is a technique used by other artists to create compelling surface designs. *Water Prism* was designed to take advantage of fold lines seen in some origami shapes and to combine it with digital printing to develop surface design engineered to correspond to the 3D shape. Added inspiration came from architecture, in particular the Yokohama Pier Port Terminal. Experimentation with garment shape initially evolved through folding paper and placing the pieces on a half-scale dress form to evaluate proportion, line and balance. The folds were based on the folded lines of the terminal. While observing the shapes, I determined that actually seeing the fold lines enhanced the movement of the eye on the surface (Figure 1).

In evaluating possible surface designs, I played with the interaction of 2D and 3D design in several ways, including using light and dark to enhance perspective. The printed image is of water's surface with light passing through from a lit floor. Pattern pieces were exported to Photoshop® and black origami fold lines placed. The water imagery was placed within the folds and then, to further enhance the 3D effect, the top edge of the folds was lightened to create increased impact of the perspective. The bodice was designed to manipulate the surface design with use of the same shading to give it dimension while remaining 2D rather than folded. Folded fabric pyramids were added as a final decoration on the upper front bodice (Figure 2). The design was digitally printed onto cotton sateen, folded and stitched on the lines, with a light batting in the skirt. The overall use of line and print creates a dynamic vision of 2D and 3D



Figure 1. Front view

integration that draws the eye from the straight lines of the skirt across diagonals on both bodice front and back, thus enhancing visual perspective.



Figure 2. Front Detail

Hodge, B., Mears, P., & Museum of Contemporary Art (Los Angeles, Calif.). (2006). *Skin and bones: Parallel practices in fashion and architecture*. Los Angeles, CA: Museum of Contemporary Art.