



Dawning Wave

Kendra Lapolla and Sarah Tao, Kent State University, Kent, OH, USA

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The Environmental Protection Agency (EPA) Office of Solid Waste anticipates a continued growth in textile waste and identified more than 28 billion pounds of clothing and textiles are wasted in the United States (EPA, 2014). This equals almost 91 pounds of clothing and textiles per person per year (EPA, 2014). One way to discourage this waste is to encourage textile upcycling through personal creativity. Hawley (2006) established the greatest opportunity for growth in reclaimed textiles is to transform used apparel into new products. The purpose of this design is to transform a used textile product into a wearable piece of clothing. In an attempt to prevent more textiles from ending up in a landfill, curtains inherited from a family member were used in this design process to create something wearable. This work builds on past design research such as Ohrn-McDaniel's T-shirt Dress (2014) and Business or Craft (2013) in which upcycling is a main objective.

Inspiration for this design came from Japanese architect, Toyo Ito, who designed a façade that mimics sea waves in a building located in Barcelona, Spain. The design process for this garment started with exploring wave tuck techniques with stripes. The intention was to mask the stripes through creation of a new façade that would have similar movement to Ito's. The curtains were cut in individual strips so that when folded, there would be one white side and one colored side. The individual strips were stabilized with interfacing and ironed in halves. Yellow strips were sewn together flat as an outline in order to develop a frame for the garment. Through experimentation, the strips were twisted in different repetitive directions to create a pattern design for the garment. The form of the garment was constructed by sewing each individual strip on to the frame of the garment. The remaining fabric from the curtain was dyed and used as a lining for the outside structure.

Findings from this design process contribute to the growing design research using upcycled materials. Furthermore, this design identifies opportunities to upcycle waste by dramatically altering the surface of the textile. Folding and twisting the textile in this design was a way to disguised the original stripe pattern. As textile waste continues to grow this could have greater implications for designers looking to source fabric. With an increasing amount of textiles available for upcycling, designers can be challenged to find new ways to considerably alter the surface design.

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