Upcycling approach to designing to highlight traditional weaving and knitting techniques.

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Contextual Review and Concept

Our co-design research was intentionally focused on balancing looking forward to the future while looking backward over the past. In order to protect our future, designers need to put more emphasis on sustainable practices that make good use of resources (Gam, Cao, Farr, & Heine, 2009). However, sustainability as a design approach often lacks the visual impact needed to entice wearer investment in purchase and use. Upcycling is a promising contemporary sustainability strategy for converting waste materials innovatively into new products with better quality instead of just reusing them (Aus, 2011). Looking to the past in apparel and textile design nostalgically looks to the Arts and Crafts Movement of the 1860-1910 period instigated by Willian Morris where traditional hand structuring of textiles and apparel were honored techniques (Parry, L, 1983). Thus, the purpose of this design process was to create an original design that integrated upcycling of used textiles with use of traditional crafts for textile and apparel structuring.

Design Process connecting Visual and Functional Goals

As designers, we were intrigued to upcycle a collection of fuchsia and orange t-shirts (65% cotton/35% polyester) discarded as resources for an aesthetics course and a grey discarded sweater (72% cotton/11% polyester/10% nylon/6% acrylic/1% spandex. We chose to employ traditional textile structuring techniques of weaving and knitting as our way to honor the past. Our technique resource was the most used textiles textbook by Kadolph and Marcette (2017). The grey sweater was disassembled back to individual yarns that were inter-looped together through knitting a purl stitch into trim. To create sufficiently long trim, we had to innovate a 60 inch circular knitting device. The fuchsia t-shirts were cut into one-inch strips to serve as weft yarns while the orange t-shirts were cut into one half inch strips to serve as the warp yarns. We used a cork table and pushpins as a loom alternative to secure the warp yarns and interlaced the weft yarns by hand. The garment was woven as one piece with draping technique used to sculpt the silhouette to the body contours through differentially tightening the weft yarns. Finally, the garment was secured to the body in three ways. The front bust area was fastened snuggly to the body contours with three sets of buckles hidden by the draping weft yarns. The hip area was finished by attaching a skirt to the hipline trim area. Finally, the dress was hung from the shoulders with knitted trim straps.

In selecting the color, shape and placement of upcycled components, visual impact was critical to decision decisions. We wanted the grey yarn to lead the observer's eye through the design to create a visual whole. Therefore, the warp yarns are composed of grey yarn twisted around fuchsia strips as are the edge trim, shoulder straps and fringe. On the other hand, the orange color was very advancing, therefore it was kept to a smaller proportion so to act as small focal points that provide accent only.

While the dress is visually fanciful, it is functionally quite comfortable since created of textiles with a high cotton content. The shoulder straps and buckles make the garment secure to the body and therefore allow much body movement. Going dancing would be a

great way to show off the movement of the fringe.

Cohesion/ Design Contribution and Innovation

This co-design design process and design are an example of how sustainability can be a reminder to occasionally slow down the design process and take time to treasure not only the resources we are reusing but also the techniques used to create the design. The contribution is therefore both visual and philosophical. We build the future on the foundation of the past.

References

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