

An Exploration of Production Efficiency and Standardization in Upcycled Designs

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Upcycling is a sustainable design approach that provides designers with the opportunity to reassess the value of a discarded material. While designers can remanufacture fragments to create original garments by making use of this post-consumer waste, one challenge is to standardize one garment into a set or series as conventionally designed and produced clothing since secondhand material supplies are irregular and quantities unpredictable (Gwilt & Rissanen, 2011). By using secondhand men's tailored jackets and neckties to create an eveningwear collection, this design research explores the use of upcycling, combined with cultural inspiration, to further determine the potential of production efficiency and standardization of these garments. Furthermore, all the fabrics from the original jackets have been utilized to create the new designs, despite small trimming for appropriate fit, in order to prevent any further textile waste.

The limitation and repetition of structure and materials of the tailored men's jackets allowed the researcher to focus on clever use of construction and details, such as plackets and lapels. For the collection, elements of the western men's suit jacket, such as the lapel, was reapplied and subtly manipulated into the dresses to form a unique combination of different cultures and identities. The silhouettes of all the designs were motivated by a traditional Chinese dress style, *Qipao*. The use of tailored men's jackets and ties, items traditionally representing status and power, distinctively contrasts with the *Qipao* style, which characterizes women's modesty, gentleness, and beauty.

The design process began by deconstructing second-hand tailored men's jackets that were made of wool fabrics. Some worn-out or damaged areas on those jackets were carefully avoided or stitched into the seams. Two jackets were typically utilized per each of the new dresses. The interesting elements, such as the lapel and pocket, were kept as whole components for reuse. The process required analyzing the amount of available fabric and existing pattern pieces from the two jackets in order to make effective use of the materials and form the desired new looks. To minimize textile waste, nearly 100% of all the pieces from the men's jackets were utilized for each of the new designs.

This design research demonstrates a reassessment of the value of waste materials, while also encouraging the consideration of cultural inspiration and how the two concepts can be combined into upcycling. In addition, while designers repurpose post-consumer waste to create innovative designs, the notions of consistent fashion collection need to be considered. Since most tailored men's jackets have a repeated structure, systematized sizing system, and similar materials, they allow the researcher to continuously create cohesive pieces to constitute into a collection and provide possibilities for reproduction. In fact, the uniformity of styling in menswear has increased the potential of production efficiency in upcycled designs (Brown, 2013). Moreover, nearly complete utilization of the original jackets promotes advanced sustainability. Future research will continue to combine the concepts of upcycling and cultural inspiration as well as promote standardized fashion collection production.

References:

Brown, S. (2013). *Refashioned: Cutting-edge clothing from upcycled materials*. London: Laurence King Publishing.

Gwilt, A., & Rissanen, T. (2011). *Shaping sustainable fashion: Changing the way we make and use clothes*. London: Earthscan.