

Daffodils- Enduring Winter

Chanmi G. Hwang Iowa State University, USA

Keywords: Chaos Theory, Knitting, Shibori, Upcycling.

The creative design process for *Daffodils-Enduring Winter* involved merging a concept of sustainability with an exploration of new textile design techniques. The lifecycle of a daffodil was the inspiration and was explored through biomimicry. The lifecycle of a daffodil was analyzed to integrate the blooming stages of the flower into a line of wearable art.

This particular ensemble was inspired by the form of daffodil bulbs in winter which withstands snow in preparation to bloom in spring. To achieve this goal, two theoretical frameworks, Upcycling and Chaos Theory, were adopted and various textile design techniques were used, such as: (a) Shibori (wet felting with a resist), (b) needle felting, (c) knitting, and (d) beading.

The fashion industry has adopted the use "Upcycling" to convert waste materials into new products of better quality and better environmental value (Aus, 2011). Unlike recycling, Upcycling "upvalues" products innovatively, instead of just reusing them (Goldsmith, 2009). In addition, Chaos Theory explores the lack of orders in the design that follow particular rules (Rouse, 2009), in this case, the structures of knitting.



Figure 1. Front

The design process included: (a) conducting research on the inspiration and theoretical frameworks, (b) sampling of the textile techniques, (c) ideating silhouettes through illustration, (d) construction of ensembles, and (e) peer and self-evaluations of the ensembles and process.

Off-white felt fabrics were used as the foundation for the garments to create volume in the silhouettes and asymmetrical peplum shapes show the movements of blooming flowers. Three recycled sweaters were "Upcycled" to create the Shibori balls. A total of 47



Figure 2. Side Detail

Shibori balls were created by using golf balls and artificial grapes to form the shapes during the wet felting process. Sheep wool was applied with felting needles to hold the edge of the Shibori balls to prevent them from unraveling. Three different materials were used for the skirt: white needled cotton batting, tulle netting, and wool yarns. The cotton batting and tulle were cut in 1" bias strips and sewn together to create a long yarn to be hand-knitted into a skirt (total of 50 stitches per row). Due to the width of the skirt, the designer created knitting needles by carving points on the ends of 30" long wooden dowels.

References

Aus, R. (2011). *Trash to trend-Using upcycling in fashion design*. Unpublished doctoral thesis, Estonian Academy of Arts, Tallinn, Estonia.

Goldsmith, B. (2009, September). *Trash or treasure? Upcycling becomes growing green trend*. Retrieved December 8, 2012 from http://www.reuters.com/article/2009/09/30/us-trends-upcycling-life-idUSTRE58T3HX20090930

Rouse, M. (2009, March). *Chaos theory*. Retrieved May 22, 2013 from http://whatis.techtarget.com/definition/chaos-theory