Cloud Eater

Keywords: Design, sustainability

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"If indigo was invented today, we would never approve it." Reflecting on this statement by Andrew Olah related to a 2014 Just Style publication on environmental textiles for apparel led our team to a sustainable design challenge. Indigo dyed products *are* part of our global culture. The indigo dyeing process and subsequent garment laundering (dye residues) distress the environment. A design team of six apparel design faculty explored ways to reduce the impact of indigo through the integration of traditional and digital design strategies to produce "indigo" surface patterns on predominantly cotton fabrics. Varied techniques were applied in pattern and assembly to produce a design prototype, Cloud Eater.

Goals and Inspiration that shaped our design process included (1) reducing indigo dye usage and impact, (2) the implementation and retention of a traditional influence/mood (Japanese samurai/boro) within an eclectic contemporary look and (3) the creation of a cohesive look from diverse perspectives and ways of working.

Criteria for evaluation of resulting design and/or process. Criteria for self- and team-evaluation included: (1) design reduces usage of indigo dyes and water usage by reducing the amount of fabric to be dyed with digital printing; (2) Innovation through aesthetic, visual, sustainable impact; fusion of craft and digital, patterns & shapes create a conversation within and among the pieces; (3) criteria focused on quality of techniques and execution of individual garments.

Techniques & materials The six designers each developed a fabric print utilized in a garment or accessory to complete the ensemble. The pieces include: powermesh polyester/spandex long sleeved t-shirt with funnel neck and Ne-maki shibori technique on sleeves and neckline; no-waste jodhpur pants; hira-ori origami pleated wrap skirt with shibori-dyed, then digitally refined bird print outer layer and mokume inspired watercolor print underskirt; bustier of upcycled denim with sashiko stitching over patches of printed fabrics, back laced with shibori dyed leather; reversible zero-waste bolero jacket, arashi pattern reverses to tatewaku print; thin batting between layers with persimmon silk trim; belt of shibori dyed leather.

Benefits of the resulting design include the retention of more spontaneous results of hand-dyeing, the reduction of indigo deposits in water. As well, the digital compositions expand the potential of more quickly developing a complex pattern (i.e. taking a few good "moments"

from dye samples and creating a pattern in photoshop rather than creating yardage with technique).

Limitations of the design include the fact that printed fabrics have a white background, this proved difficult to tear/stitch some fabrics or to use reverse side of fabric. In our process we missed the tactile qualities of hand dyeing, as some of the complex variegations that arise in dye work cannot be easily digitally duplicated.

Reference: Just Style. (2014). Sustainable Textiles for Apparel: Fact, Fiction and Future Prospects Report Description, p.1. http://www.just-style.com/market-research/sustainable-textiles-for-apparel-fact-fiction-and-future-prospects_id192005.aspx

This project (Part 2 of 2) was funded in part through a competitive grant “Leuco State” presented to The University of Delaware by the Importer Support Program of the Cotton Board and Cotton Incorporated.