SCAURA

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Keywords: Circular Design, Material Innovation, Textile Waste Reclamation, Craft-Based Processes, Papermaking Methods, Sustainable Accessory

Mentor Statement: As the instructor for the senior-level capstone course focused on Innovative Fashion Product Development, my role is to challenge students to develop critical thinking skills and foster personal inquiry and resourcefulness. This year's project focused on circularity in the fashion industry, with students tasked to rethink material use, value, and waste within product development. The project *SCAURA* is a compelling result of this challenge. The student reclaimed pre-consumer textile waste from program production studios and developed a non-woven, leather-like textile using traditional papermaking techniques—an unfamiliar process that required experimentation, patience, and a willingness to work outside conventional fashion-making practices. Throughout the semester, this student demonstrated tenacity and adaptability, evolving their concept through rigorous research, hands-on exploration, and critical reflection. They embraced feedback and setbacks as opportunities for growth, resulting in a final design that is both materially innovative and conceptually grounded in sustainability. I chose to sponsor *SCAURA* because it exemplifies the depth of inquiry, innovation, and resilience I aim to cultivate through this capstone experience. The work pushes the boundaries of fashion prototyping and contributes meaningful dialogue to circular design practices. It is a strong representation of what design scholarship can be when students are encouraged to take risks, question norms, and reimagine the systems they will soon enter in the fashion industry.

Design Abstract

Introduction, Concept, and Context: *SCAURA* is the result of a capstone project investigating sustainable material innovation through a conceptually driven satchel made from a nonwoven, leather-like textile created using traditional papermaking techniques. This work explores how consumer textile waste can be reimagined inxto durable accessory materials through handcraft processes. The guiding research question for this research and development work was: *How can waste textiles be transformed into a functional, bio-based material using accessible, craft-based techniques suitable for accessory design?*

While sustainable fashion scholarship often focuses on high-tech innovations like microbial cellulose and fruit leathers (Dissanayake & Weerasinghe, 2011; Fletcher & Tham, 2019; Rissanen, 2013), *SCAURA* fills a gap by offering a low-tech, scalable approach grounded in material reuse and craft. The material was treated with konnyaku paste, a plant-based agent used in Japanese washi paper preservation, aligning with

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ecological aesthetics and sustainable design (Manzini, 2015). The title references the Old Norse word *scaur*, meaning “rocky bluff,” and the English “scar,” symbolizing themes of landscape, surface, and imperfection. These metaphors shape the project’s conceptual and visual identity.

Aesthetic Properties and Visual Impact: The aesthetic of *SCAURA* deliberately rejects polish in favor of primitive and imperfect qualities, creating a visual language aligned with ecological consciousness. Drawing from imagined early human craft cultures, the satchel emphasizes rawness, irregularity, and tactility. Principles of design —including balance, rhythm, texture, and emphasis—are used to support the project’s conceptual goals.

The artifact’s asymmetrical form is balanced through directional stitching and contrasting surfaces. Visible saddle, cross, and baseball stitches serve both functional and decorative roles, reinforcing rhythm and craftsmanship. The fibrous surface texture and scorched flap edge reference erosion and imperfection, contributing to a narrative of labor, decay, and transformation. By elevating flaws and visible construction, *SCAURA* challenges conventional fashion aesthetics. This reframing aligns with Manzini’s (2015) ecological aesthetics, which prioritize temporality, incompleteness, and material authenticity in sustainable design.

Methods: Process, Techniques, and Execution: *SCAURA* was developed through a rigorous process of material transformation. Textile waste from local apparel design production studios was collected, sorted, pulped using a Hollander beater, and formed into sheets using a pour mold and traditional papermaking techniques. A combination of 50% reclaimed cotton muslin, plus 20% reclaimed cotton rag paper from a fine art course, and 30% pre-processed virgin fibers of hemp and jute were used to create the two types of nonwoven textiles for this work. After couching, pressing, and air drying, sheets were treated with konnyaku paste to enhance flexibility, durability, and water resistance. Following a second drying phase, the material was cut and assembled using leatherworking methods, including reinforced seams and hand stitching. Functional hardware, such as rivets and O-rings, was integrated to strengthen the structure.

Material trials and experimentation revealed performance variations based on fiber content; the jute blend was prone to tearing, prompting structural reinforcements and seam binding. These adjustments reflect a deep engagement with learned knowledge and iterative craft (Rissanen, 2013; Moorhouse, 2017). The final product demonstrates skilled execution, design coherence, and practical application of experimental techniques.

Cohesion: Each development phase—from sourcing waste to final assembly—was guided by the project’s core themes of ecological mindfulness and primitive design. Visual and material decisions reinforce the concept of resource scarcity and ancestral ingenuity. Raw edges, exposed stitching, and layered texture work together to create a cohesive, meaningful artifact.

The finished piece fulfills the designer’s goal to transform discarded textiles into a sustainable material system. It embodies the principles of *Cradle to Cradle*, employing

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the idea that “waste equals food” (McDonough & Braungart, 2002, pp. 92–117), illustrating how discarded resources can be revalued through circular design.
Design Contribution: *SCAURA* introduces a method for reclaiming textile waste through traditional papermaking techniques combined with plant-based treatment, resulting in a fashion product that aligns with circularity principles. The fabrication process demonstrates how low-impact, adaptable methods can support the creation of sustainable, diverse products, offering accessible solutions for independent designers. By expanding material diversity in sustainable fashion (Falsafi, 2023), the project positions handcraft not only as a practical technique but also as a driver of innovation. *SCAURA* also challenges conventional aesthetic norms by embracing imperfection and highlighting process visibility as intentional design elements. These choices encourage consumers to reconsider material value and foster deeper, more mindful relationships with sustainable products. Through the integration of conceptual design and hands-on experimentation, *SCAURA* offers a distinct contribution to the discourse on circular fashion.

Beyond material development, *SCAURA* represents a pivotal expansion of the designer’s personal practice into accessory design. With a background rooted in apparel, this project challenged the designer to adopt new tools, techniques, and forms of thinking specific to accessory construction. Prototyping a functional bag required new approaches to shaping, structure, and function, broadening their technical skillset and advancing their identity as a sustainable fashion practitioner.

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