

CIRCULAR

MATERIALITY

We're moving beyond our old ideas of sustainability into new ideas of constant regeneration. Vibrant ecosystems of creation. Advanced material processes. Continual reuse and repurposing of elements. How can our production methods incorporate ideas of renewal, restoration, and healthy growth?

Apple-based Material

TU/e

Daniëlle Ooms



This project began as a design research investigation into unsustainable fashion lifecycles and production processes. As the eventual outcome of several flows of material research, Apple-based Material is a biodegradable material comparable to leather, but lacking leather's large environmental footprint. Pulling on the visual language of fashion photography, the Apple-based Material installation makes reference to the current state of fast fashion's ability to spark our desires for certain aesthetics with each new season. Stimulating desires to grow for an aesthetics of sustainable materials could have a clear environmental impact.





Myshell is a personalized speaker with a soft sound that creates a moment of comfort, enhanced by the interaction which is close to your ear. This project developed as an investigation into ownership and sustainability. One proposed way to cut down on environmental costs of production is a world descending from the sharing economy of collectively owned products and services. Myshell arose as a counterpoint to this vision of the future, looking instead to the concept of emotional durability, or the qualities that make a single product last over a long period of time. With a peaceful aesthetic of both personalized and timeworn materials, Myshell explores how lasting emotional durability might impact interior product design.

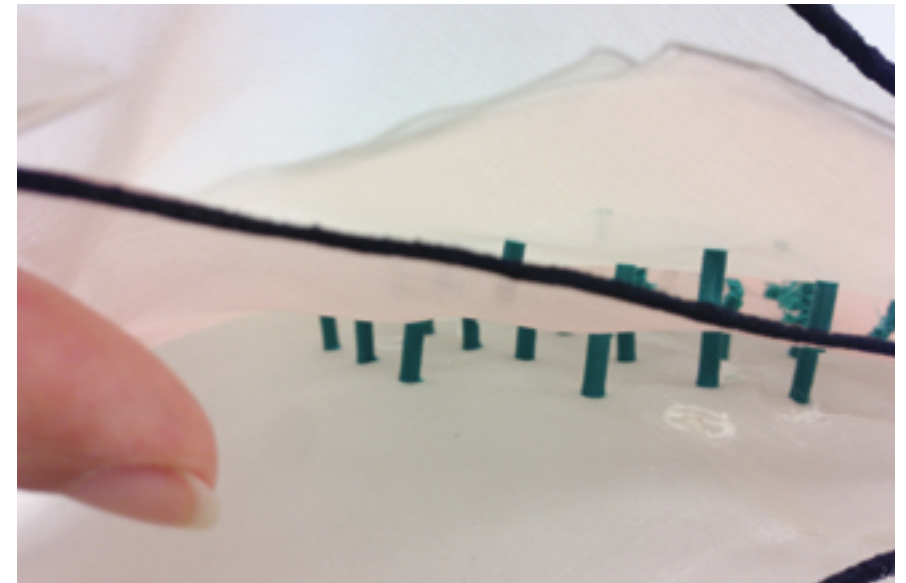


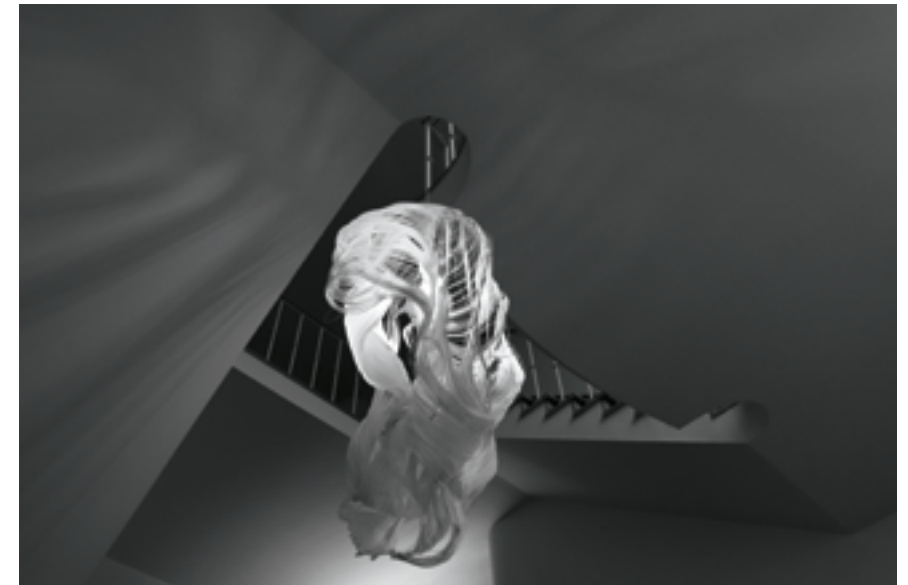
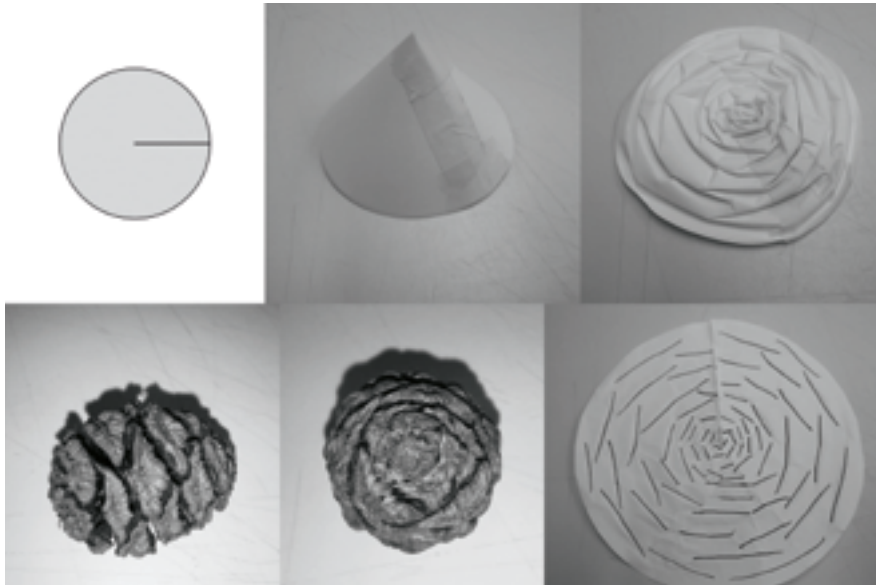
tactileDress

TU Delft

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This project aims to investigate and improve the comfort of 3D printed materials. Combining handcrafted garment traditions and digital manufacturing is a necessary step to solving problems of overproduction in the fashion industry. 3D printing technologies can enable on-demand preparation of a garment, in contrast to the often wasteful process of producing speculative amounts of clothing. tactileDress is a draped dress consisting of an intricate combination of multiple sheets of silk fabric and 3D printed geometries in the form of rigid plastic fibers. Different printing formations were used to explore how the geometry influences the tactile experience of the fabric, resulting in new and comfortable structures.





Inspired by the complex entanglement of the sea and plastic pollution, the focus of Marinero is to create an architectural blueprint of a garment that transforms organically over the course of time due to different meteorological conditions. The blueprint is one woven square, created with a preprogrammed weaving pattern. The weavings have a main chain of vertical nylon threads and horizontal integrated threads made of shrinking yarns, seaweeds, and other sea materials. The contrast of these threads causes friction and results in the evolution of dynamic shapes during different meteorological conditions such as rain, heavy wind, or drought. As an adaptive, evolving garment pattern, Marinero demonstrates just how innovative slow fashion can be.

ECO Village

TU/e

Renee Noortman



The ECO Village project arose from a collaboration with Next Nature Network and their ECO Coin initiative. This interactive illustration of a future scenario aims to help people gain insight into the impact of their own sustainable behaviors 5, 10, or 15 years from now. People often stop performing environmentally friendly behaviors when they do not see a direct impact. As a fictional future village that develops in response to specific behaviors performed (such as cycling to work, using a reusable water bottle, or eating vegetarian lunches), ECO Village seeks to clearly illustrate positive outcomes. Scanning this model with a AR application gives additional information about how a user's everyday actions impact the environment and what this would mean for individuals living in the future scenario.





The Netherlands is known worldwide for its ornamental cultivation of cut flowers. But most people don't give much thought to the amount of flowers thrown into the garbage without ever being shown for sale. This project investigates how rather than being wasted, these flowers could become a raw material for a new textile. Flower Textile proposes a countervision to the amount of pollution that permeates the fashion industry. This textile product comes entirely from Dutch soil and is fully biodegradable. Instead of cultivating plants like cotton specifically for our clothes, why don't we use a natural material that is already being cultivated for a different purpose and extend its lifespan?