

Encapsulated Infinity

Keywords: textile innovation, sustainability, couture techniques

Measurements: Bust 37", Waist 28", Hips 38", Total length 59"

Concept

Science-fiction literature introduced the term *terraforming* and defined it as the process of creation of an Earth like habitat on a new and uncharted planet (Dennis, 2011). Aerial photographs taken while flying to Iowa were the original inspiration for this project. The morphing natural landscape patterns and colors visible from far above led to the creative urge of interpreting them via textile exploration and wearable art aiming to create a terraforming encapsulation of the aerial views. The idea of textural layers that overlap and create a practical infinity of patterns led to further research into landscape art models and theories. Vitruvius Pollio (circa 27 BC) summarized the guiding principles of the garden design as being "commodity, firmness and delight". The lack of any work equivalent to Vitruvius' model for landscape architecture (Turner, 2000) makes his design model the oldest that is still applied to garden design. His three design principles have been used in the construction of each of the garment layers of this ensemble.

Process and techniques

"Great fashion like great art, always reflects the times" (Geoffrey B. Small)

The use of sustainable materials and processes is a must in today's world. The guiding principle for the construction of this ensemble was zero waste in multiple forms. The initial materials were four rectangular pieces of printed silk chiffon from an old Komar fabric header in four different color ways. The iridescent cross weave reversible pieces have a random splash pattern reminiscent of the aerial views. The idea of wrapping the body in different transparent colors and patterns seemed appropriate to express dynamism, delight and versatility. Adding to the aesthetics of the sheer silk layers, a strong structural tube made of navy high power spandex nylon fabric holds the pieces together around the hips. The versatility of this piece was enhanced by the limitation of zero waste technique, and led to double folding the stretch layer so when sliding it up the bodice is a tube dress and when sliding it under the sheer layers provide coverage. The edges of the sheer rectangles were finished by hand sewing a fringe yarn to add textural interest as well as to suggest endless boundaries. A zig zag stitch was used for added durability. Furthermore, layers of gray and green mesh were cut out to overlap and drape over the bodice to create a tube top in a zero waste technique. Structure was added to this piece by threading a rigid green satin cord through a channel sewn in the shape of the infinity Greek symbol ∞ (lemniscate). When the ends of the cord are pulled, it creates stability of the top on the body as well as draping interest around the waist. The versatility of this top comes from the multiple ways it can be worn, higher or lower or even backwards. The same infinity symbol provided silhouette inspiration for the multi textural fiber art piece that wraps around the neck and hips. Free form crochet, hand knitting, machine knitting, beading, tasseling and hand sewing were techniques employed to build this piece row by row using various textural yarns. The idea of infinity was furthermore embedded in the knitted stitches by continuously changing and

alternating the textural yarns. Aiming to also encapsulate the current yarn technology developments, wide tape yarns such as ruffled and tubed as well as fringed and fur yarns were used for added textural interest and silhouette variation. Firmness and structure were added via nylon yarns with tiny sequins and faceted iridescent beads knitted at the back. Versatility was achieved through the open decoupage pattern of the overarm part. The arms can go over or under, for a cape like style. The endless rows of looped tubed yarn aim to create a dynamic silhouette and to reinterpret the infinity concept.

Overall, the ensemble feels lightweight and see-through just as an aerial photograph, without missing the textural density of a landscape design or the complexity of fibers and techniques of a terraforming capsule.

Design Contribution and Innovation

The concept of terraforming and its sustainable implications for garment design is in its incubation stages and it has not been explored in depth. In her 2015 collection named Hacking Infinity, the famous fashion technology designer Iris Van Herpen expressed the idea of terraforming via 3D printing and assembling garments that do not function along with the human body but use the body as an under layer. Not including the need of social interaction in any future fashion statements seems to be unsustainable. Aesthetics are not enough. The sustainable fashion concept developed by Janet Hethorn and Connie Ulasewicz (2015) includes three branches: interconnecting people, processes and the environment. My design exploration aims to start a conversation about how the human interconnectivity aspect can be integrated via not only aesthetics, but the social and cultural communication of fiber arts, using technology as an enhancing tool for creating a terraforming capsule wardrobe. If we are going to live on Mars, we might still like to remember the earthy colors.

References:

- Dennis, N., Larsen, G., & Macaulay, M. (2011). Editorial: Terraforming Arts Marketing. *Arts Marketing: An International Journal*, 1(1), 5-10.
- Hethorn, J., & Ulasewicz, C. (2015). *Sustainable Fashion: What's Next? A Conversation about Issues, Practices and Possibilities*. Bloomsbury Publishing USA.
- Turner, T. (2005). *Garden history: Philosophy and design 2000 BC–2000 AD*. Routledge.

