from the Greek morphê shape and genesis creation

## MORPHO-+-GENESIS

beginning of shape

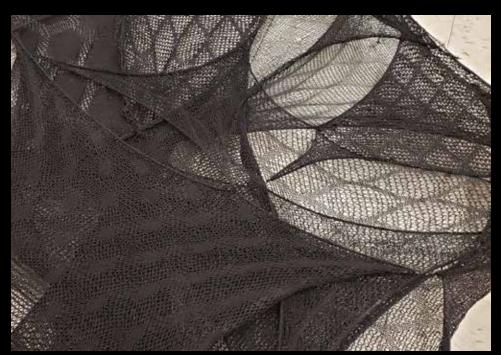
## ESS Y Y



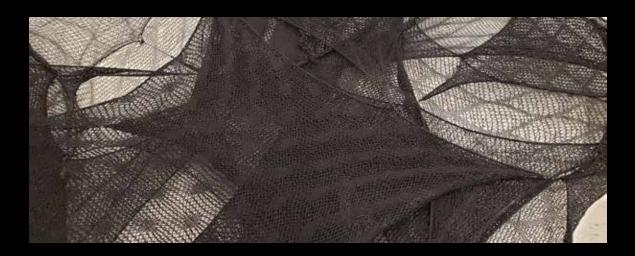




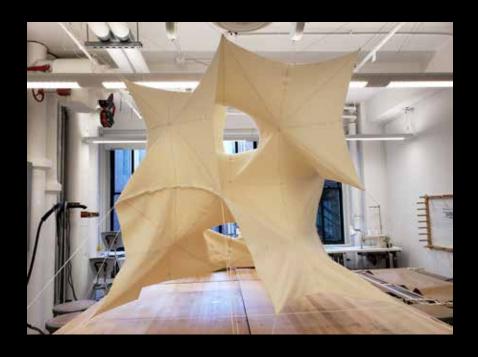




Grown from thread, Darkness was formed. The textile is created by machine knitting isosceles triangles. The panels are stitched together and stretched within the sphere of a platonic solid. The layers morph and interact as one moves around the shape with the experience of changing moiré patterns.

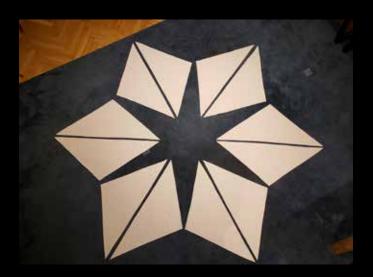






My love of geometry collided with my annoyance of noise. I created a visualization of a humming sound wave from the triply periodic minimal surface knows as the gyroid. Quiet is created from white sound absorbing knit wool. Isosceles triangles are cut from yardage with minimal waste. I will be working with Okko Design of Stockholm Sweden (okko.se) to produce "Quiet". It can be easily scaled to fit various spaces to control echoes and unwanted external noises. This will be exhibited in Italy in 2021 during Milano Design Week.







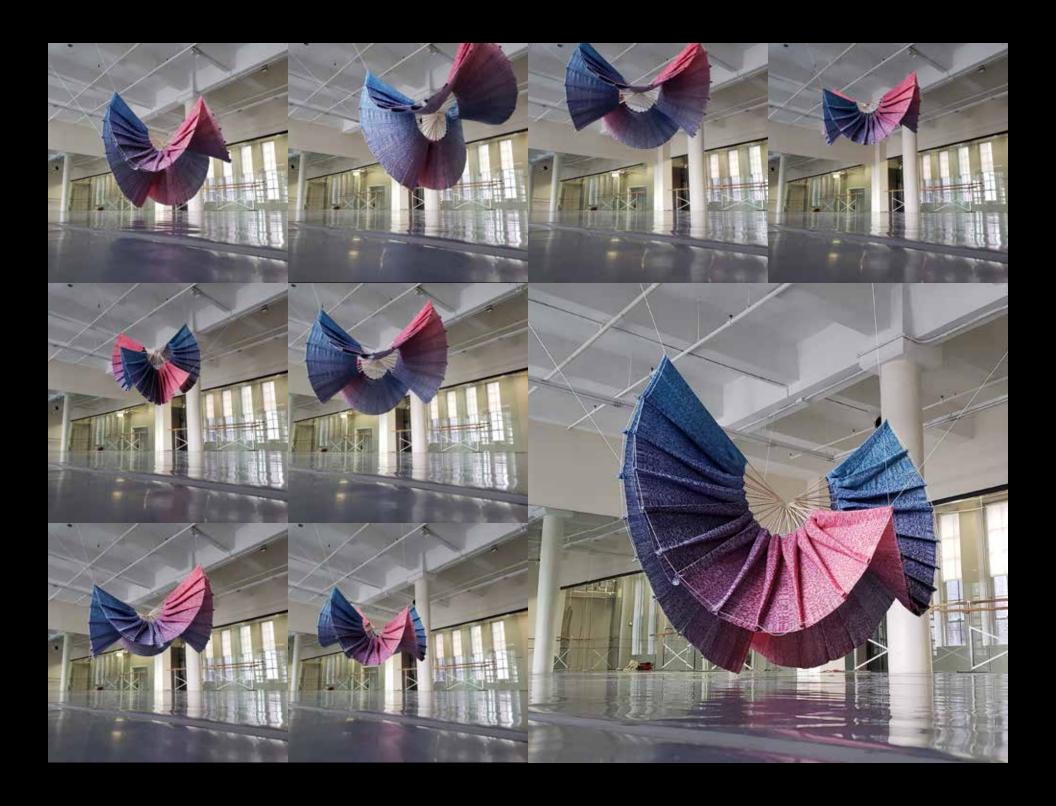




The geometrical shape from the minimal surface called the Enneper surface creates this undulating form. The textile pattern is generated to mimic patterns that are created from our biosphere. The pattern gives off frequencies and vibrations just as much as the colors circulate. I would like to apply these randomly generated patterns to create nonrepeating textile patterns. Machines both digital and analog can be taught how to generate the patterns as the textile is created. I wove this textile with a manual hand loom following randomly generated computer number sequences. The form has been given a skeleton and with the aid of strings it is able to move like a marionette. I, the puppeteer, makes the textile dance.











Textiles can speak. They can represent. We have flags and garments of nations and nationalities. This textile was handwoven on a simple 4 harness loom. The wool is supplied from the American Woolen Company of Stafford Springs, Connecticut. Parsons is an artistic design school from its inception. Artists can be impulsive, random, sporadic. A design school is much like the people that form it's culture. This plaid is to represent this crazy and unpredictable institute that we call Parsons School of Design.

# AMERICAN WOOLEN







During the summer of 2019, I spent most of my time at American Woolen in Stafford Springs, Connecticut as an intern. This is a woolen mill that grew from our industrial revolution. The mill was recently purchased by Jacob Long. This textile mill is now in a transition to grow from it's past to create textiles for the present. It is one of my hopes to return to the mill in some capacity to help rebuild the American textile design philosophy. America needs a textile design that grows from our natural principals that are as old as or universe.





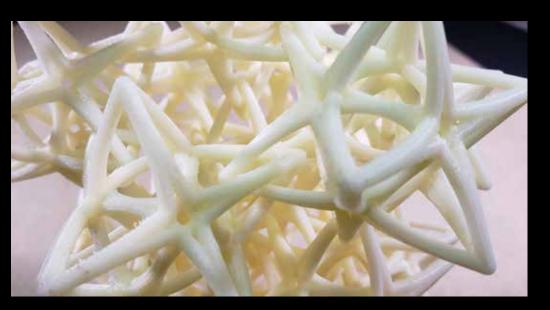
Obeetee is a creative, ethical and global company producing hand woven rugs. Parsons MFA Tgextiles collectively with Obeetee developed new ideas for the future of hand made rugs. I worked with fellow student, Sanya Sharma, to create rug samples that incorporated lighting and circuitry. The concept was to create flooring that can direct and move people through a space. The rugs contained pressure sensors that could detect a person entering a space and lights would guide to a destination.



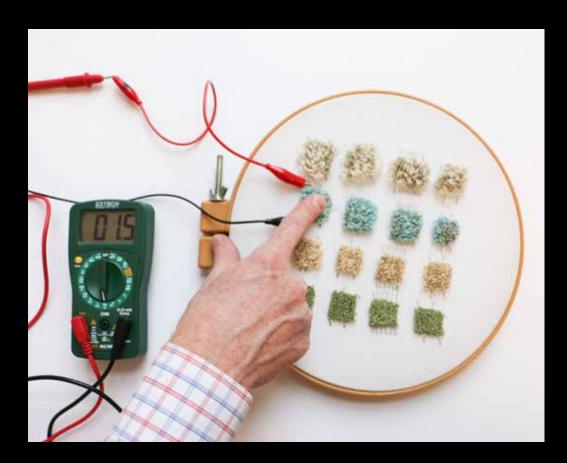
This was a collaborative project with fellow Parsons students, Sagarika Sundaram and Saabira Markar for a digital knitting course. The project was built from the idea to create parabolic forms to resemble creatures of the sea. We collectively used the Shima digital knitting machine to create these forms that are not intended to be made with the Shima, pushing the machine to its limits. We embraced our individual skills and incorporated them by developing color swatches, researching knitting structures, digital Shima machine programming, and assembly of our textiles into deep sea creatures.







Current 3-D printing with plastic extrusion is a simple process. 3-D printing can create interlocked flexible forms that cannot be easily created with traditional methods. Extrusion printing in conjunction with textiles has great potential to create innovative hybrid materials.



During my atelier with Yuchen Zhang of Wearable Media, we developed a simple textile touch sensor. We explored the use of an ancient textile method called punch needle embroidery. This experiment shows how needle punch tufting with conductive and nonconductive threads can be used to construct sensors. With this technique, designers could integrate e-textile sensors into furniture design, fashion design, carpet design and other interior design applications with capacitive touch, pressure and gesture sensing input. This could integrate our technological and textile worlds.

medium.com/@yuchenz/ tufting-with-conductive-thread-6ea197c3b54c



## SENSOR

We are all individuals forming our own lives. From our individuality we interact collectively in the form of communities. We can grow beyond our selves by harnessing our collective understandings. There is a need to bring together unrelated specialties to create new and unknown fields of study. We can recognize our fragile connections between social systems as politics, healthcare, economics, religion, into a more flexible robust society. We can cross train individuals to bridge specialties to fulfill changing needs of our society. We can connect collaborators and open up closed rigid structured systems into a flexible malleable world ready to shift and change to meet unexpected circumstances.

We need clear and strong leadership. Leaders must give individual freedom and guide groups toward clearly set goals. Individuals can give equal input for their own unique solutions and offer these at a fair value. Leaders will distribute our collective knowledge and wealth to maintain individual freedom and rights.

These connections are built into our subatomic particles, to the electrical forces, the cells in our bodies, our relationship with plants, animals and inorganic things. We need to integrate our human systems into our natural world in order to maximize our resources and extend our life on Earth.

This is a holistic design philosophy. It is not restricted to any one strategy or process such as, textile, visual, industrial, product, or service design. This is a multifaceted way to make all considerations interconnected. We need aspects such as sourcing, supply chain, manufacturing, management, economics, end users, end-of-life, and life expectancy to be integrated to work with one another. There are a few things that can help to make this possible by extending product life, minimizing consumption, recycling our waste, responsibly sourcing materials, equitable pay, and equal opportunities. We are broadly a society of rigid specialized individuals that tend to compete against one another. Designing a noncompetitive, interconnected, collaborative, and holistic system would balance our relationship with the world and honor our individual freedoms.

New York City - May 2020

