

Name	Grant Warren
Award	Donis A. Dondis Travel Award
Major	Industrial Design Sculpture
Undergraduate Status	Senior
Project Title	Sustainable Materials Research in Scandinavia and the Netherlands
Synopsis	<p>My proposal is to travel to Scandinavia and the Netherlands to meet designers and companies using sustainable materials and processes to continue the development of my project of providing millennial designers and makers with sustainable resources. Traveling to the Netherlands, Sweden, and Norway, I am interested in learning why this region of the world is a leader in sustainable design. What aspects of these societies enable this to happen? How do the economies, cultures, values, and environmental laws and practices relate to this leadership? Visiting design studios, manufacturers, and cultural spaces, I hope to gain insights into how I can integrate this type of design into practice in the United States.</p>
Complete Proposal	<p>Tracing my interest in sustainable design and my desire to visit Scandinavia, I reflect back to being a freshman at MassArt. I was browsing in the design and architecture section of a Barnes and Noble store one afternoon. With the deadline for major declaration approaching, I still had not decided between a major in Sculpture or Industrial Design. I was confident that sculpture would allow me to express myself creatively and build things with my hands. My initial impression of Industrial Design, however, was that it was about creating speculative, flashy new consumer products like cars and kitchen appliances. I was concerned about the impact of this field on the environment, and was skeptical that I could remain true to my own values if I were a product designer. Luckily, the book "Sustainable Design" by Karen Proctor caught my eye, and within its pages I found beautiful, unique products that were accompanied by interviews and stories from the</p>

designers. I suddenly realized the potential for thoughtful design, incorporating sustainability, to make positive environmental changes. My decision to pursue industrial design was validated, and throughout my time at MassArt I have been committed to finding ways to prioritize my values of environmental and social justice into my design solutions.

My primary method of addressing sustainability has been through materials. I have become fascinated with the materials we use to create products, and am passionate about finding new ways to display their valuable potential. There are many crucial considerations when designing products in the 21st century if we want to be truly sustainable and address global climate change. Where is the material produced? How was energy used in the production process? How much waste does the production result in? What will happen to the product after the user is finished using it? For the past two years, I have been investigating these questions by creating products out of corrugated cardboard. I selected cardboard due to its abundance, accessibility, and global circulation. Cardboard offers surprising qualities such as the ability to be transformed multiple times, and to be cast into molds to create detailed objects. I have used its properties as an opportunity to create a series of works out of the same batch of material. Using my studio space and select tools, I am experimenting with an alternative to the industrialized process that uses massive amounts of energy to collect and transport discarded cardboard to be reprocessed in factories. I have developed a closed loop system for repurposing cardboard, and have tracked the amount of energy, water, and physical labor my process consumes.

The majority of the designers and material manufacturers featured in the Sustainable Design book are located in Scandinavia and the Netherlands. The design in this region is characterized by minimalism, durability, natural forms/materials, and functionality. These designers have led the way in developing new sustainable processes and materials. For my degree project titled "Shine", I am creating a sustainable material subscription service for designers and makers. This multi-sided platform will provide designers with monthly material samples and educate them about sustainable options for products that designers like those found in this book use. Therefore, I wish to use the grant money to visit companies and make connections in Scandinavia and the Netherlands, in order to further the development of the sustainable materials project that I will continue after graduation.

I am curious to learn about why this region of the world is a leader in sustainable design? What aspects of this society enable this to

happen? How do the economies, cultures, values, and environmental laws and practices relate to this leadership? I would like to spend a week in Amsterdam visiting the Stedelijk Museum, the designer Pepe Heykoop, natural material manufacturer Enkev, as well as studios Fairforward, VIJ5, and Imperfect design. I would then spend two weeks in the Arnhem region. I plan on visiting the designer Debbie Wijskamp who has been a major influence for my paper pulp work. She lives and works in Arnhem, Netherlands where she has a design studio, and Atelier where she sells her work. Ms. Wijskamp regularly gives workshops on her process of creating bowls, vases, furniture, and other interior design objects out of recycled paper. From there I would fly to Stockholm, Sweden. In Stockholm I would like to visit Joakim Lundgren at Green Furniture Concept. They create sustainable furniture design arrangements for public spaces, and explore innovative materials which is relevant to my design interests. I would next visit Gothenburg for several days, visiting the Rohsska Museum of Design which has an extensive collection of industrial design. Additional design studios that I anticipate visiting in Sweden are oyyo, and norrgavel. Afterwards, I would spend one week in Oslo, visiting Snohetta studio, Permafrost studio, and The National Museum of Decorative Arts and Design. I would spend an additional week exploring Hardangervidda National Park and the surrounding natural areas. Here I would hike, photograph, sketch, reflect, and draw inspiration from the beautiful landscape for future designs.

Throughout my travel of this region I will keep a daily log and write a weekly blog entry about my travels, my experiences with designers, and updates on my project "Shine". This will help me to document and share my experience with others in the MassArt and Design community. This grant will ultimately give me the exposure to innovative sustainable design, and help me achieve my goal of making Shine, a reality.

Total Expense \$5,000

Budget

Expense	Explanation	Amount
Lodging	7 weeks of AirBnB apartments that range from 30-70\$. On average, the apartments will cost \$50 and will therefore total around \$2100. I also anticipate spending several days in hostels to meet other travelers.	\$2,450
Food		\$1,200
Equipment	Registering for workshops, Museum entry fees.	\$125
Supplies	I will be purchasing sustainable material samples from different manufacturers that I visit.	\$125
Transportation	<p>Current round-trip flights to Amsterdam are under \$400. Flights from Amsterdam to Stockholm run for \$110, and from Stockholm to Oslo they go for around \$125. Between public transportation and Uber rides I anticipate spending \$250.</p> <p>Tracking my environmental impact of this trip, I calculated the amount of carbon I will emit through airplane travel. It would be about .809 tonnes of CO₂. To offset this, I will need about \$15 which would go towards reforestation efforts. (see verifiedcarbonstandard.com) I am leaving myself \$200 for additional travel expenses</p>	\$1100

Artwork



Wanted:Waste
A project visualizing the potential of food and paper waste



10
Gallons of water for beating pulp



104
Paper cafeteria containers



47
Minutes running the hollander beater



Description

Wanted Waste

8 x 11 inches

Compostable Cafeteria Containers, Soil, Plant

2017

Artwork



Description

Cardboard Pulp Work
8 x 11 inches
Recycled Corrugated Cardboard
2016 - 2018



STEP I:
POUR PULP INTO MOLD AND PRESS OUT WATER



STEP II:
CUT OFF EDGES OF BLOCK AND BEGIN TURNING



STEP III:
TURNING COMPRESSED DOWELS ON LATHE



STEP IV:
FINISH WITH SANDPAPER

Description

Turning Cardboard Process
8 x 11 inches
Recycled Corrugated Cardboard, Lathe, Sandpaper

Artwork

SHINE

Degree Project

Shine is a multi-sided delivery service platform that provides millennial designers and makers with monthly material samples and educational resources

User Centered Research

The vision and values for the world millennials want to live in is threatened by politicians with corporate interests

Climate Change is the number one global issue that Millennials care about

How do I help millennial designers become sustainable revolutionaries by providing them with resources and experiences that make them feel empowered to challenge their industry?

The feeling of being able to make change

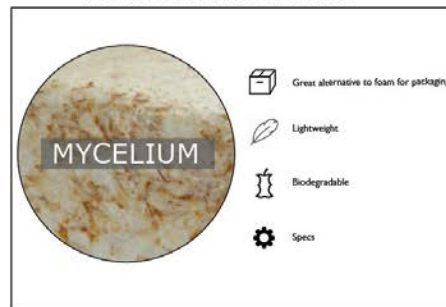
Access to Resources is limited

UI Website Development & UX

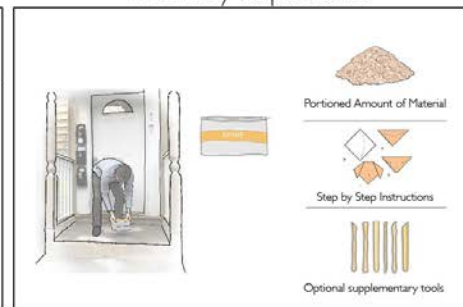
Material Library Screen



Material Details Screen



Delivery Experience



Description

Shine Summary

11 x 17 inches

Adobe InDesign, Adobe XD

2018