



Mary Dunford
Product Design Application
Fall 2015



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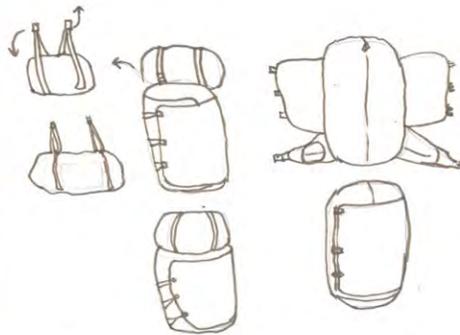
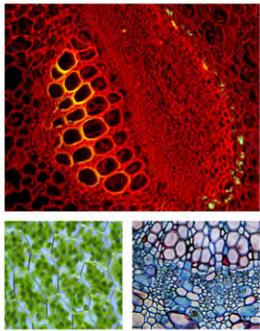
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Daydreamer Backpack



Daydreamer Internal Frame

1. The pad is stored in a slip, which serves as a multipurpose internal frame.
2. The pad is smaller, making it lightweight, but still provides comfort for your hips, torso, shoulders, and neck.
3. The layout of the padding is mimicked after plant cell structures, giving vital areas larger and more plush cushioning.

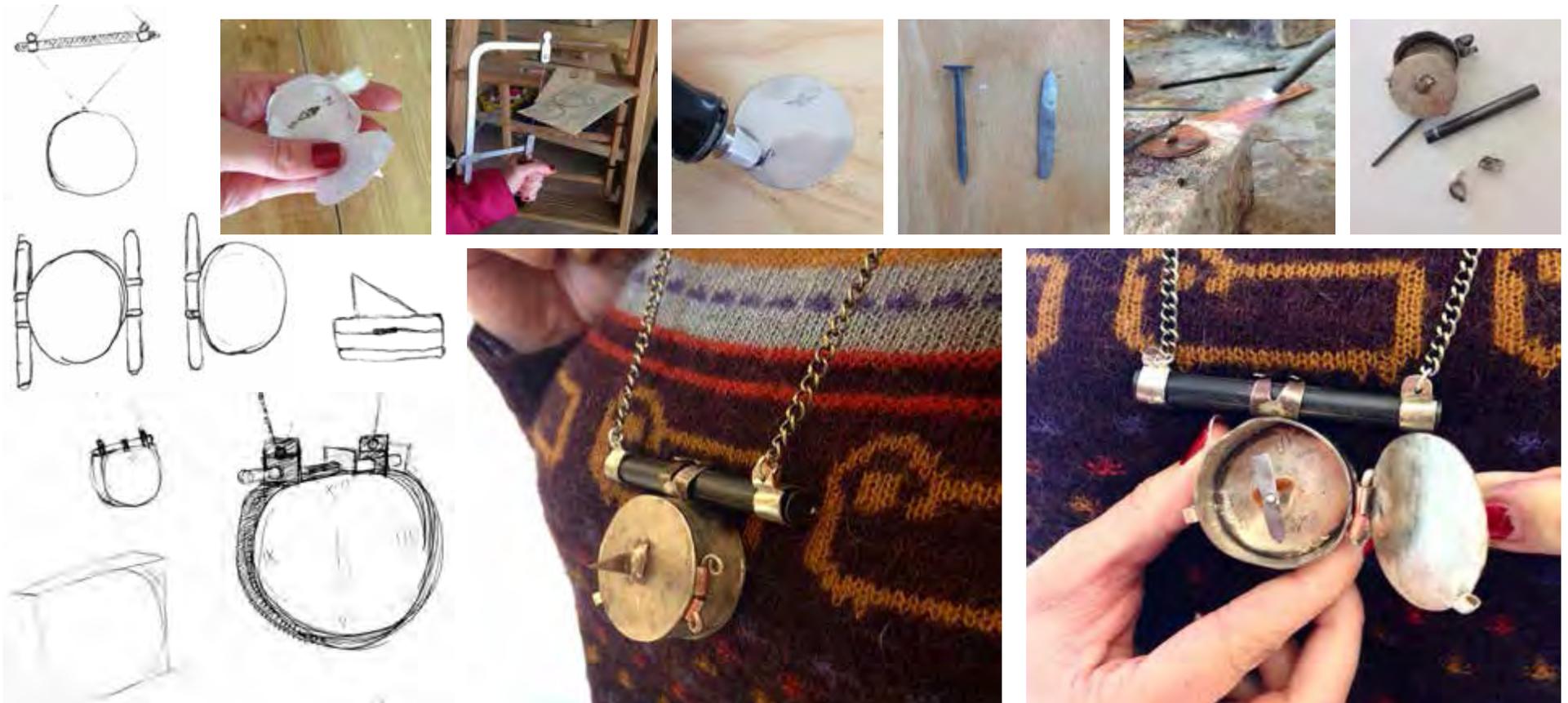
Personal Project 2014

Purpose: Design a backpack whos' internal frame **dual purposes** as a sleeping pad.

Method: Inspired by a friends minimalist backpacking strategies, I wanted to make a product that would free up space in the backpack container. The pad itself is **structured after plant cells**, giving critical areas, such as shoulders and the torso, cushioned support. The pad would also provide extra comfort during hikes, because it is stored in a pocket that rests against the users' back.



Survival Jewelry



Personal Project 2015

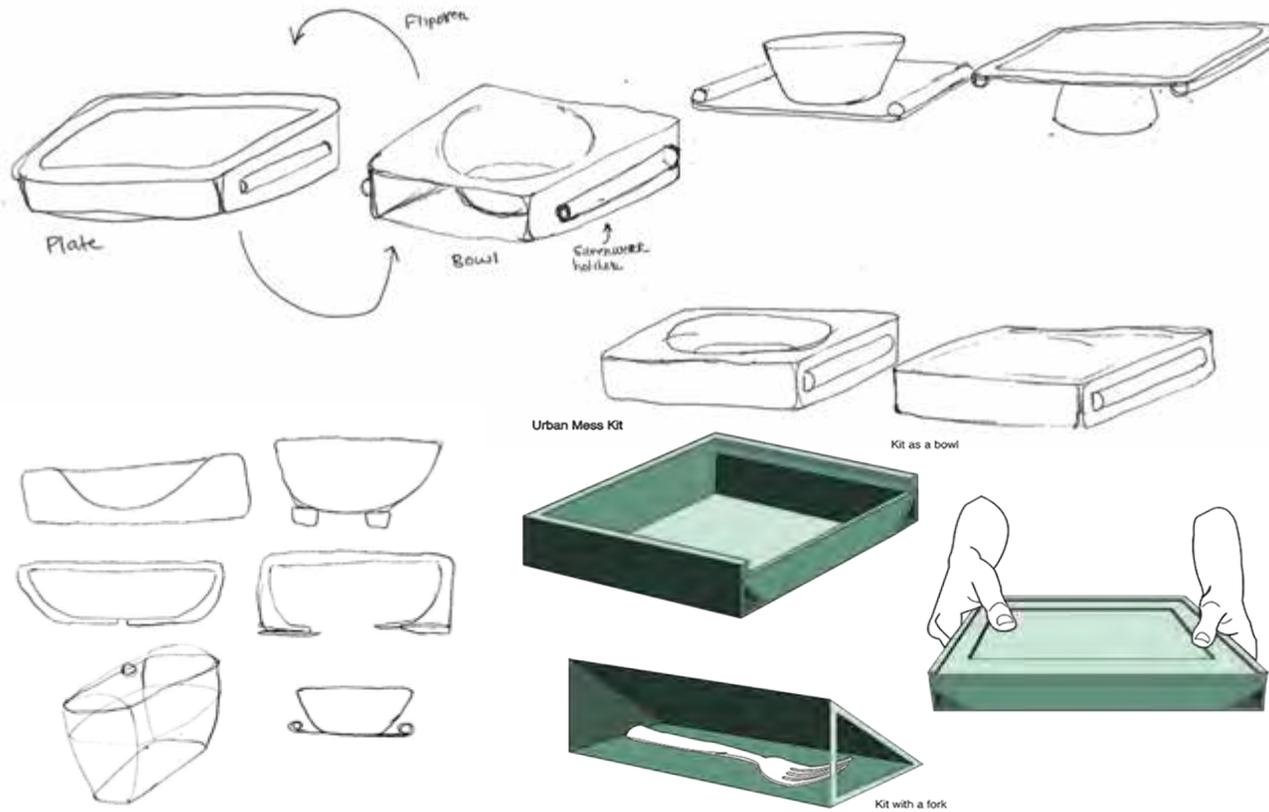
Compass 2"x2"x1/2" Flint 3"x1/4" Nickel, Flint, Steel

Purpose: To make a **multi-use survival tool**, that serves both a **decorative and functional** use. It is comprised of a sundial, compass, and flint with striker.

Method: This piece is made of sautered nickel. Using a dremel I engraved a clock on one face and "North" and "South" on the other face. I magnetized the compass needle with a magnet, making it functional. The Flint is used as a bar from which the compass/sundial hang. In an emergency, you simply remove the end caps and slide out the flint and file to start a fire.

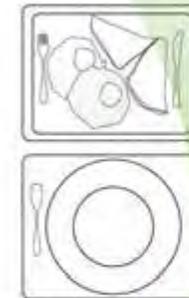


Urban Mess Kit



Urban Mess Kit

Designed to be compatible with small spaces, the Urban Mess Kit is both easily stored and easy to use. Made with bamboo wood, this product is both environmentally friendly and graceful to look at. This is perfect for a dorm room or a small apartment with limited storage space.



Easy to use, this mess kit utilizes space by creating an all-in-one plate, bowl and silverware storage. Depending on which surface is needed, you simply flip the kit over.



Umbr Design Mary Dunford

Umbr Design Mary Dunford

Personal Project 2014

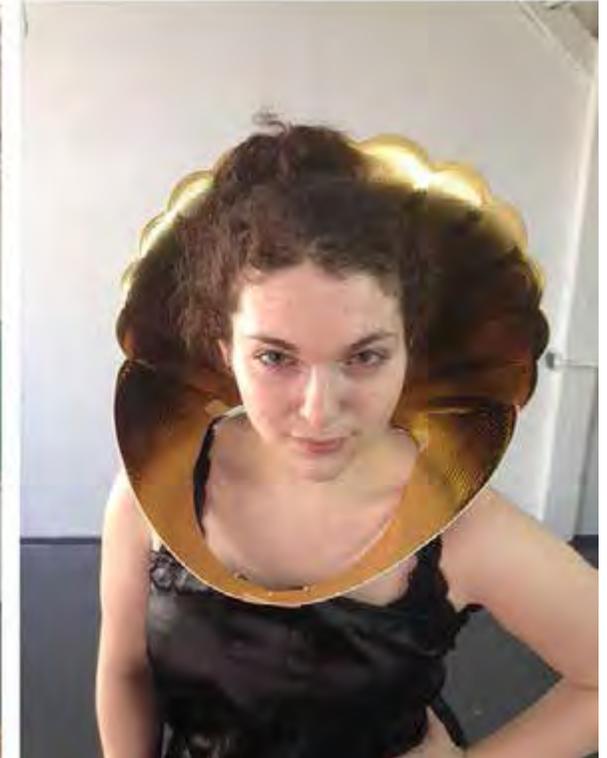
6"x5"x4"

Purpose: To create an **all purpose eating/storage device** that can be kept in small spaces such as dorms.

Method: Originally I had the box lid slide off the box to reveal a bowl. But later decided that a bent piece of wood would make a smoother design. Made with bamboo wood, this product is both environmentally friendly and graceful to look at.



Graduation Gown



Personal Project 2014

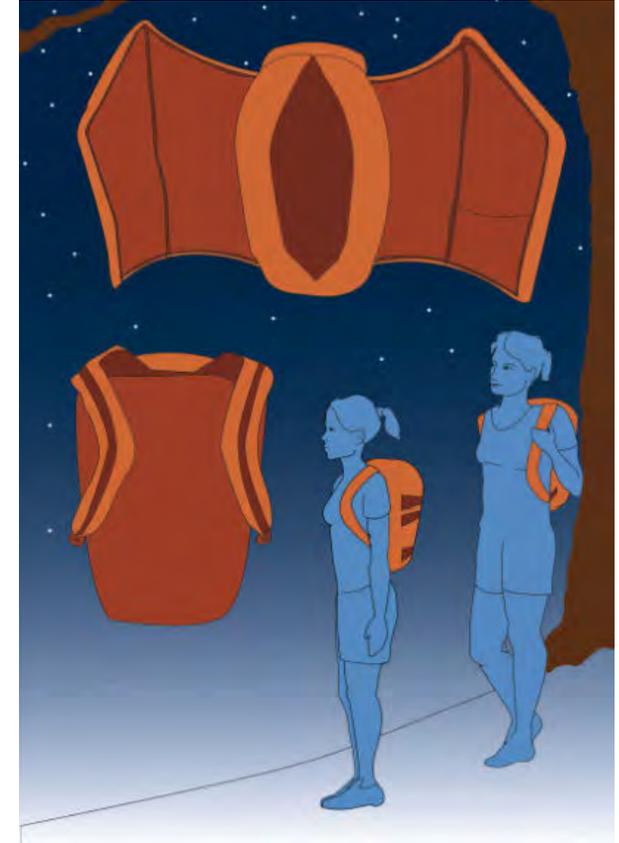
Silk, Place mat

Purpose: Re-purposing house-hold items to reinvent graduation gowns. Gown must be just as impracticable and eccentric as current graduation gowns.

Method: Using an old silk laundry bag and a place mat, this new design draws inspiration from Elizabethan collars. The dress is hand-sewn and the pattern was tailored to the models' measurements, as was the collars' molding and length.



Batpack



Personal Project 2014

Purpose: I find it frustrating when I can't see what I'm looking for in my backpack, which is often the case when the bag opens from the top. This only allows a user to see what's on the surface of the container, and not the entirety of the bag. This bag equips the user to have **broader view of their contents**, while still having the **ergonomics of a customary backpack**.

Method: I've had to create my own pattern for this bag, and still haven't gotten the measurements right for it. It is still a work in progress, but I'm close to getting the pattern fitted for this bag. I've used muslin fabric for the prototypes, which is a bit flimsy, but is nice to make mistakes with.



Paper Speaker



Pulp



Mixing in gesso



Spreading pulp



Drying pulp



Personal Project 2014

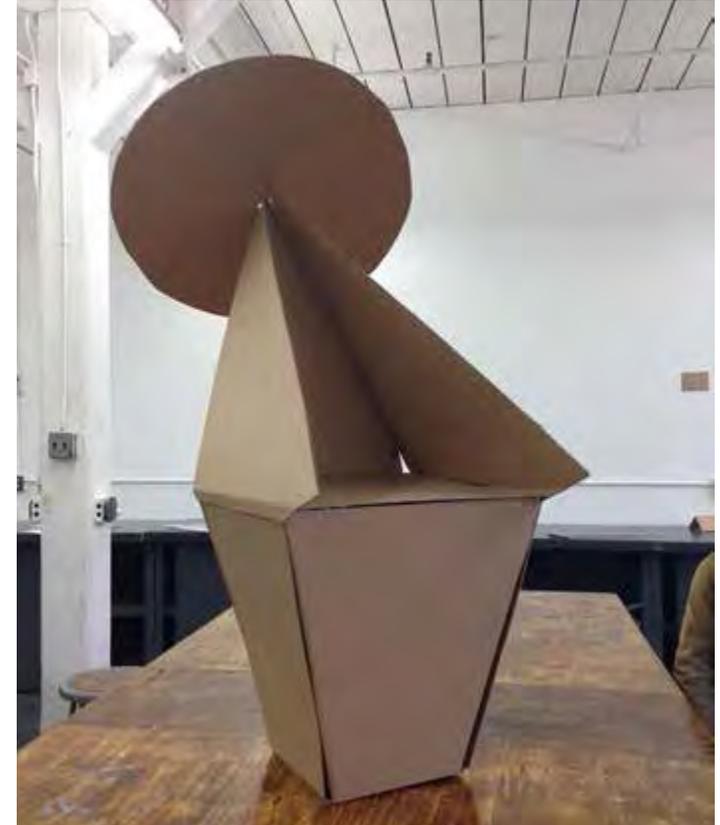
Compass 2"x2"x1/2" Flint 3"x1/4" Wrapping paper, glue, gesso

Purpose: To find a **use for old wrapping paper** after it has been consumed

Method: After making the pulp out of the wrapping paper, I put it in the dehydrator for several hours. I based my design after the interior of wasp nests, and cut out the thick cardboard-like paper.



Chair



3D Class 2014

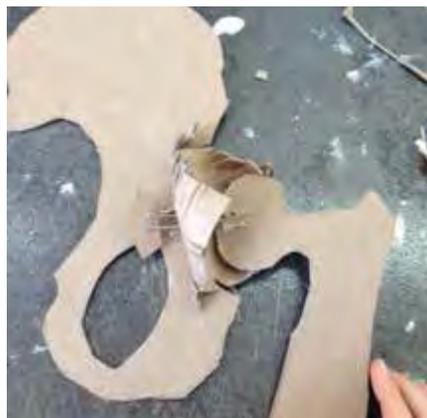
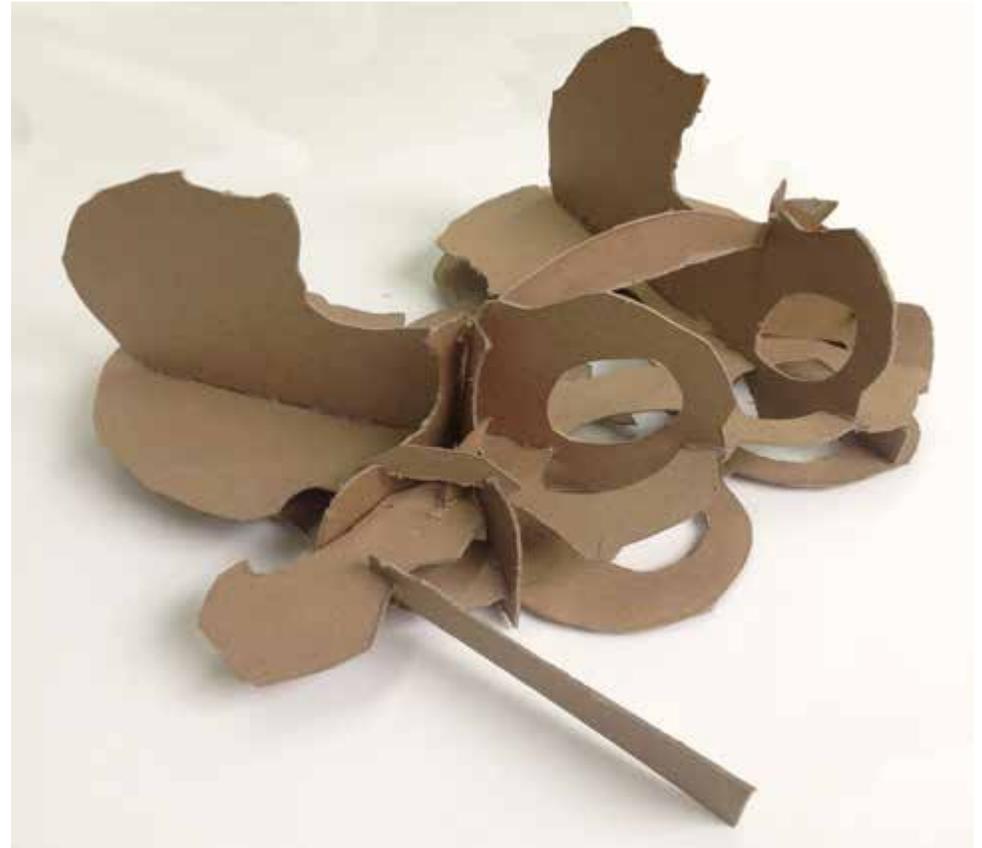
Base 6"x6" Chair 24"x24"x60" Chipboard

Purpose: To construct a **functional chair out of chipboard** that can hold the 125lbs of weight.

Method: We first constructed the chairs from scrap wood, seeing which forms we liked the most. Then using a box cutter I cut 3/4" thick stencil out of chipboard. The interior of the base is lined with supportive ribs that help hold weight. The chair's back is slanted at an angle, and it also has a parasol, making it the perfect lounging chair.



Pelvic Girdle Study



3D Class 2014

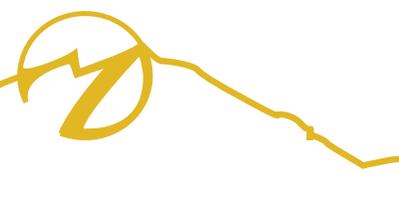
14"x14" Chipboard

Purpose: This is a **study on joints in the body**, and how they lend themselves to movement as well as stability.

Method: I first referenced the Gray's Anatomy book, and studied the general structure of the hips; I was able to reduce the hip down to three shapes. Using 3/4" chip board, I cut out duplicates of the same shape, which enabled me to minimalistly exaggerate the physical form of a pelvic girdle.



Condom Plaster Sculpture



3D Class

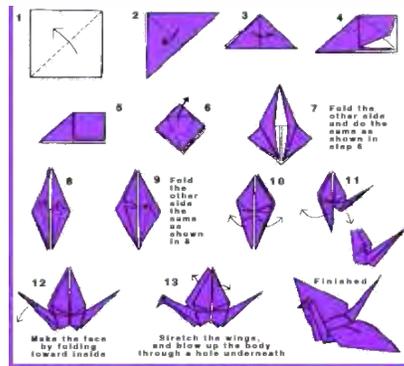
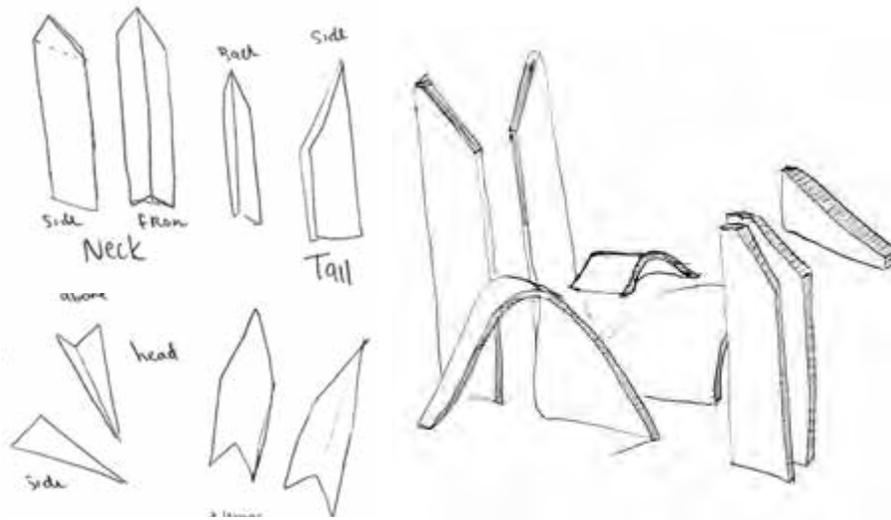
2013. 6"x4"x6." Plaster.

Purpose: Explore different molds that created smooth textures when using plaster.

Method: By pouring plaster in the contraceptives, it makes it impossible for air bubbles to form on the outside surface. The condoms can expand to contain large volumes of plaster, and are mold-able. Once the plaster is dry, simple cut off the rubber mold.



Acrylic Plastic Crane



3D Class 2013

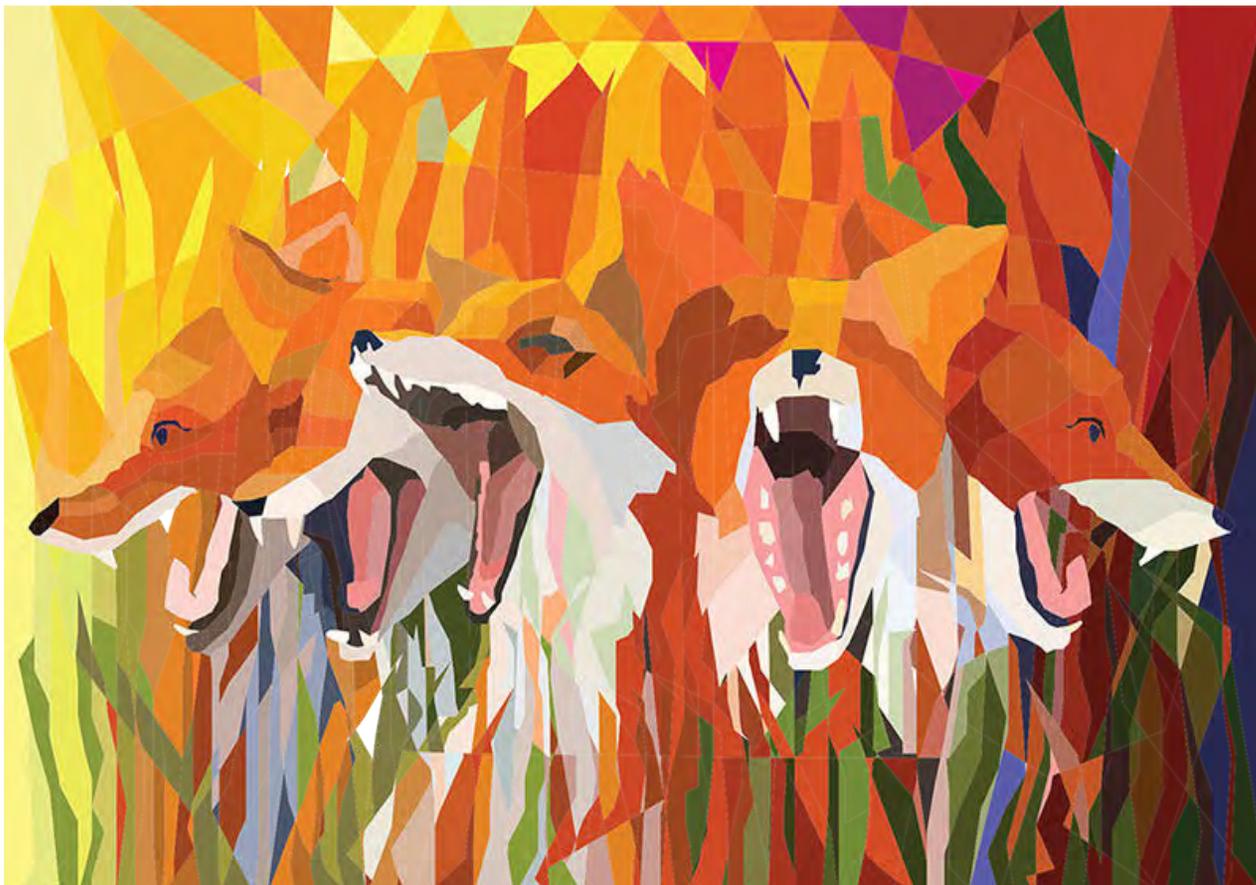
4"x 3"x4" Acrylic plastic

Purpose: To experiment with Poly(methyl methacrylate) an acrylic plastic that is bendable when heated.

Method: Using a large heater, I was able to bend the back and wings of the bird. The rest was glued together with an acid that would heat the plastic until it melted, enabling pieces to be pressed together.



Yawning Fox



Light/Color/Design Class

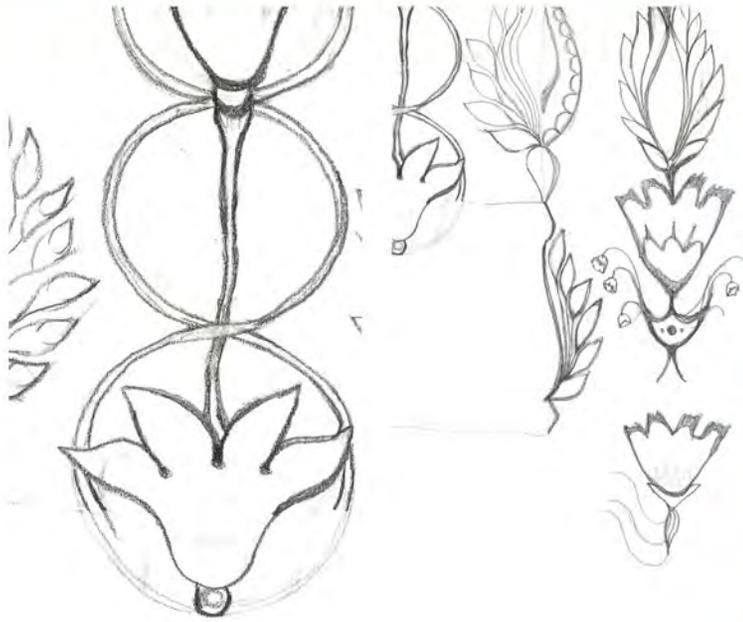
2014. 5"x8." Digital.

Purpose: To create a composition that shows **refractile movement**, in combination with a color and value scale.

Method: Using early **Italian Futurism** as an inspiration, this piece shows the progression of a yawning fox. The bright colors and abstract shapes are meant to guide the eye on an energetic path.



Digital Prints

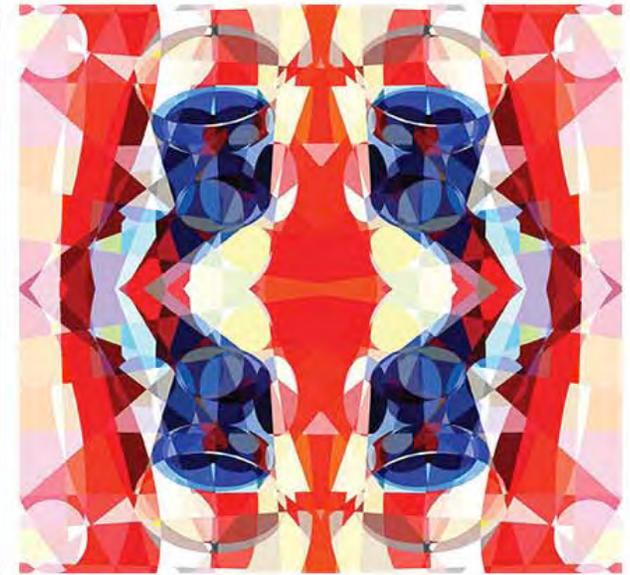


Light/Color/Design Class

2014. 8"x8." Digital.

Purpose: To create a repetitive pattern that has triadic color scheme.

Method: This composition was inspired by Alphonse Mucha a famous Art Nouveau poster illustrator. I wanted to **incorporate natural elements** moving in organic ways. This was first sketched on paper then transferred to illustrator.



Light/Color/Design Class

2014. 6"x 6." Acrylic paint. Digital

Purpose: To show **translucency**, color overlap, and surface color with paint and digital media.

Method: I set up a still life of dyed water and paid close attention to how it effected the **surface color** of the backdrop, as well as the reflection of the plastic cup. After I scanned it into illustrator and began generalizing the shapes and colors the still life made, and created a tessellation of the painting.



Light/Color/Design Class

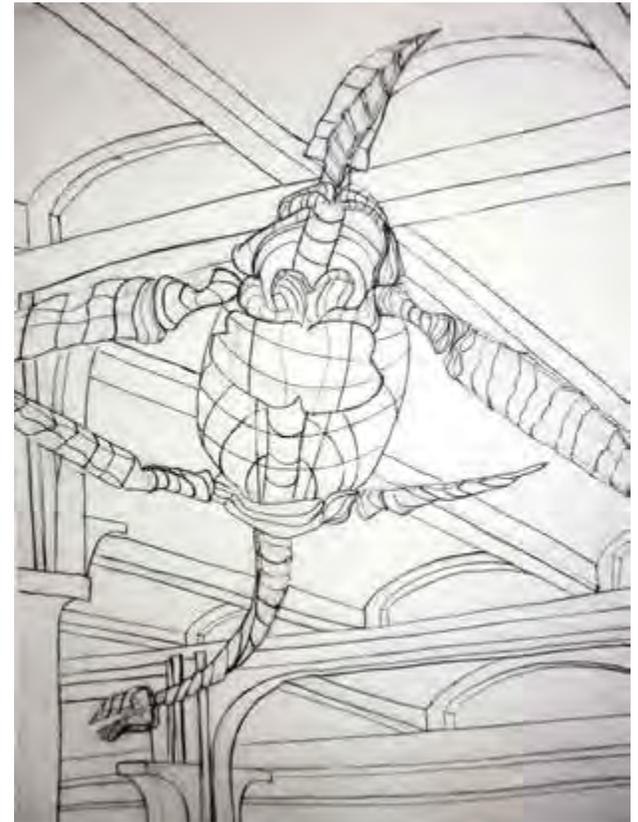
2013. 5"x5." Acrylic paint. ColorAid paper. Colored pencil.

Purpose: Illustrating the intricacies of color, by starting with simple grids, and moving on to traditional still lifes.

Method: Using three different mediums, I documented the color of an apple. Each square in the grid of the first apple was a generalization of the space on the fruit. The second apple shows the value and temperature of the colors, and the third is a full hue spectrum apple.



Charcoal Drawings



Drawing Class

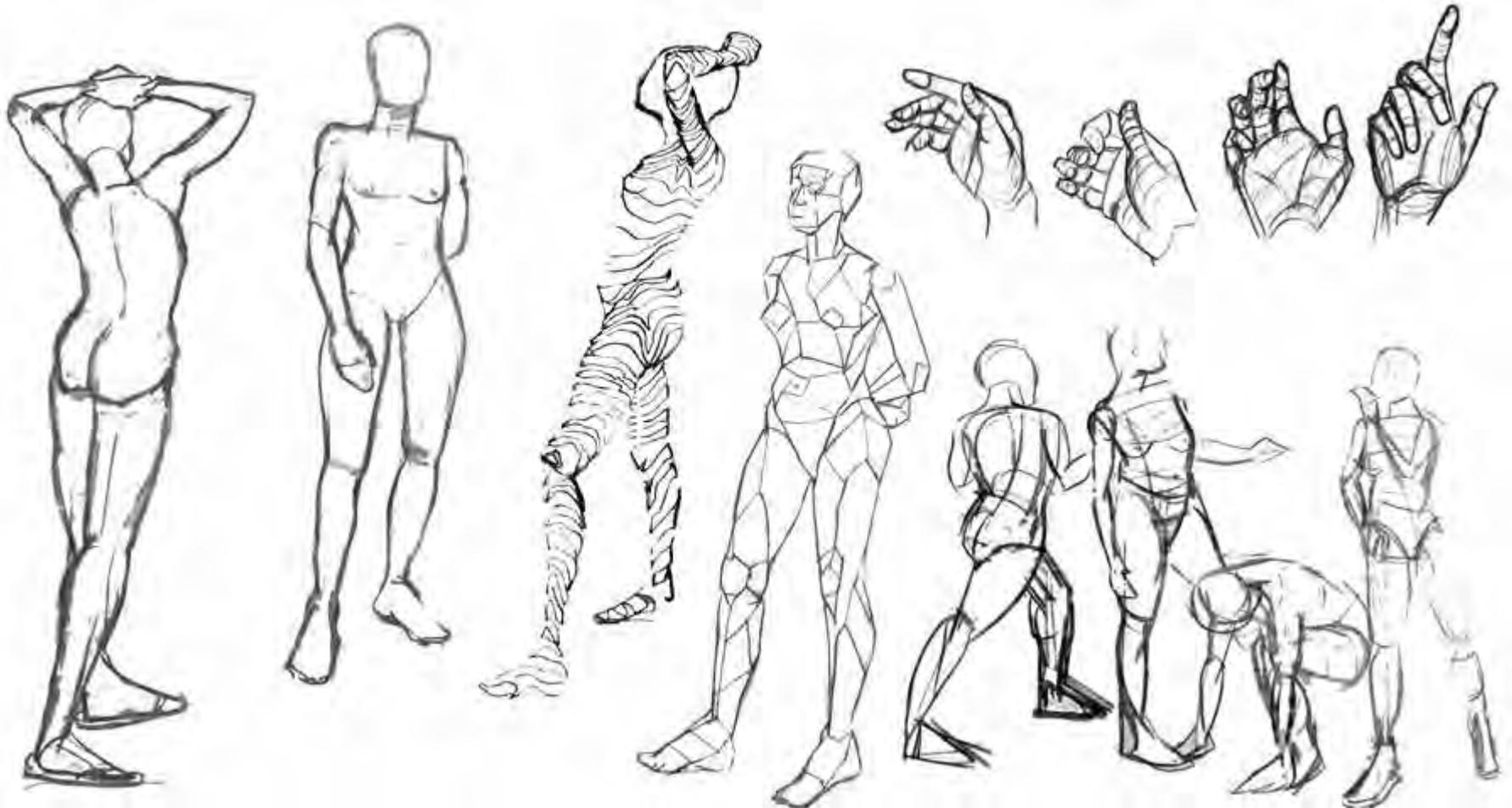
2013. 11" x 18." Charcoal.

Purpose: Learning to draw intricate scenes that involved **multiple forms, scales, and value structures**. With these skills, perspective is shown with foreground, middle, and background as well as eye level.

Method: These compositions were a part of larger scenes, but are focused on areas that best captured value, form, and shape.



Figural Sketches



Drawing Class

2014. 11"x18." Charcoal.

Purpose: Learning to draw the figure in an architectural context using charcoal and ink.

Method: These figures were drawn as **structural objects**.