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Consisting mostly of desert, Saudi Arabia’s climate posed many factors to be accounted for during the design process. To combat the intense climate, an organically shaped canopy is used to control heat gain within. Along with designing solutions for the climate, security must be under consideration. In collaboration with the United States Department of State, certain embassy guidelines had to be followed. The overall compound follows regulations such as setbacks, parking restrictions, entry points, circulation, etc. The embassy itself had to be 30.5 meters away from a 10ft. high perimeter wall that encases the entire compound. The challenge of this project was to create an aesthetically pleasing building that met all the regulations provided, controlled the extreme temperatures, and be a safe and secure place for high-profile government officials and ambassadors in Saudi Arabia.
The overall form of the building consists of two systems, an exterior organic canopy, and the occupiable interior space. The building sitting underneath the canopy has its own structural system consisting of steel-reinforced concrete columns, beams and trusses. The geometric, rectangularity of this space juxtaposes the canopy. The canopy is made up of a steel space-frame and glass fiber reinforced concrete panels. The goal of the canopy is to frame the entry points while reducing interior heat gain and providing shade within the courtyard space. The canopy is a monumental, organic form that grows out from the ground. Being the driving force of the design, the canopy solves issues of security and climate.
This building, situated on the border of Norman and Moore serves the community as an art gallery for local artists to display their work. Responding to the functionality, the building itself has sculptural characteristics through contrasting design elements. The exterior wall footprint is a perfect square, with organic metal sun-shading devices covering each of the four facades.
Sitting on the boundary of Norman and Moore, this site is a perfect spot to begin the expansion of artistic culture into Norman. As Norman becomes more populated with the growing size of the University of Oklahoma campus, the need for more galleries is apparent. Showcasing young, developing artists around town is an excellent way to publicize Norman on a broader scale. Giving aspiring artists the opportunity to rent gallery space and freedom to create within a space is a learning experience needed in this area.
Lightweight concrete canopy

Insulated glazing unit

Insulated concrete tornado shelter

8" x 8" steel column

Supply/Return ducts

metal sunshades

Outdoor area

Annual Natural Daylighting

Summer Natural Daylighting
Located on the outskirts of the University of Oklahoma campus, this bus terminal seeks to attract students and residents to take part in public transportation. Not only does this bus terminal provide routes all over Norman, but adequate access to the nearby train is simplified. Views out to the bus circle are dramatized through large glass windows facing the southwest.
The 2016 Central States Region Student Design Competition was held in Manhattan, Kansas. The purpose of this 12-hour long design charrette was to propose a new regional design and pedestrian link to reconnect the public realm in Manhattan with the riverfront. The Grass Stitch provides a framework of three distinct components that reconnect the city to the riverfront.
The Financial District, one of the many heavily populated neighborhoods of New York City, has been increasingly growing over the past few years. The abundance of offices and major financial institutions make this area very business-driven. Recently, the financial district has had an increase in demand for housing. Moving into this high-stress, busy environment calls for the need for a place to relax and unwind before or after a long day of work. The Rho, a yoga studio sitting on a busy corner in New York City is a combination of convenience and a relaxing environment. A few steps away from one of the major subway stations in downtown NYC, the site is extremely accessible to people who aren’t within walking distance. A circle, representing totality, wholeness, and eternity, common themes within the practice of yoga, became the motif behind the project. The yoga study is heavily influenced through the design of the courtyard partitions. These partitions consist of a series of circles varying in size, allowing light to seep through. These lights are intended to follow the pace of the yoga classes. When classes intensify, the lights will respond by displaying shades of red, which evoke more exciting emotions. Depending on the goal of the class, the lighting will vary.
Physical Modeling / Research Development

Provoke emotion through color
- GREEN: balance, harmony, refreshment, restoration
- VIOLET: spiritual, luxury, truth, quality, meditation
- ORANGE: physical comfort, warmth, passion
- RED: warmth, energy, excitement, strength
- BLUE: serenity, logic, coolness, reflection, calmness
- PINK: tranquility, nurture, warmth, love

Perforated metal panels
The metal panels are designed to allow light to filter through the proposed areas that are shaped as circles. The transparency of the circles allow the light to shine through, creating a glow that is visible from down the street. Coordinating classes with the colors of the panels is what sets this yoga studio apart from the others.

Floor plan:
1 entry
2 storage area
3 yoga space
4 lounge area
5 courtyard space
Rhino 5.0 / Grasshopper / Laser Cutter / Physical Modeling

As a continuation of the Rho yoga studio, the same conceptual ideas were applied to a light fixture. Using the same techniques developed in Grasshopper, the interior pieces follow the form of the perforated panels. The addition of mirrors on the interior allow for light to bounce around and create a more dynamic, decorative light fixture.

**Outer shell** - consists of four rectangular pieces, one solid side facing outwards, and one mirrored side facing inwards.

**LED Light Bulb**

**Inner shell** - consists of four, rectangular, perforated pieces, allowing light to diffuse through.

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**The Joint**

To combat the weight of the exterior shell being made up of mirrors, an interlocking joint was used as a method of construction. The points of intersection created transparency, allowing light from within to glow outwards. With the colored light filters attaching to the bottom, the warm glow from the joints remained a consistent color, as the light filters can change depending on the type of exercise class.
The PAVE 2017 student design competition is a competition to reinvent a chick-fil-a restaurant on a college campus. Through transparency, circulation, and adaptability, this design showcases a new and improved Chick-fil-a experience. To continue promoting freshness and quality of Chick-Fil-a foods, views into the kitchen space are provided to the public eye. Being on a college campus, the need for adaptability is apparent. For future additions and changes, the open floor plan allows for efficient re-arrangement and construction if needed. On most college campuses, there is specific times that on campus dining gets extremely busy. One of the major concerns of this design is for students to know where to go, to feel comfortable, and to circulate through the space in a smooth fashion. Circulation through the space is developed around the main counters in the center. The pick-up area is accessible from both the entry side and the indoor seating side, allowing for more paths of circulation. The main entry is directly on axis with both ordering stations, along with the linear lighting guiding circulation towards the center.
This project explores how simple, stacking polyhedrons can be fabricated. The three interlocking pieces were developed originally as planes in Rhino 5.0; as mass was added, miter joints were designed. The objects, with their miters, were laid flat and cut out of plywood with the CNC router and assembled simply with glue. The holes cut within the faces of the polyhedron directly correlate to each of the corners of that face. We then used these forms as the formwork for an additional object. The intention of this piece was to use an inextensible material to create an object with compound curvature. The form is created using triangular shapes laser cut from sheets of acrylic and zip tied together on the inside face.
This goal of this project was to create a 3D object with the CNC router by milling on both sides of stock. This twisting ellipse object explores the restrictions of the CNC router through the form’s thinness. The object evolved through trial and error as it took many iterations to figure out the force of CNC router’s drill-bit in comparison to the form. The textures are created depending on the speed of the machine as it goes through its finishing toolpaths.
This project is a combination of creating a mold and casting material within. The choice of material is a foam mold with a concrete casting. The foam mold was developed in Rhino 5.0, exported into RhinoCam to explore mill techniques and textures and then brought to the CNC router.

This project was an experimentation with concrete additives, mold releasing techniques, and form. The final series is an outcome of multiple iterations.
This bench is an exploration of different Grasshopper techniques. The development of the bench relied on experimentation with how many pieces of plywood need to be stacked together to create a comfortable sitting area. The parametric bench can follow along any curved line input into Grasshopper. The goal of the bench was to adapt to any type of surrounding context. The full-scale mockup was produced through a joinery technique where the pieces would just slide into one another, creating stability.
These models were created using algorithms using the program Grasshopper. Each model was derived through a code with various inputs that can be adapted and transformed creating different outputs to fit a variety of conditions. The models experiment with filtering light, materiality, structure, and joints.
Senior quarterback completes unlikely journey from walk on to Heisman winner with landslide win on Saturday

"I think the biggest difference for me was just the talk about Oklahoma football, you know, Oklahoma football changed me. It's been a dream come true. "I'm speechless, it's been a dream come true.""}

Joe Burttner | Photo Editor
As the Heisman has become a national event, Oklahoma football has grown with it. Here’s our look at OU’s winners.

**INTRODUCTION**

**MANUFACTURING A WINNER**

“It was no campaign,” said Steve Owens, the sixth statue standing after defeating Ohio State in 1952. “(The Heisman Trophy) was not cast as the sixth statue standing in our part of the country,” Green fir. “Once you’re a Heisman candidate, and Williams became permanent when they dropped Corso wrong, beat us in there we’ll be disappointed if we lose. You’re going to be identified as one of the most iconic moments of college football. You’re going to be identified forever in history as a Heisman winner.”

Oklahoma quarterback Baker Mayfield started the Heisman moment can promote it harder to promote for that award, Mossman said. “And then, of course, right before they present the next. There was no campaign,” said Mossman. “There was no campaign, Mossman said. Still, there isn’t a perfect formula to promoting a Heisman candidate, and how a candidate is promoted.”

However, Mossman said, “You’re going to be identified forever in history as a Heisman winner.”

On Saturday night, Oklahoma and Riley have their season game out of the way, according to the media was saying, but we couldn’t defeat the Buckeyes. On Aug. 26, ESPN’s Weekday Edition | September 11-13, 2017 | Twice Weekly in Print | Oudaily.com

Lincoln Riley, vice president of the University of Oklahoma, he proved he can win the next. That didn’t happen at all. "There was no campaign," said Mossman. "And then, of course, right before they present the next. There was no campaign," said Mossman. "You’re going to be identified forever in history as a Heisman winner."