Depicting a colossal abstracted drosophila eye, Oculus both recalls the circular opening of an architectural boundary and alludes to devices of surveillance: a drone hovering in mid-air. As reflections play across the undulating surface, the apprehension of the self affects both individual and collective behavior in unexpected ways. Gazing at Oculus is an act of seeing, and of being seen.

The work evokes affective encounters with scale such as viewing miniature particles through the lens of a microscope or wandering through monumental physical environments. It explores those sensory modalities that play a dominant role in spatial perception, triggering the affect of scale on several fronts: in the relationship between micro and macro worlds, in the viewer’s perception of their own bodily scale in relation to the work, and in the viewer’s perception of the sculpture’s relationship to architectural space.

OCULUS
52”x32”
High density polyurethane foam, automotive paint

Artist: Patricia Olynyk, digital design with Nathaniel Elberfeld
Venice Design Exhibition
Site: Palazzo Michiel, Venice, Italy
Year: 2018
Concrete Tapestry investigates the potential of textile craft to generate new configurations of reinforced concrete, translating an existing small-scale technique into larger-scale architecture, and subverting the perceptual and literal heaviness of typical concrete construction through a series of delicate linear networks fabricated by experimental methods.

Each “tapestry” panel is reinforced with a braided carbon fiber armature that leverages techniques from traditional lacemaking—those that usually produce pictorial motifs—into purposeful forms that adopt a material and structural function. The project builds on previous research employing a hybridized computational and analogue workflow for the design and fabrication of each underlying armature. The braided carbon fiber is then made rigid and thick by the application of a resin and aggregate coating, is dipped in concrete, and hung to cure.

CONCRETE TAPESTRY
12’ x 7’
Carbon fiber, resin, concrete
with Nathaniel Eberfield, Lavender Tessner & Sam Bell-Hart
Temporary Installation, Bruno David Gallery
Year: 2018
Peel away diagram showing material layers of tapestry cross-section.

Panel fabrication process:
1. Attach pattern
2. Drill holes at vertices
3. Clip fiber to rail
4. Arrange bobbins
5. Add nails at vertices
6. Braid fiber
7. Lift frame from backing board
8. Coat with resin
9. Coat with gravel
10. Dip in concrete
11. Cure
12. Remove nails
13. Install side rails
14. Install lower rail, remove bobbins

Peel away diagram showing material layers of tapestry cross-section.
Left: Diagrams showing the three carbon fiber braid patterns and how they are mirrored, oriented, and layered to create the final panel geometries and tapestry pattern at large.

Above: Carbon fiber braiding in process.
Panel prototypes testing cross section thickness and carbon fiber armature layering.

Below: Concrete recipe and color tests.
Across time, Great Flood mythologies have been a medium for framing and expanding human experience. Layered with themes of death and rebirth, these cultural narratives speak to the awesome capacity of water to both destroy and create; transformative powers mirrored and symbolically harnessed by man for centuries through ritual bathing.

In the heart of downtown Saint Louis, water is suspended through air. A vertical bathhouse stands as a satellite of the Mississippi River, echoing its ebb and flow, and restoring meaningful rites to the city. As bathers enter the water, it is displaced, overflowing the boundaries of the pools and falling to the city below; a performative entrance into the resonant cycles of place, ritual and myth.

At the foot of the bathhouse a public plaza acts as a collection device, capturing and channeling rainwater beneath the tower where it is held for cleansing and treatment. Remediated water flows through the tower for use in the baths and saunas before being released back to the earth.

**EUREKA**
Site: Saint Louis, Missouri
Program: Vertical
Bathhouse
Instructor: Heather Woofter
Year: 2011
Site plan
Left: Mappings of the historic flooding of the Mississippi River at Saint Louis
View to tower from public plaza
Opposite: Exploded plan diagram
View underneath the main temepada bath and in between the sushi restaurant.

Opposite: Section
View of one of the private sauna baths from the threshold.

Opposite: Longitudinal Section.
Guided by spatial, proportional, and compositional cues from Kahn's masterpiece, this alternate proposal to Renzo Piano's Kimbell Museum addition focuses on the relationship between ground and sky.

A roof monitor envelops the upper half of the gallery's volume, permitting and regulating diffused natural light to below while protecting the artwork from the sun's intensity and creating the optimal environment for its appreciation.

The galleries and public programs organize around a central, sunken courtyard that funnels light to lower instructional spaces while its cooler depths offer sanctuary from the Texas heat.

KAHNECTED
Site: Fort Worth, Texas
Program: Addition to the Kimbell Museum
Instructor: Robert McCarter
Year: 2011
Facade alignments and section through main gallery.

Top: Section model, 1/4"=1'-0"
Rendering of interior courtyard

Opposite: Sketches of shared plaza with the Kimbell Museum
Historic fragments and contemporary urban conditions are synthesized to form a new series of cultural narratives for the city of Saint Louis. Through this process of myth-making, the city's sense of place is manifested and its emotional identity is interpreted and re-imagined.

Mythropoeia

4.75" x 6"
Artist's Book

From the Rare Books Collection of the Olin Library, Washington University in St. Louis
Instructors: Jana Harper & Zeuler Lima
Year: 2010
Flying Houses

by the end of the day, there was only one left.
The Watchtower

The laughter grew louder the higher they climbed.
THE BIRDS AND THE DISAPPEARING CITY

piece by piece, it slowly began to vanish.
THE LAST MIGRATION

Having come this far, there was no turning back now.
An observatory studying the effect of lunar illumination on the nocturnal behavior of aquatic insects sits on Bowl Lake, a small body of water on the edge of Saint Louis’s iconic Forest Park. Rooted in the relationship of the moon’s cyclical path across the site, the formal language embodies the transformative process of insect metamorphosis and playfully nods towards the lunar mythology of the Lycanthrope.

Lunar Phasing
Site: Forest Park, Saint Louis
Program: Lunar Observatory
Instructor: Derek Hoeferlin
Year: 2008
Site plan with lunar path overlay

Below: Diagram of sun/moon/earth rotation with corresponding lunar phases
Study models
Above: Basswood model with lunar path overlay