

The Vessel Transformed - Manual and Digital Exploration

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Abstract

Learning to use the computer as a projective design tool, rather than a time-consuming representational device, is essential to architecture students as they develop habits that will influence their education. Beginning studios take students outside the world of their experience by teaching representation strategies that rely on abstraction. This project attempts to integrate hand techniques with digital image manipulation to extend and reinforce the lessons of spatially based conceptual design exercises.

Keywords: Beginning Design Student, Tectonics, Vessel, Tactile and Digital, Sectional Studies

Continuing in the Bauhaus tradition of teaching “how to see,” students combined process oriented explorations with digital media and were encouraged to think with the computer and the hand simultaneously. (Lin, 2013) The speed of digital manipulation allowed students to quickly grasp how conceptual design translates into human experience. This pedagogical model encourages students to develop a digital sensibility at the inception of their design process.

Students graphically explored an object utilizing various sketching exercises and unique qualities were reinterpreted through model building. Students were asked to consider the shoe as a vessel at two scales; could it ultimately embodying similar tectonics and be translated to create space at a habitable scale?

The internal workings were graphically represented by hand in cross-sections as a departure point for developing a spatial sequence. By presenting the sections in a side-by-side series, students learned to see sectional moments within a larger whole. This step sets the framework for designing space through a progression of abstractions. Rather than using their limited frame of references for “space-making”, students were confronted with sectional shapes predetermined by their object.

This example of a design sequence demonstrates that students can be taught to think simultaneously through the computer and the hand. Appreciating the computer as a projective tool promotes an actively engaged digital user that is able to design intuitively with the computer. Working back and forth between the hand and the computer at the onset of a design education enables the students to control their own process at each level without being limited by the manual or becoming trapped graphically by the digital.