

# BEGINNING DESIGN

## PROCESS:

### SUBJECT TO OBJECT

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*"The making of architecture is intimately connected to the knowledge that buildings instill within us emotional reactions. They can make us feel and they can also make us think. Architecture begins to matter when it brings delight and sadness and perplexity and awe along with a roof over our heads. It matters when it creates serenity or exhilaration, and it matters just as much, I have to say, when it inspires anxiety, hostility, or fear. Buildings can do all of these things, and more." <sup>1</sup>*

Beyond the act of building, the architect is responsible for assembling a collection of inanimate objects – steel framing members, bricks, window units, etc - and with those basic elements create form and space that are expressible to the human spirit. The first architecture design studio is the initial opportunity to explore these actions of making, with the applied framework of a concept to guide the process.

The issue of concept, as a generator of design actions, is elusive and somewhat difficult to explain to the beginning design student. In this first year design studio, we offer a two stage process that allows the student to understand the necessary abstraction (essence) and the necessary application of concept (substance) in the design of architecture.

#### The Essence of the Subject

"A Concept Can"<sup>2</sup> project brief: Using a familiar, neutral, mass produced, valueless item - the cola can - transform it in five steps through the direct application of an emotion onto the composition. The double entendre of *can* as an action, and *can* as an object, begins the discourse. The goals of the project are to introduce conceptualization as a means towards a physical expression. The project is designed to stretch the imagination, and test the ability to solve complex three dimensional compositional and representational problems. In the one week exercise, the students research, formulate, and narrate their thoughts on the given subject – a human emotional condition – as the precursor to this initial act of making.

Students may be assigned any one of the following human emotions as the vehicle for the transformation study: Anticipation, Awe, Contentment, Curiosity, Envy, Frustration, Grief, Lust, Joy, Hope, Pride, Loneliness, or Suspicion. The selection of both positive and negatively perceived emotional conditions is deliberate, as it attempts to separate convenient reactions from well considered and researched ones. Excerpts from several students' initial research follows:

*"Pride is a complex secondary emotion developed through self. It can be viewed as a shield, borne of one's accomplishments."*

A. Mitchell

*"Awe is the power to inspire with fear or reverence or dread – by authority, genius, beauty, sublimity, or might." C. Patterson*

*"Suspicion is an emotion completely of the mind; it clouds the mind completely." A. Abo-Basha*

*"To Hope is to risk... Hope demands progress and encourages us to strive for improvement in our lives." E. Ashbaugh*

*"Joy is above all emotions, it is inwardly focused and held tight to become long lasting." B. Lee*

*"Anticipation brings the unimagined to life."*

J. Palacios

While initially the beginning design student may be displeased with the emotion they have been randomly assigned, all must come to terms with the content, and absorb it through design research. Once the initial thinking has been established, the transformational studies begin. The emotional condition must be represented as a transformation in five steps, the first of which is a normal cola can, untouched and with the neutrality normally understood as a quality of the mass produced, throw away item. The final, five frame composition must exhibit qualities of the emotion, by interpreting aspects of that emotion manifested in abstract terms through the actions of the cola can transformative process.



**Joy**, interpreted by H. Hall



**Envy**, interpreted by S. Williams



**Loneliness**, interpreted by V. Vest



**Frustration**, interpreted by K. Willis

The can transformation may occur in the formal language angular cuts or applications, curvilinear ones, or via use of linear elements. The narrative may begin within the cola can, or from the outside. The surfacing of the can may be altered, disguised, or transfigured; even the cola company graphics may be used as part of this transformation message. Unity is achieved through repetition and a common design language. Linkages between the stages are important to promote continuity. Focus is achieved through visual emphasis created by a frenetic activity of form, absence of activity, strategic use of cola company graphics or color, changes in scale, repositioning of the can within the composition, etc. These fundamental compositional strategies apply to the essence of this abstract design challenge.

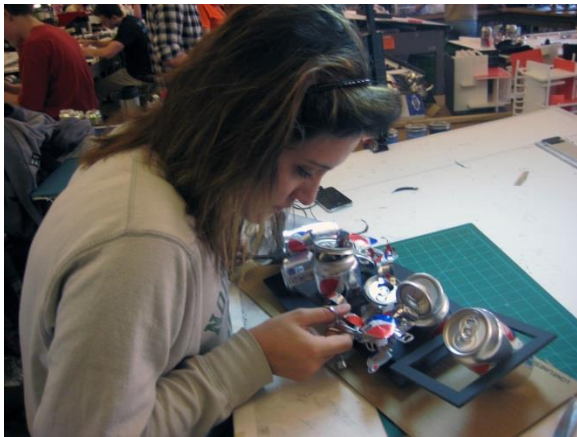


"A Concept Can" project in process

The black frames also become part of the design problem and discussion as well, serving as a kind of context for the composition. The subject can move in front of, at center, or behind the frame element, as a static datum to which the message

can be affixed. Or, the frame itself may not remain static; it can also tilt, move forward or back; in some way it may create motion within the composition. In every case, the frame becomes part of the message.

There is investigation and discovery at work. The problem allows for variation yet consistency in design vocabulary. Critiques center on content, reference, analogy, symbol, assemblage, and fabrication. The end goal is to create a meaningful message, the essence of the subject, via the transformation of this basic inanimate object... and to bring value to the previously valueless item.



V. Vest at work assembling cans and frame

From the one week "Concept Can" project, students move into the "Vertical Construct" project, a three week intensive study. The four week sequence, occurring mid-semester, constitutes one quarter of the semester's work in the first design studio.

### Transformed into the Substance of the Object

"A Vertical Construct"<sup>3</sup> project brief: Create an architectural proposal for a vertical construct (a tower) that responds to the messaging content realized in the "Concept Can" project. The conceptual starting point remains constant – the human emotion, yet elements necessary for human interaction and interpretation must be

incorporated through base plane development, structural systems, vertical circulation systems, habitable space at height, and imagery at the skyline. The human has now entered the design problem, to become the receptor of the design messaging. How the vertical construct is perceived from a distance, upon the imagined skyline; how the human enters and moves through the circulation system; what the culminating experience is – these questions are fundamental to the development of the architectural concept.

Here the students find themselves at the crossroads of idea and architecture. As in art, intentions are necessary, but they are only a beginning, not an end in themselves. How good intentions become serious ideas which in turn, inspire the creation of built form is the essence of idea to form, subject to object. In the classic text *Experiencing Architecture*, Rasmussen aptly notes that the best buildings have been produced when the architect has been inspired by something in the problem which will give the building a distinctive quality. He further states that such buildings are created in a special spirit and they convey that spirit to others.<sup>4</sup>

While in the 'Concept Can' project, students interrogated their assigned human condition and attempted to give it physical form utilizing a standardized object as the medium, in this iteration of the project students must further investigate the human condition to solve for the human experience and create a meaningful object that is architecture. Literal translations employed in either stage of the project are prohibited, encouraging instead a deeper understanding of what it can mean for a building to embody an idea or message as a human experience.

While some of the initial formal qualities, or design language, and certainly aspects of the message content of the "Concept Can" project may be immediately applied to the "Vertical Construct"

design problem, many other issues related to the reality and human experience of architecture require a new interpretation. Additional goals include the investigation of an innovative structural solution – a nod to the population of architectural engineering students in our first design studio. Additionally important is the investigation of several fundamental design principles such as repetition, hierarchy, order, focus, and materiality in terms of color, texture, transparency, solidity, etc. Without the limitation of the media, students must now make selections about materiality that relate to their newly redefined message and concept.

Students begin the design process with a conceptual narrative, perhaps as a description of the desired human experience, as one would approach, enter, and move up and through the tower itself. Poetry is another means of creative writing that may be employed. Or, students may simply write an explanation of how the emotion can be felt in architectural terms as an expression of the tower itself. Excerpts of several students' initial concept search follows:

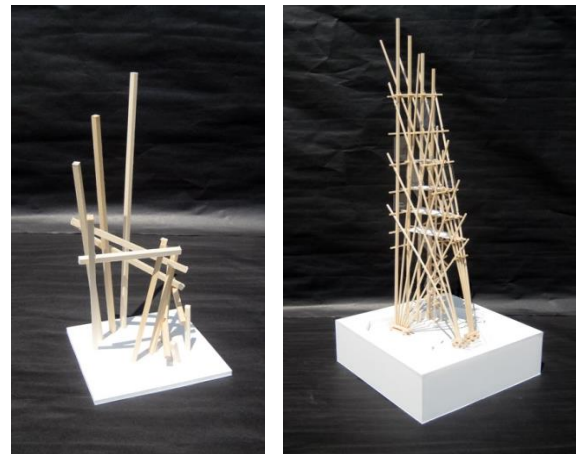
**“Loneliness** is broken isolation and solitude, and occurs when desire is present – the tower must be alone, perhaps reflected in water, and to reach it is arduous. At the top is a beautiful opening of the heart.” T. Pelzel

*“Something is misaligned,  
It is a misplaced idea;  
In my fear I distort and twist it;  
And without me even realizing it,  
It has become the worst possible thing  
I could imagine.*

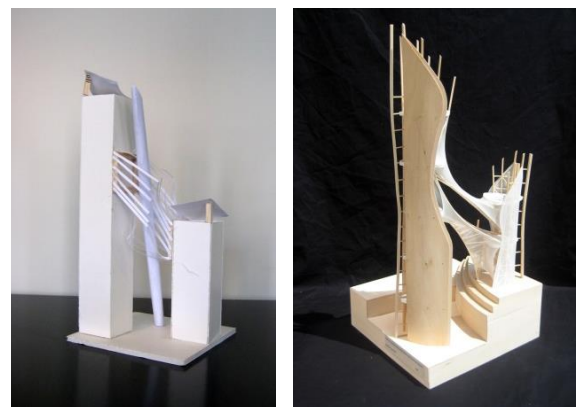
**Suspicion** fills my heart and mind like a disease  
Until my composure is shattered.” J. Martin

**“Frustration** is aspiring for greatness, but brought down by external forces. The tower must surge upwards in spite of gravity, fueled by the desire to defeat an inevitable yet invisible opponent.” S. Lassman

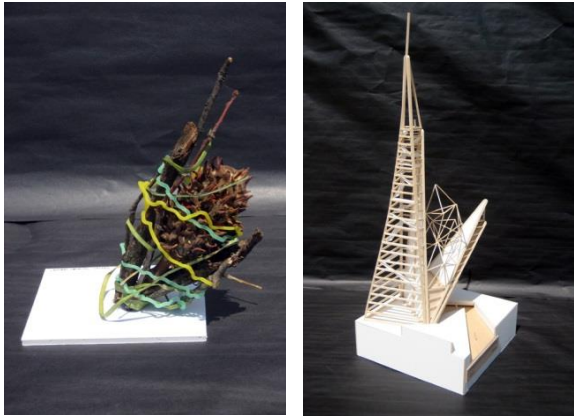
To promote innovative structural thinking, the first required studies must employ three separate sets of structural concepts – stick system, planar system, and found object system; each must be applied as part of the overall conceptual direction. These systems are evaluated for how well they relate to the conceptual messaging, and one or more are selected for further development. Architectural engineering faculty provide introductory structural presentations, and are included in these initial critiques and throughout the design process, to help guide structural development from an intuitive sense.



**Loneliness**, Stick System Initial Study and Final Project, by S. Wilson – inspired by the decayed and abandoned oil field equipment commonly seen in the barren Oklahoma landscape.



**Lust**, Planar System Initial Study and Final Project, J. Lane – inspired by the tenuous touch of fingertips between two bodies, one dominant over the other.



**Contentment**, Found Object Initial System (branches, a magnolia bud, and rubber bands) and Final Project, B. Mitchell – inspired by the precious centrality and inward focus of a contented soul.

Throughout the design development process, the success of the concept is measured against the application of these basic design principles. Form, space, structure, experience, and meaning are equally important in the development of the architectural object.



M. Delp completing her final model

Vincent Scully said that we perceive architecture in two ways – associatively and empathetically or, in other words, intellectually and emotionally. We make associations between buildings and

other buildings, and we feel buildings as emotional presences. Most buildings affect us both ways, reminding us of other structures and their forms while also evoking certain deeper feelings.<sup>5</sup> While this concept can be easily demonstrated in an architectural history class, illustrated with the wondrous examples of man's accomplishments throughout time and across continents, for the beginning design student in the first studio experience it can be a difficult concept to apply to their own work.

This project sequence is necessarily abstract; it has no particular site, nor client. Rather, it focuses squarely upon design fundamentals related to concept development and bringing meaning to form. This education methodology attempts to bridge the opposing strategies of the essence of the subject - the message, and the substance of the object - the architectural resultant, in the design process for the first year Architecture student.

In the seven years this project sequence has been offered in our program, more than 600 unique solutions have been generated. The “Concept Can” and “Vertical Construct” projects remain favorites among our student population, for the way in which they creatively invoke thought, encourage experimentation, and address meaning in making at the beginning design studio level.

<sup>1</sup> Paul Goldberger, *Why Architecture Matters* (New Haven: Yale University Press, 2009), x.

<sup>2</sup> “Concept Can” project brief, written by Professors Suzanne Bilbeisi and Mohammed Bilbeisi, 2007.

<sup>3</sup> “A Vertical Construct” project brief, written by Professors Suzanne Bilbeisi and Mohammed Bilbeisi, 2007.

<sup>4</sup> Steen Eiler Rasmussen, *Experiencing Architecture* (Cambridge: MIT Press, first edition 1964), 32.

<sup>5</sup> Paul Goldberger, *Why Architecture Matters* (New Haven: Yale University Press, 2009), 154.