

ACSA/AIAS New Faculty Teaching Award

2015-2016 Winner Submission Materials

LISA HUANG
University of Florida

AIAS/ASCA NEW FACULTY TEACHING AWARD NOMINEE

LISA HUANG | SUPPORTING MATERIAL 2011-2015

Assistant Professor | University of Florida School of Architecture DCP



Robert Lyons | Architectural Design 8 | Spring 2013

LISA HUANG Assistant Professor University of Florida School of Architecture Summary Course Evaluation Data		Number of Students Enrolled	Number of Responses Received	Response Rate	Percentage of Course Taught by Instructor	1. Description of course objectives and assignments	2. Communication of ideas and information	3. Expressions of expectations for performance in this class	4. Availability to assist students in or out of class	5. Respect and concern for students	6. Stimulation of interest in course	7. Facilitation of learning	8. Enthusiasm for the subject	9. Encouragement of independent, creative and critical thinking	10. Overall rating of the instructor	Course Average
Term	Course															
2011 Spring	ARC 3321 Architectural Design 6	16	11	69%	100%	4.45	4.55	4.64	4.82	4.73	4.73	4.55	4.91	4.91	4.70	4.70
	ARC 6355 Advanced Graduate Studio 2	11	6	55%	100%	4.67	4.00	4.33	5.00	4.50	4.33	4.50	4.67	4.50	4.17	4.47
2011 Fall	ARC 1301 Architectural Design 1	27	22	81%	100%	4.34	4.53	4.26	3.48	4.54	4.52	4.35	4.68	4.76	4.53	4.40
	ARC 1301 Architectural Design 1	34	31	91%	100%	4.14	4.31	4.33	3.97	4.61	4.34	4.18	4.45	4.48	4.40	4.32
	ARC 2301 Architectural Design 3	11	6	55%	100%	4.67	4.50	4.83	5.00	5.00	5.00	4.33	5.00	5.00	5.00	4.83
	ARC 4941 Architecture Education Issues	22	5	23%	33%	4.20	4.20	4.20	4.20	4.60	4.60	4.20	4.60	4.80	4.60	4.42
2012 Spring	ARC 1302 Architectural Design 2	27	17	63%	100%	4.37	4.36	4.61	4.47	4.66	4.72	4.43	4.94	5.00	4.71	4.63
	ARC 2304 Architectural Design 4	17	8	47%	100%	4.75	5.00	4.88	5.00	4.75	4.88	4.75	5.00	5.00	5.00	4.90
2012 Fall	ARC 1301 Architectural Design 1	31	31	100%	100%	4.49	4.52	4.65	4.20	4.49	4.68	4.46	4.75	4.72	4.68	4.56
	ARC 4071 Core Graduate Studio 1	7	4	57%	100%	4.50	3.75	4.00	3.75	4.25	4.25	4.00	4.25	4.00	4.00	4.08
	ARC 4941 Architecture Education Issues	28	8	29%	33%	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.75
	ARC 6911 Research Seminar 1- Material Explorations	14	8	57%	100%	4.13	4.13	4.00	4.63	4.75	4.38	4.00	4.38	4.25	4.38	4.30
2013 Spring	ARC 3463 Materials and Methods of Construction 2	32	26	81%	100%	4.57	4.49	4.59	4.43	4.23	4.27	4.31	4.48	4.39	4.48	4.42
	ARC 4323 Architectural Design 8	32	22	69%	50%	4.19	4.10	4.31	4.18	3.86	4.18	4.13	4.49	4.27	4.15	4.19
2013 Fall	ARC 1301 Architectural Design 1	32	27	84%	100%	4.25	4.16	4.44	4.25	4.39	4.48	4.27	4.69	4.57	4.38	4.39
	ARC 4071 Core Graduate Studio 1	5	4	80%	100%	4.50	4.25	4.50	3.75	4.00	4.25	4.50	4.50	4.75	4.50	4.35
	ARC 4941 Architecture Education Issues	22	8	36%	33%	5.00	4.88	4.75	4.86	4.88	4.75	4.75	4.88	4.71	5.00	4.85
2014 Spring	ARC 2304 Architectural Design 4	21	15	71%	100%	4.87	4.67	4.93	4.93	4.93	4.87	4.67	4.87	4.93	4.87	4.85
	ARC 6911 Research Seminar 1- Material Explorations	7	3	43%	100%	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
2015 Spring	ARC 3321 Architectural Design 6	16	8	50%	100%	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
	ARC 3463 Materials and Methods of Construction 2	77	28	36%	100%	4.82	4.77	4.74	4.74	4.73	4.81	4.73	4.90	4.81	4.80	4.78
	ARC 4074 Graduate Core Studio 4	1	1	100%	100%	4.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	4.60
INSTRUCTOR AVERAGES						4.53	4.45	4.58	4.52	4.57	4.63	4.45	4.74	4.71	4.64	4.58

Rating Scale: 1 = Poor or Low; 2 = Below Average; 3 = Average; 4 = Above Average; 5 = Excellent or High

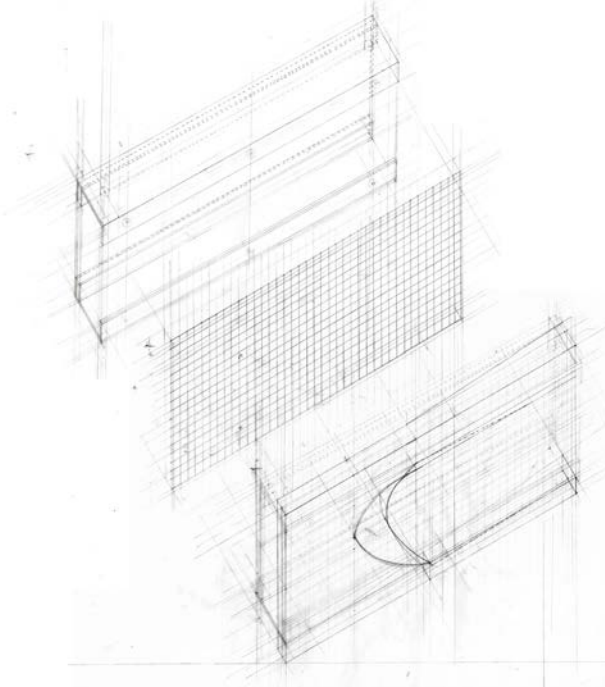
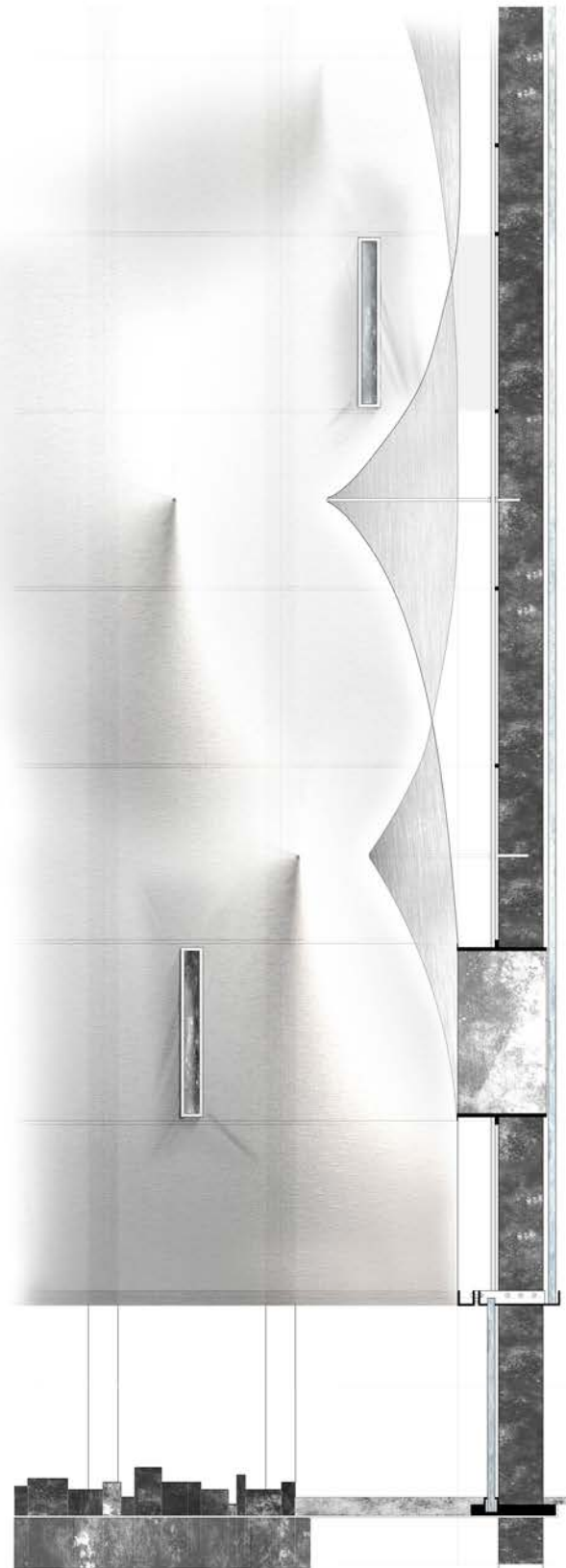
ADVANCED GRADUATE STUDIO 1 | Fall 2015 [in collaboration with Prof. Bradley Walters]

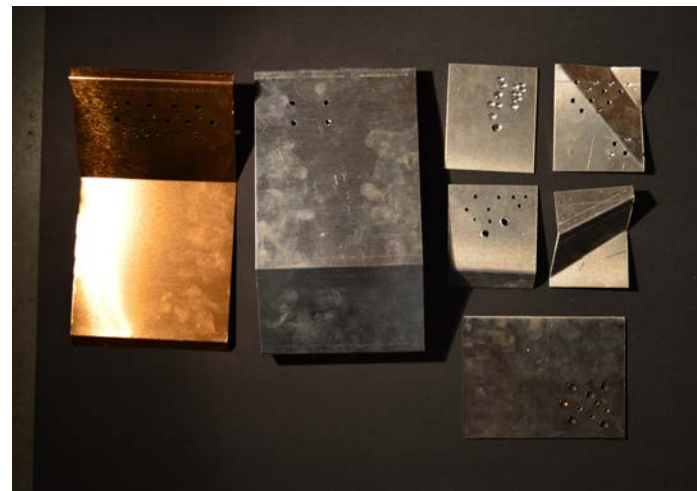
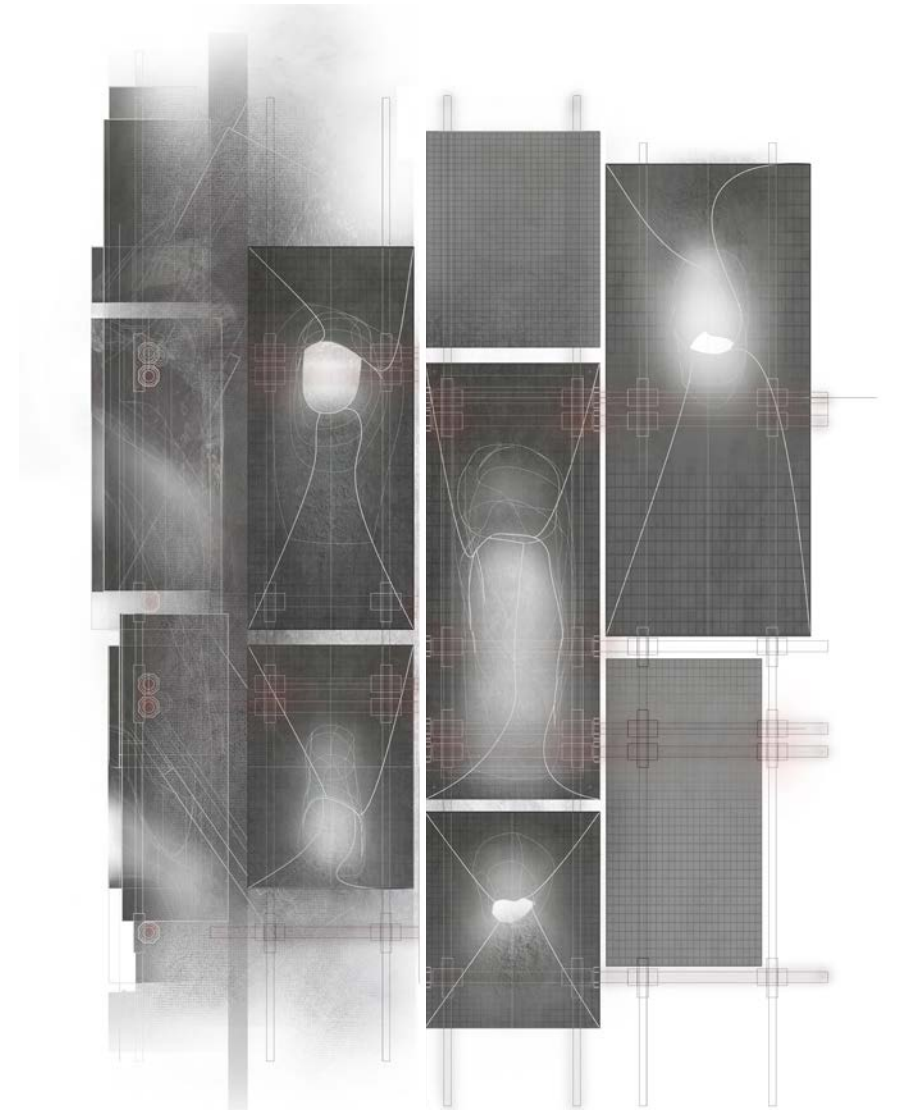
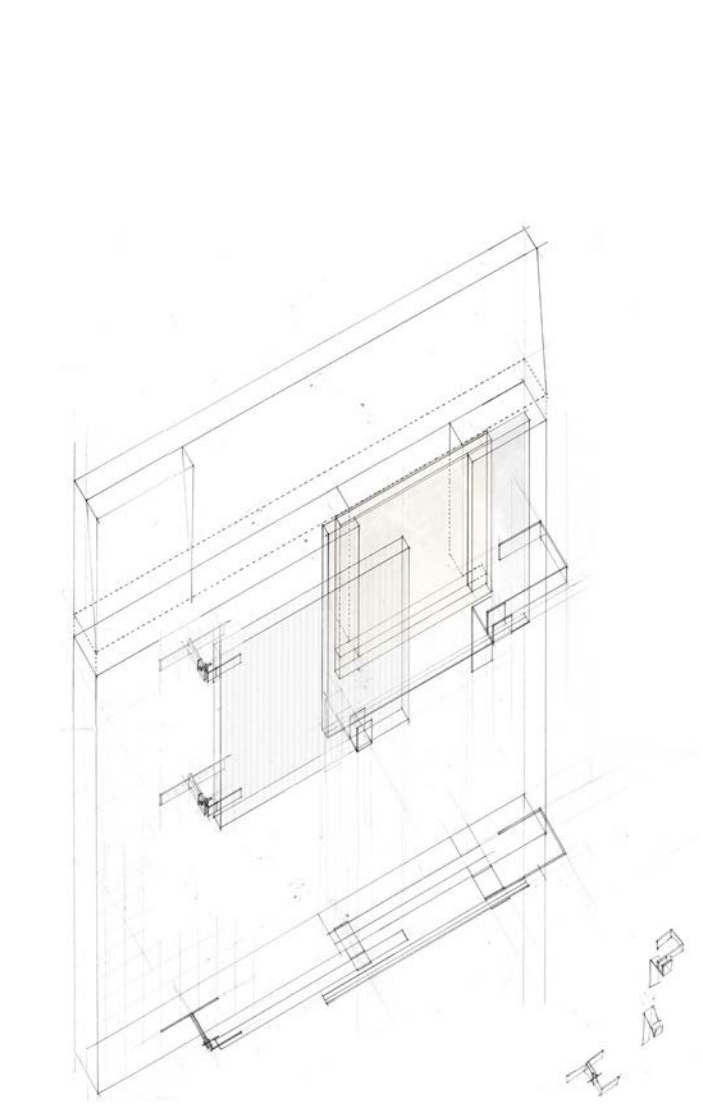
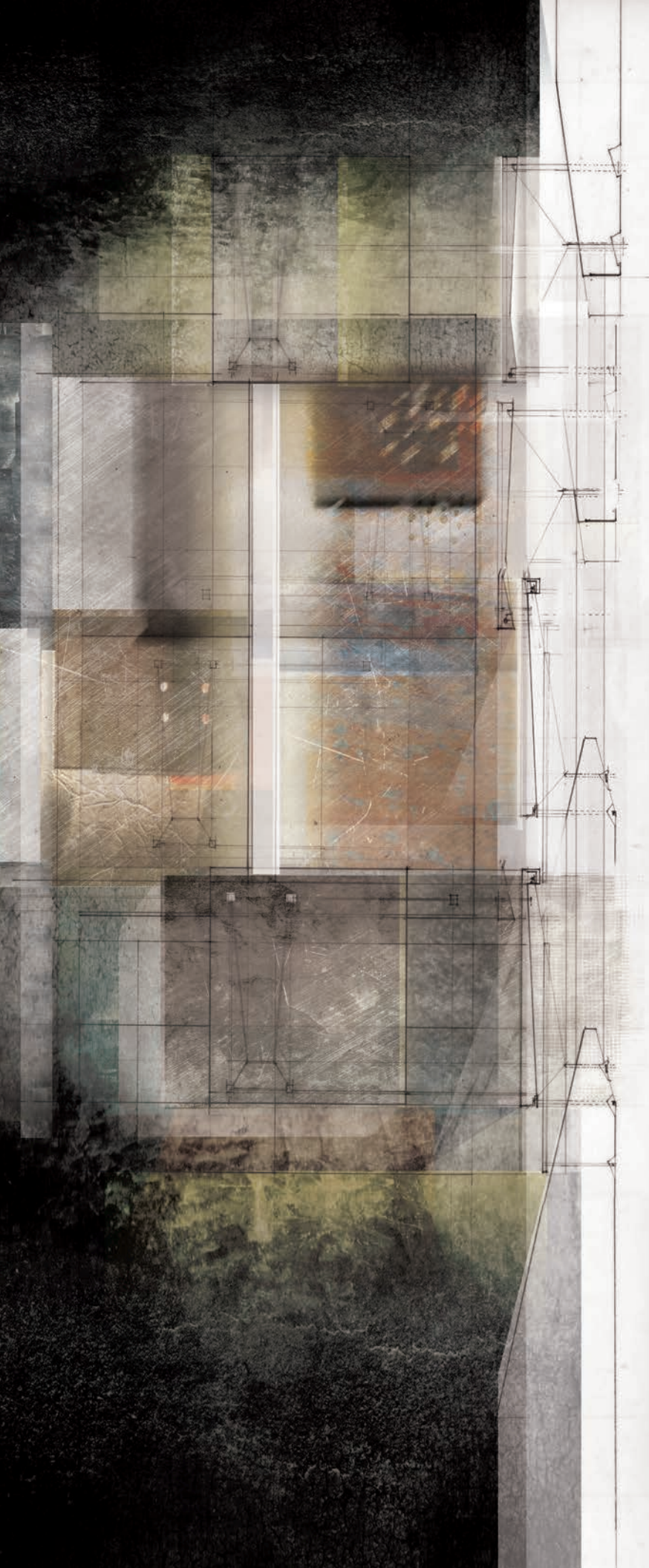
MEDIATION OF LIGHT + MEDITATION ON MATTER [5 weeks - In Progress]

In architecture, matter is the medium through which design ideas become reality. Materials shape spatial experiences and architectural form. In professional practice, architects rarely get their hands dirty in the construction process. Instead, the role of the architect is to observe and note if the work is being built as per their design drawings. In most innovative architecture practices, material considerations are integral to conceptual ideas from the start of the design process. To investigate and communicate material concepts, they proactively fabricate their own full-scale material studies during a project development to ensure contractors understand the design intention and to also demonstrate how it can be built.

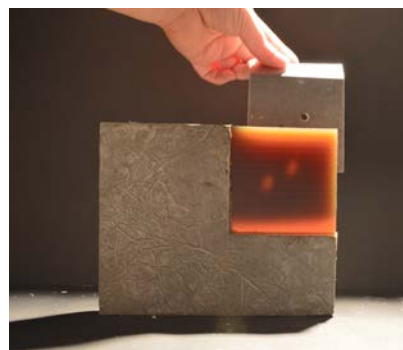
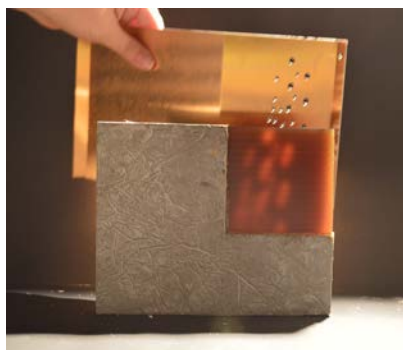
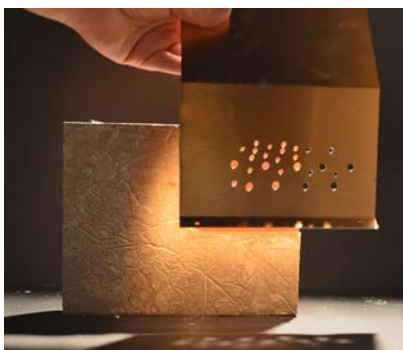
Young designers entering practice often experience a gap between their design intentions and built reality. In order to minimize this distance, it is critical to engage matter hands-on to know its characteristics (weight, dimensions, limitations) and its relationship to other materials (joints, intersections, adjacencies). In this project, we address this issue head-on by designing at a 1:1 scale to investigate the impact of materials and assembly on design intention and the design process. The hands are challenged to tackle the physical and intellectual resistances of working directly with full-scale building materials. The goal is to develop a "seeing hand" that understands the relationship between architectural constraints and material realities. Instead of starting with the design of a whole building, we start with detail in order to explore issues of tactility, phenomenological effects and the poetics of material assemblies.

Students began the project by constructing a large 1:1 drawing in relation to the human body that explores a spatial experience of transmitting or regulating natural light. For the last 3 weeks, we have been examining the design proposal in parts. We have zoomed into the drawing to speculate on the possible materials that could shape light in the design through full-scale material studies. Representative materials and adhesives are not allowed. In the next week, we will develop a series of material studies focused on joinery. The project will end with a material assembly that transforms the 1:1 drawing into 1:1 physical construct.





Cameron Buck | Mediation of Light + Meditation on Matter | Fall 2015



Sara Vecchione | Mediation of Light + Meditation on Matter | Fall 2015

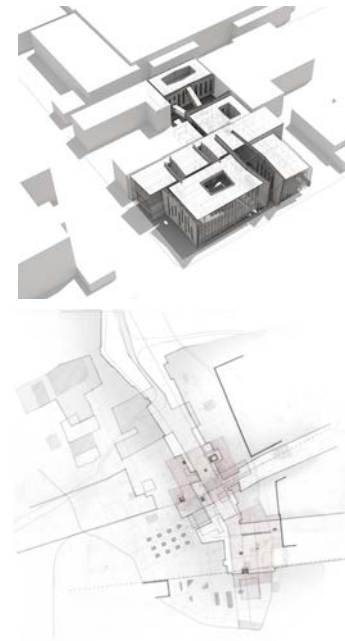
ARCHITECTURAL DESIGN 6 | Spring 2015

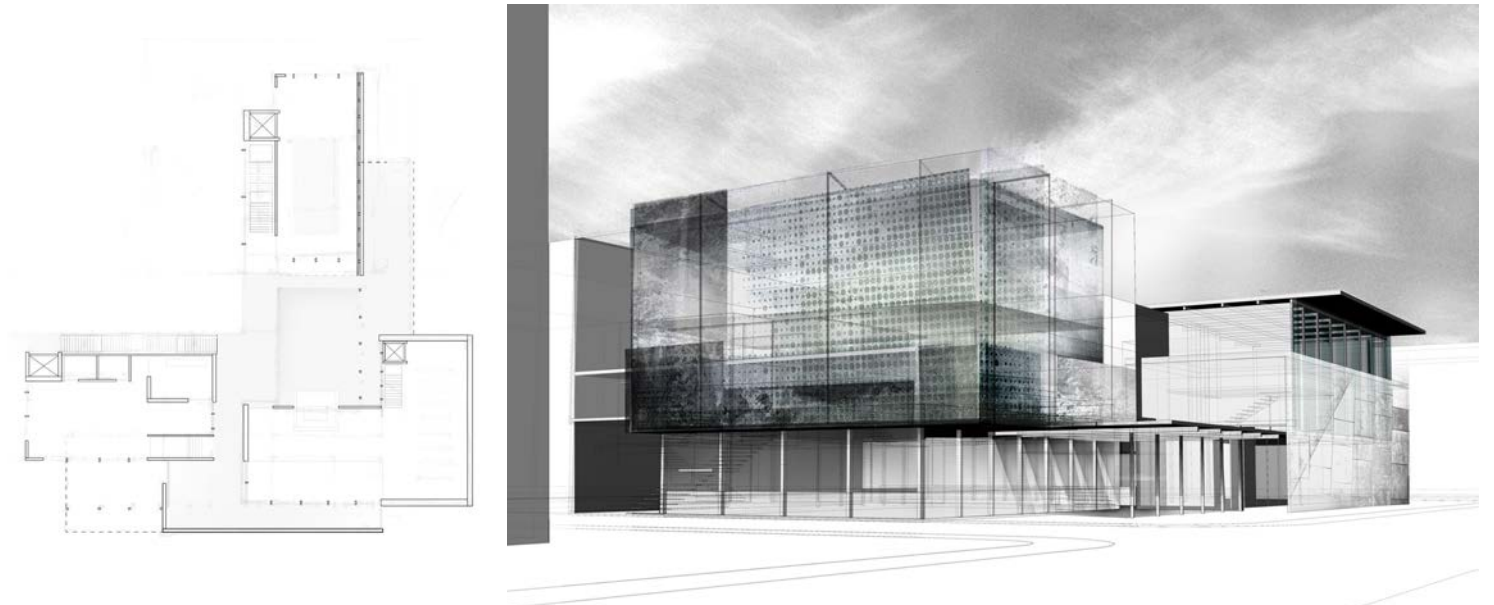
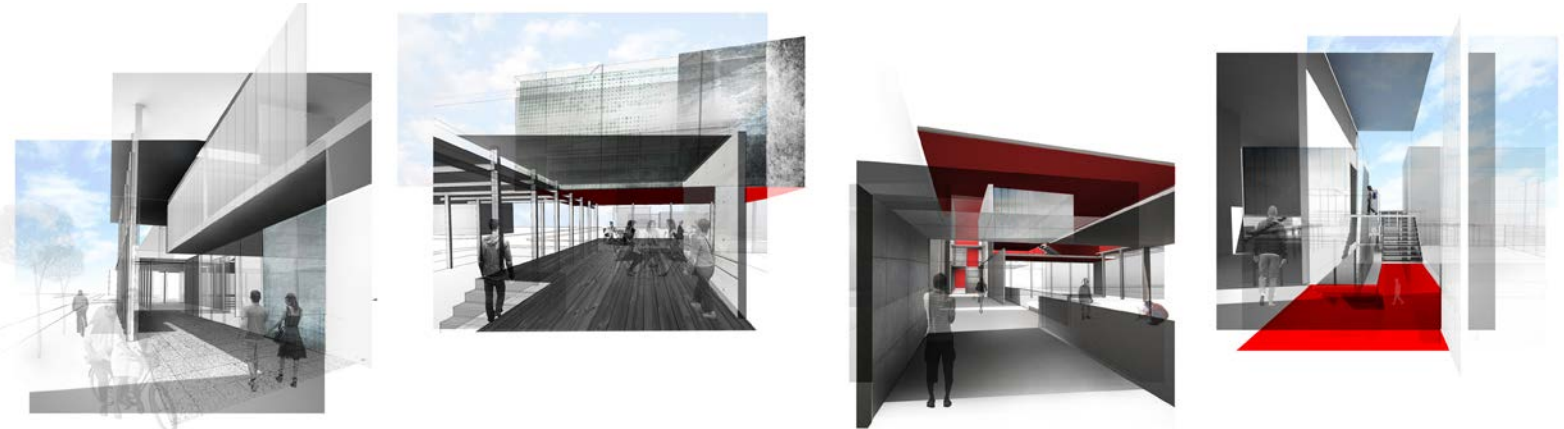
CHARLESTON: SHAPING THE URBAN EXPERIENCE: The Art Institute + Library [8 weeks]

Design 6 centers on investigations with the urban context. The key objectives for this studio are:

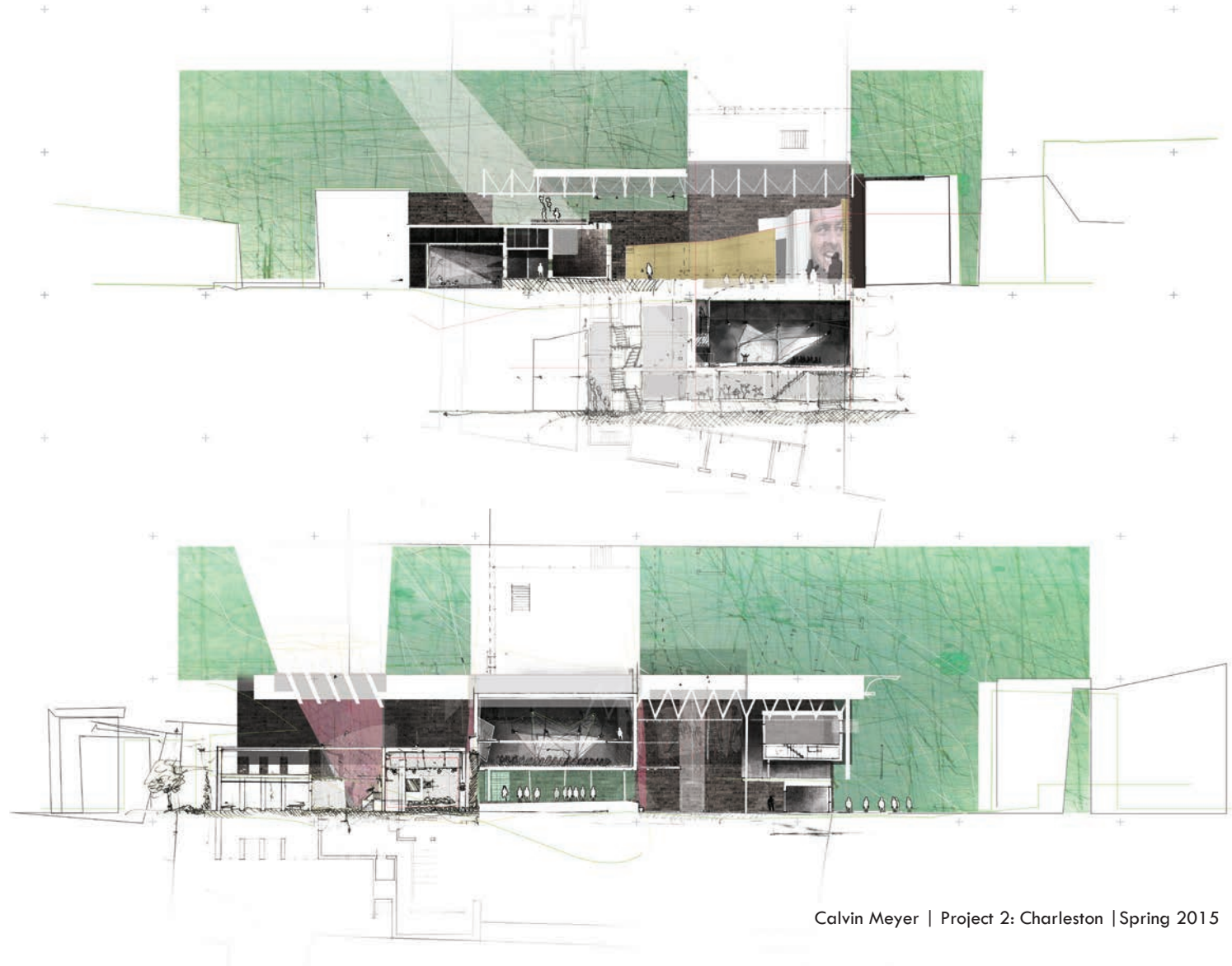
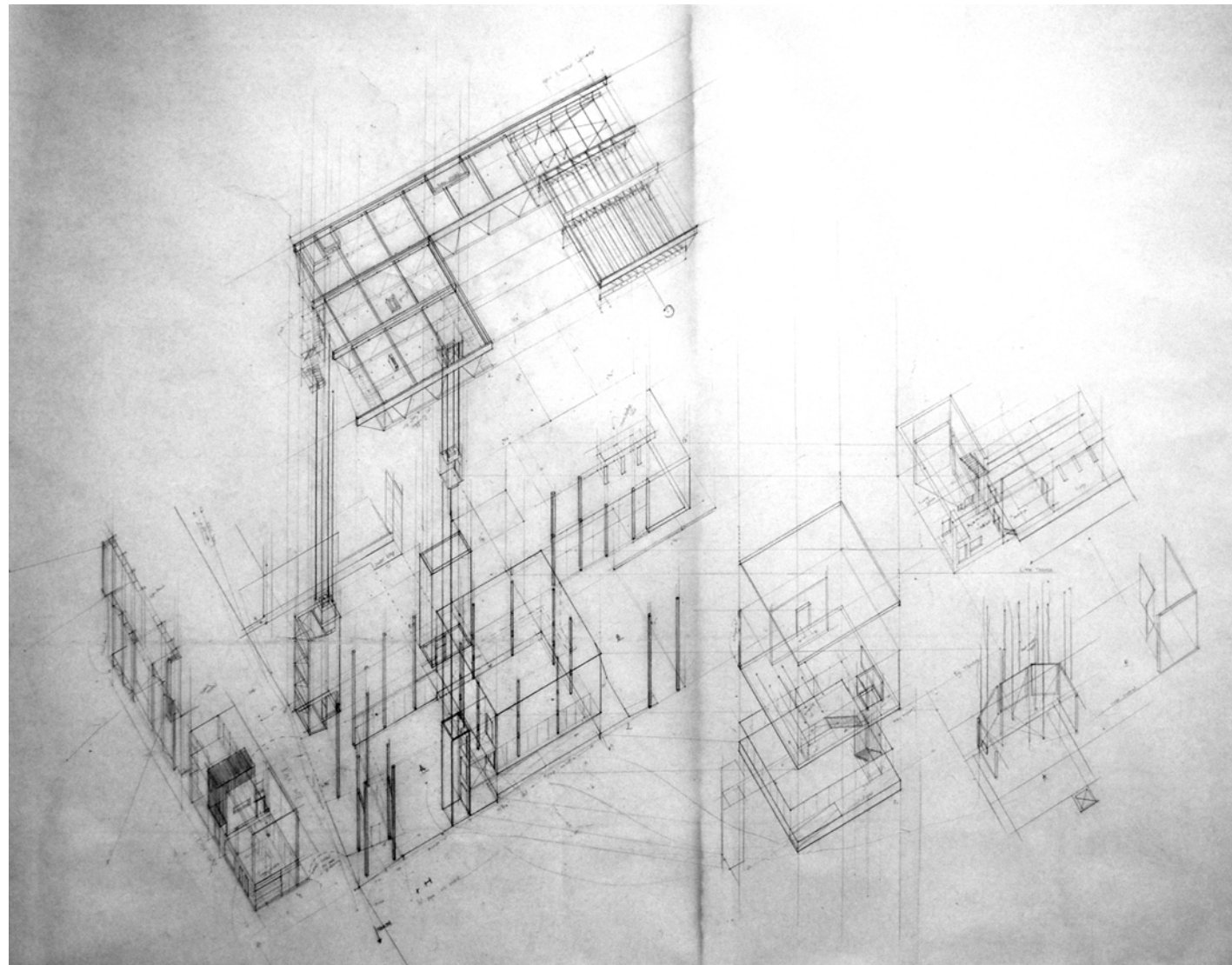
- to establish a critical design approach through analysis and research that informs a response to site that both respects and challenges the perceptions of architecture and its interaction with the urban context.
- to develop formal and spatial relationships both internal and external to the constructed design and understanding the role of the envelope in the mediation between those two realms.
- to develop a tectonic language in detail and material clarity consistent with the defined conceptual approach.

We explore architectural conventions in three basic modes: *conceptual*, *tectonic*, and *representational*. The *conceptual* builds upon the method and process structure of the lower division. The conceptualization of the building will be explored largely through the question of architectural ideas and positions: their appropriateness and constituent strategies for translating an idea into built form. The *tectonic* explores the making of meaning through an exploration of the tectonics (poetics of construction and materiality). Issues of tectonics are explored through structure, building envelope, material, and detail (the expressive qualities of assembly). The *representational* explores meaning inherent in carefully considered forms of representation – plans, sections, 3-dimensional modeling of various means, and diagrams. Issues of scale, occupancy, and materiality are recorded in drawings. Design 6 represents a shift in techniques, with emphasis given toward the digital in both exploration and representation – from context models, volumetry, tectonics and in-context representations. Nevertheless, digital methods will not be used unquestioningly – rather emphasis will be given as to their appropriateness for the given task and exploration and hybrid techniques promoted. For one, emphasis will be given to using digital methods analytically over realistic renderings. Conventions of plan and section will be used to test explorations in 3d modeling. In addition, physical models will be used both as process investigations and presentation constructs.





Sarah Rutland | Project 2: Charleston | Spring 2015



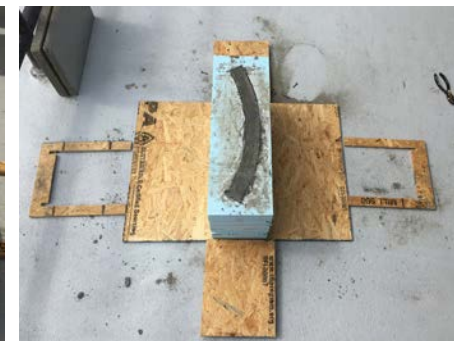
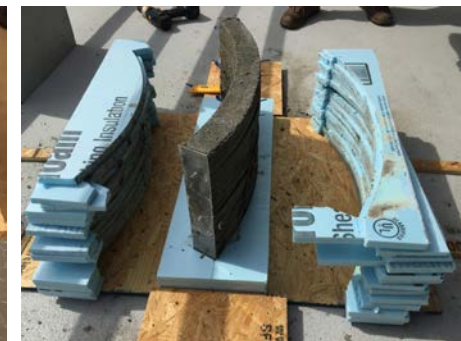
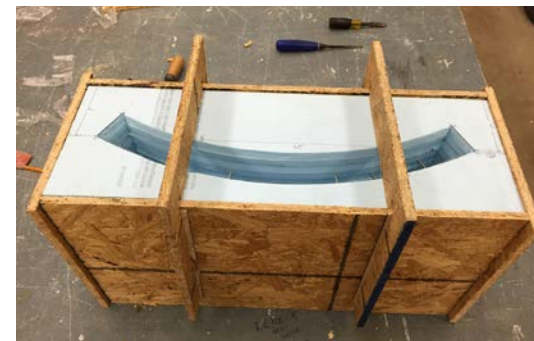
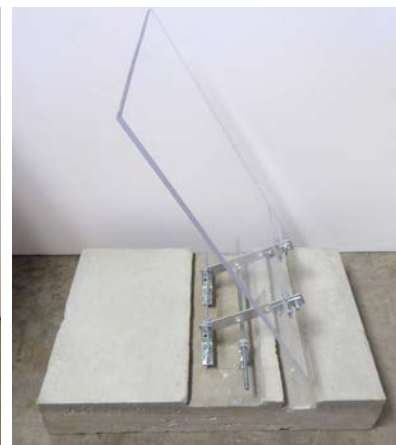
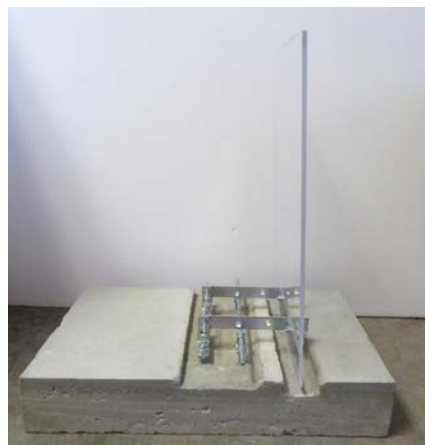
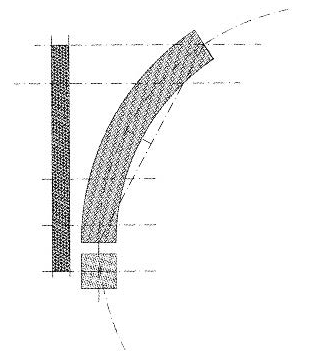
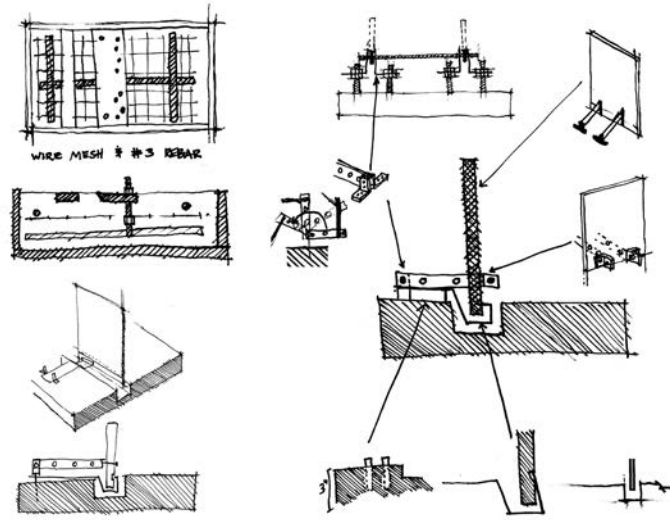
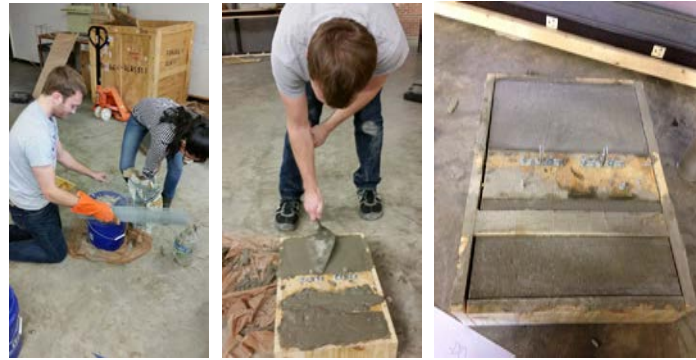
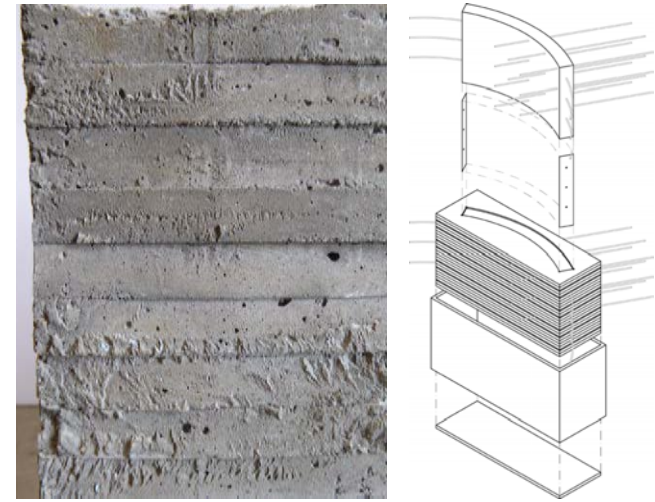
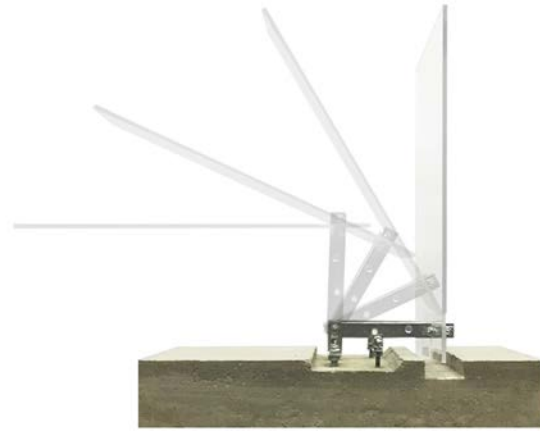
Calvin Meyer | Project 2: Charleston | Spring 2015

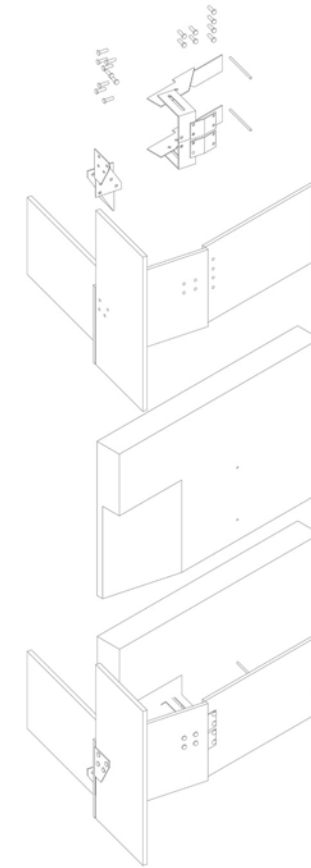
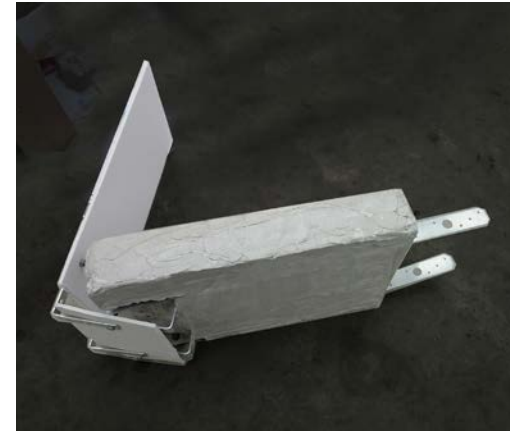
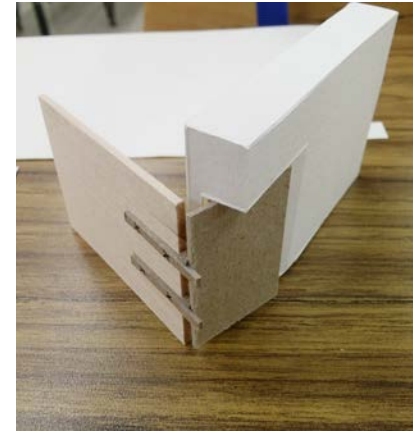
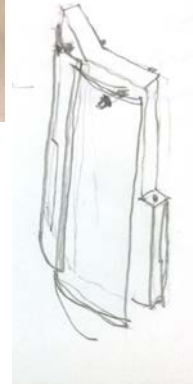
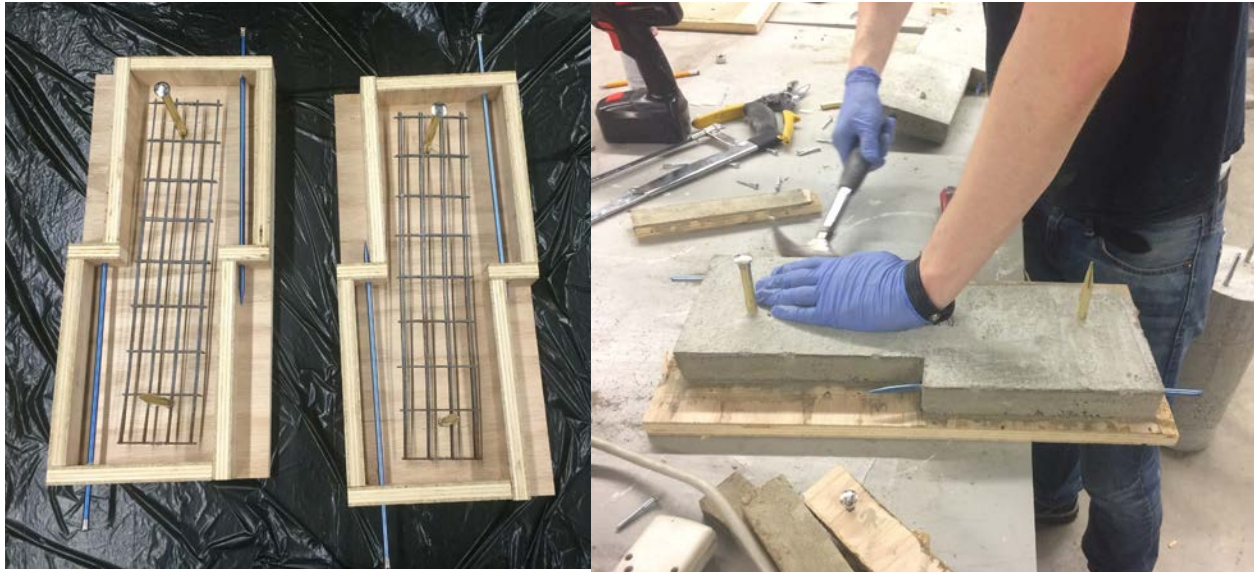
MATERIALS AND METHODS OF CONSTRUCTION 2 | Spring 2015

JOINING TWO DISSIMILAR MATERIALS [5 Weeks]

This lecture + lab course focuses on conceptual understandings of material characteristics and assembly methods that help transform inventive design ideas towards the realities of construction. Every attempt to translate an idea into a built reality requires the designer to hypothesize about the materials and processes that might be used in its construction. Knowledge of construction conventions provides a foundation for developing details and the opportunity to work hands-on with materials helps to develop tacit knowledge of material properties. The key objective for this lecture + lab course is to develop an understanding of the issues involved in detailing and assembling buildings.

In the first phase of Lab Project 1, students experimented with casting concrete (formwork, mixing and reinforcing) and confronted issues of craft when working with full-scale materials. In the project's second phase, students attempted to connect dissimilar building materials at full-scale into a detail assembly. In this project, we focused on craft, the character of the joint and the understanding that there are numerous strategies to connect one material to another.





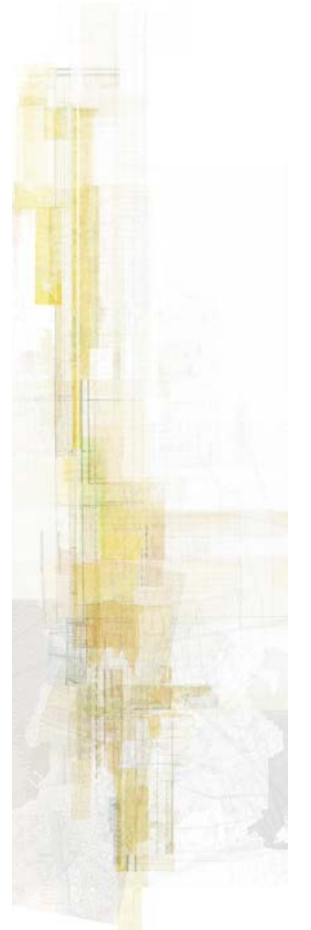
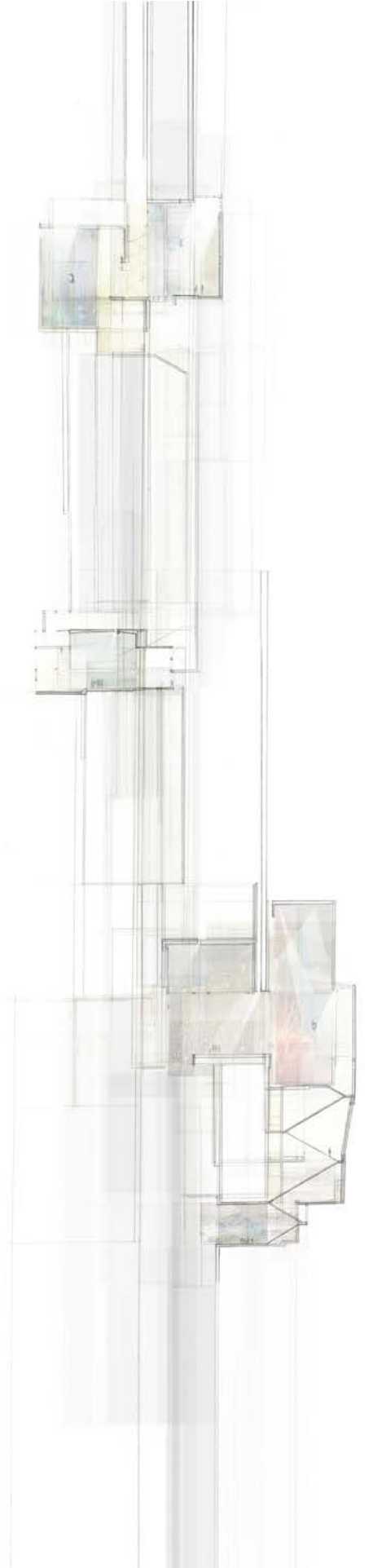
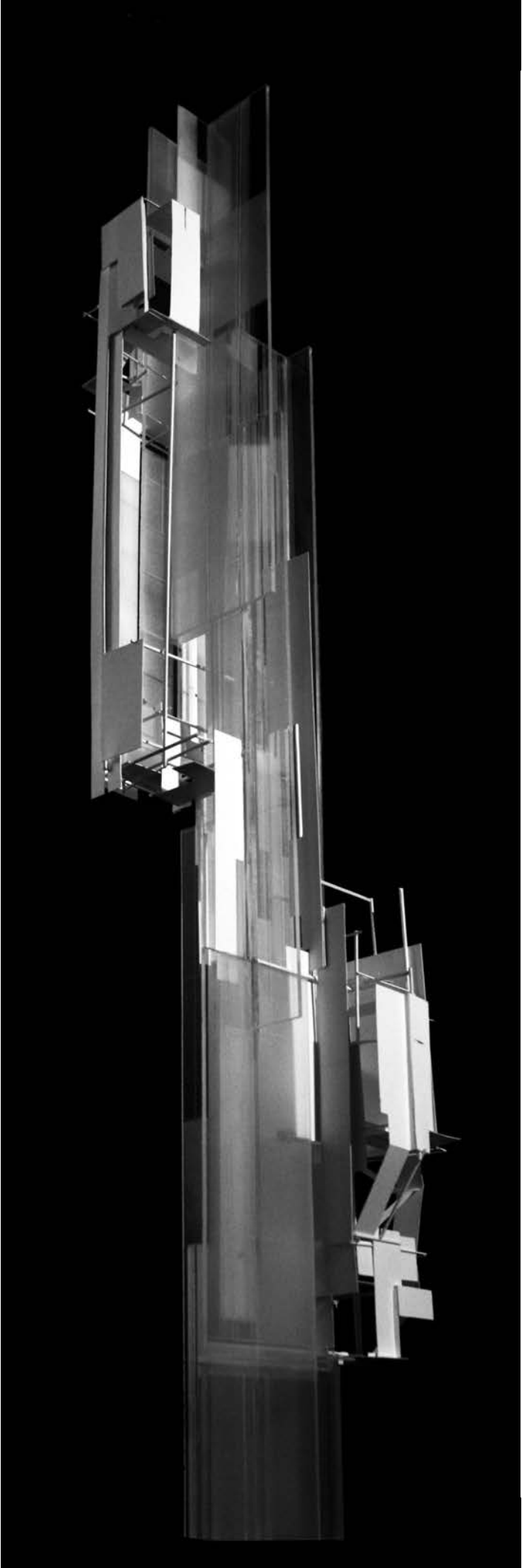
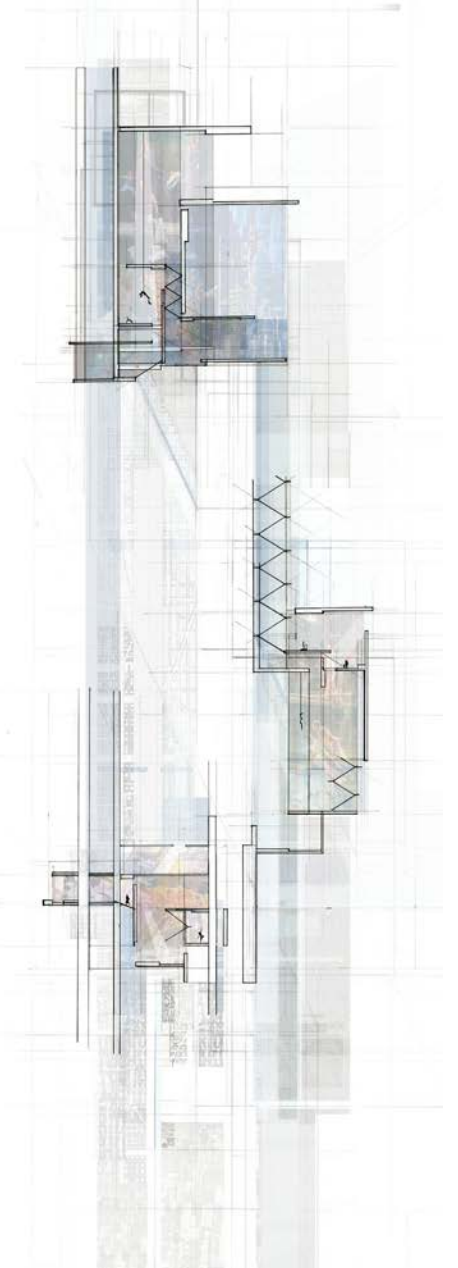
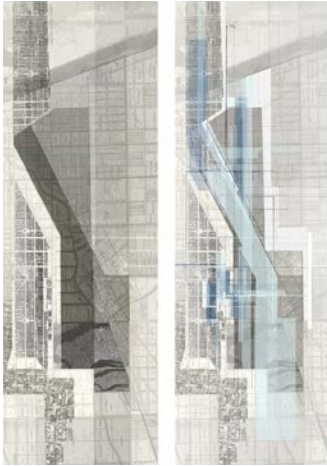
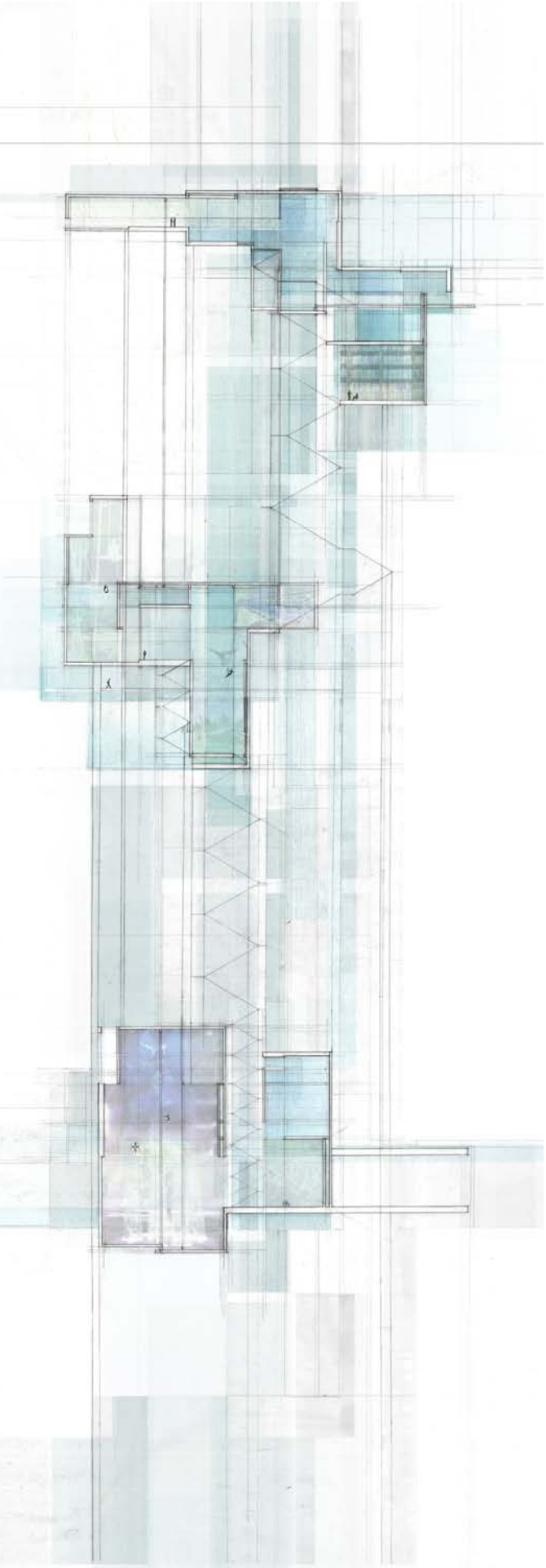
ARCHITECTURAL DESIGN 4 | Spring 2012 + Spring 2014

VERTICAL DATUM + HORIZONTAL DATUM [4 weeks each]

The primary issues of the studio revolve around context, architectural language, issues of representation and incorporation of program into space and concept. There will be an emphasis on the development of digital skills as part of the generative design workflow, in addition to representation in hybrid digital/analog methods. The key objectives for the studio are to engage "program" in a conceptual, poetic and pragmatic manner, to develop and refine an architectural language, to develop and refine a sense of design process / methodology and to develop context as a body of knowledge and a source of architectural ideas and informants

The vertical datum project focuses on creating a headquarters for Cirque du Soleil within a tower typology. The headquarters building is a self-sufficient city that houses every aspect connected to the development of their performances. Instead of developing the envelope of the building that contributes to a tower's monumentality and object quality, the students investigated programmatic relationships and spatial itineraries.

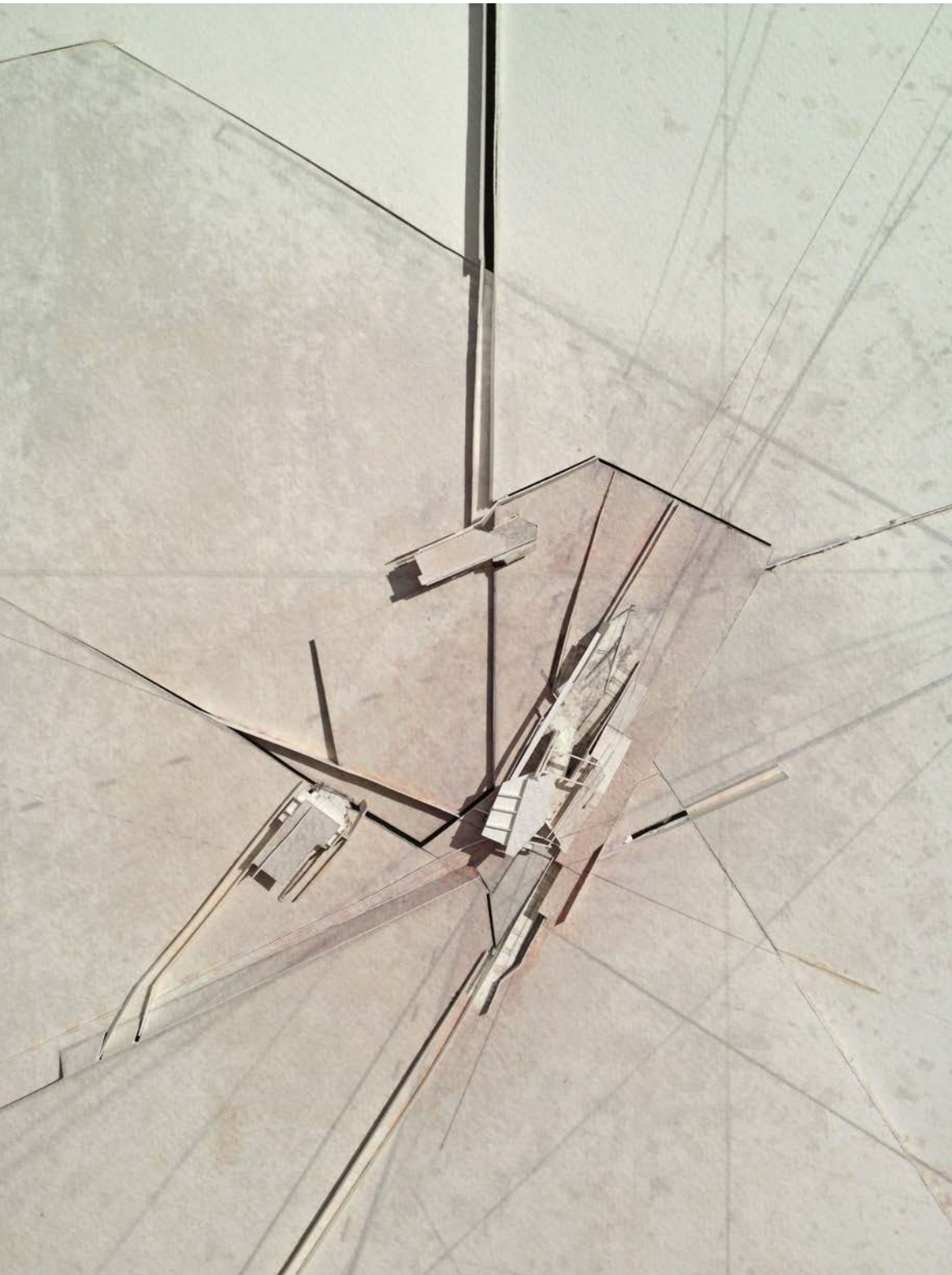
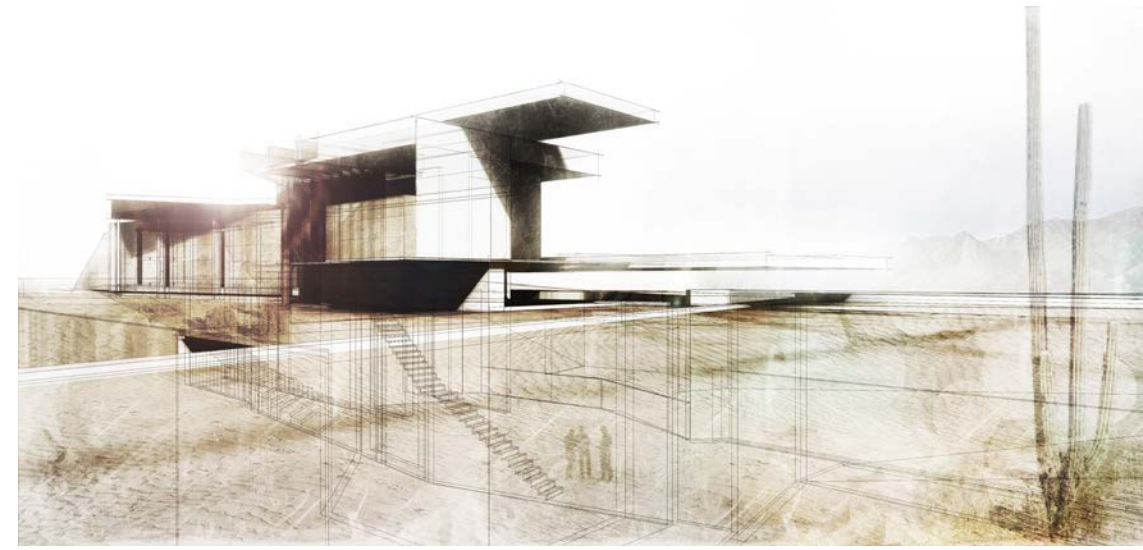
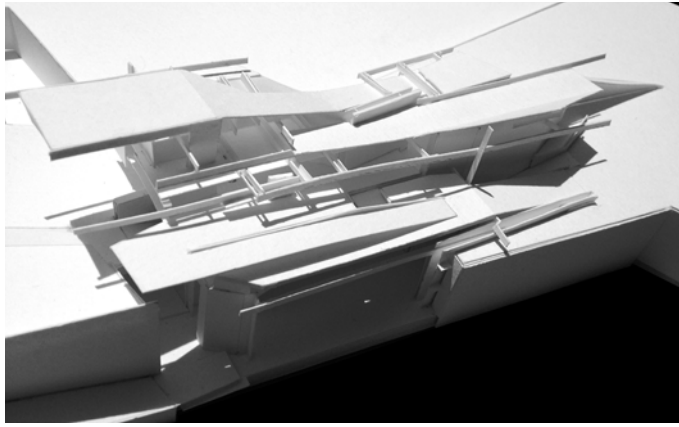
The horizontal datum project addresses issues of engaging site and bridges the study of occupation at the scale of the room to the scale of the landscape. We will research the desert as a physical and conceptual place – we start with a horizontal datum as a given (a specific desert will not be assigned). From your research of desert landscapes and its environmental conditions, you will generate a series of markings in the ground that establishes the desert context that will be activated by your intervention.



Tracey Weisman | Project 2 - Vertical Datum | Spring 2012

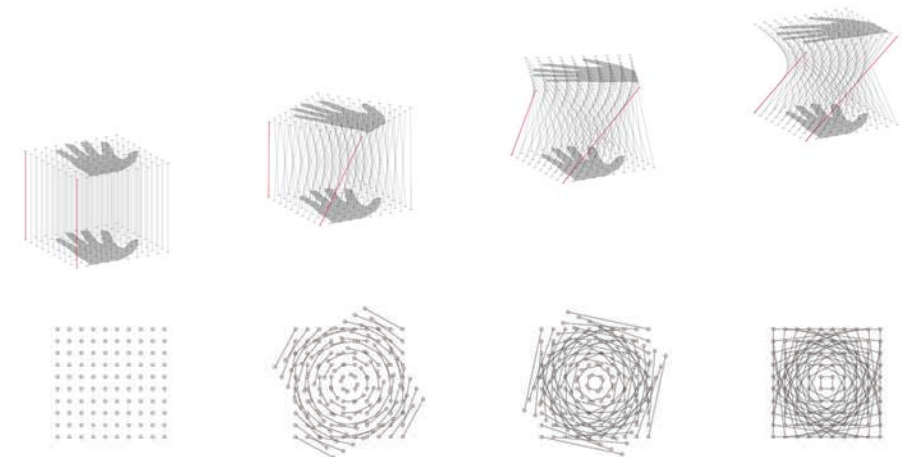
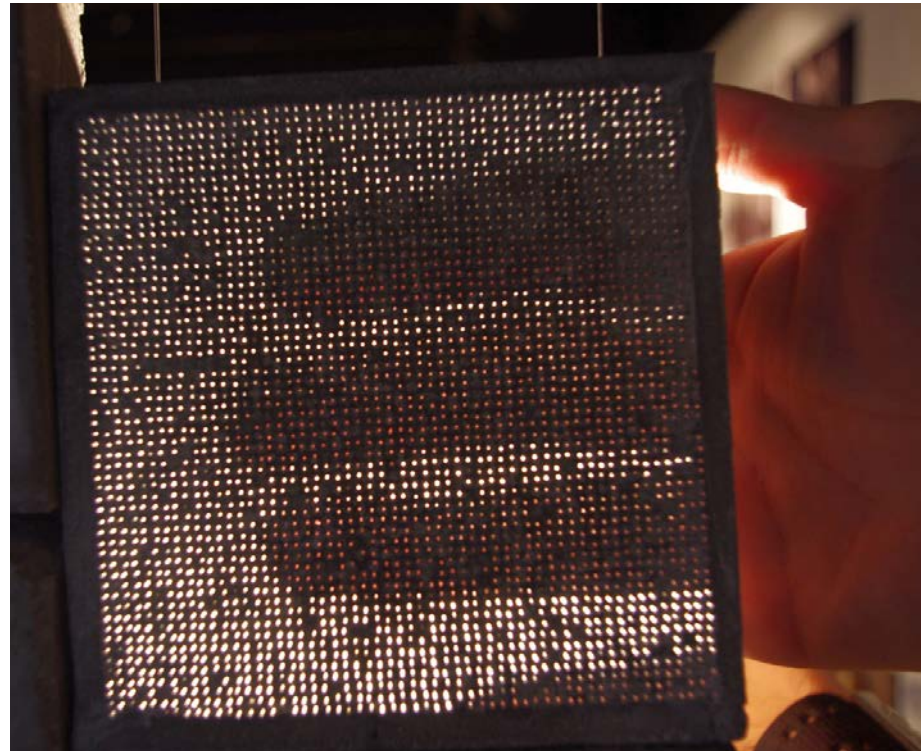
Elizabeth Cronin | Project 2 - Vertical Datum | Spring 2012

Dijana Milenov | Project 2 - Vertical Datum | Spring 2012



RESEARCH SEMINAR: MATERIALS EXPLORATION | Fall 2012 + Spring 2014

This research/discovery seminar focused on material explorations and full-scale constructions through real architectural parameters. We will be producing investigations at 1:1 scale while also interrogating these constructs through drawings. The spirit and nature of the course is driven by students' efforts to fully engage in material experimentation. Students spent the semester conducting material tests and then evaluating empirical feedback to speculate on emergent architectural implications. Our objective was to probe new ways to work with conventional products and speculate on the possibilities of nonstandard materials. The workshop was structured to nurture skills beneficial for a critical process of generating design decisions regarding materiality in future practice. The first part of the course focused on materials research (properties, processes and procedures) and material relationships (testing through full scale details). The second part of the course focused on invention when addressing architectural building components/assemblies and its corresponding limitations.



Tim Beecken | Light Transmitting Concrete Studies | Fall 2012

Huajing Huang | Rubber and Wood Studies | Fall 2012



Ice casting aluminum + Aluminum cast into concrete



Experimental Castings: Textures and Tones

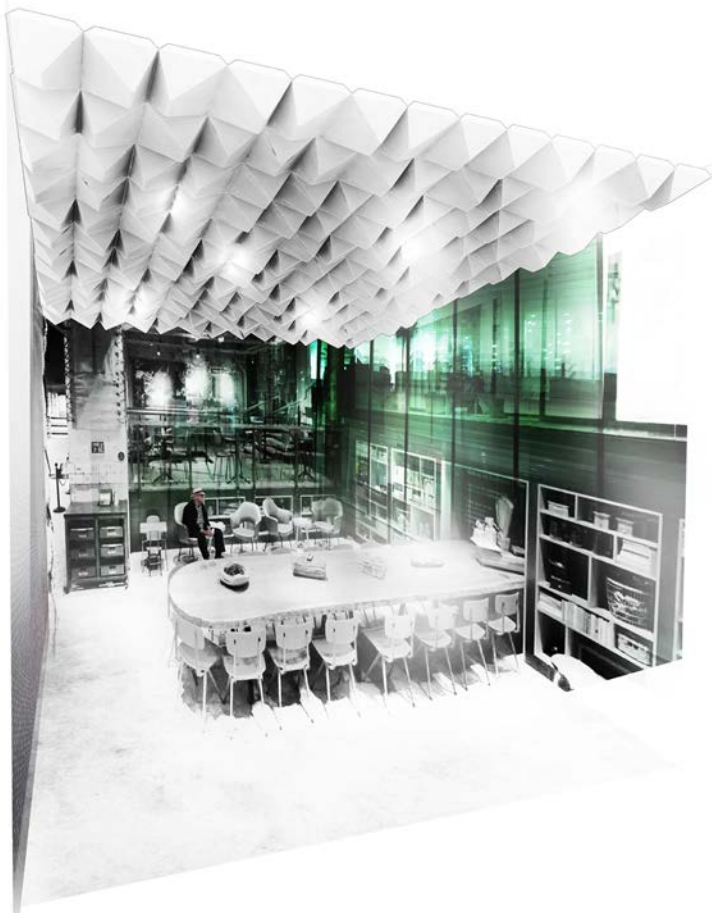
While we have presented an effective, reliable, and economical material in the casting of perforated aluminum screens, a number of other materials (including wood, paper, and fabric) were explored in the casting process. While the resulting textures were often unique and visually appealing, their materiality reacted with aluminum in unpredictable ways. Though the results were visually intriguing, pouring molten aluminum into dry materials often resulted in a material that was brittle and difficult to handle. The results were visually intriguing, but the process was often frustrating. A thumbs up does not mean that a material produced any particular effect in a casting, only that it reacted in an interesting, aesthetically useful way.

		Wet Basswood Basswood was soaked in water for 24 hours before casting. Result: smooth texture, but some warping occurred.	
		Dry Basswood Dry basswood was used for casting. Result: porous texture, but some cracking occurred.	
		Wet Paper Towels (Squeezed into Balls) Paper towels were soaked in water, squeezed into balls, and used for casting. Result: porous texture, but some cracking occurred.	
		Wild Berries + a Lot of Water Berries were soaked in water for 24 hours before casting. Result: porous texture, but some cracking occurred.	
		Dry Hay Hay was used for casting. Result: porous texture, but some cracking occurred.	
		Wild Berries + a Little Water Berries were soaked in water for 24 hours before casting. Result: porous texture, but some cracking occurred.	

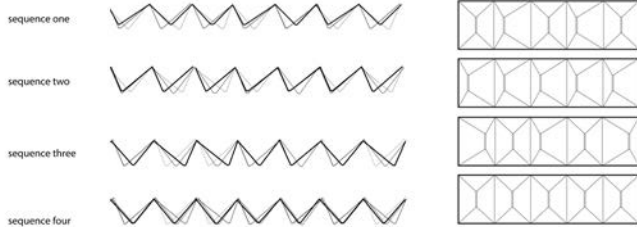
Dry Ice casting



Calvin Di Nicolo | Cast Aluminum Studies | Fall 2012



Section - Ceiling Plan



Zigzag module



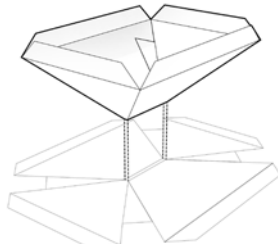
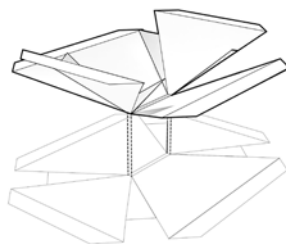
X-cross module



M and W module



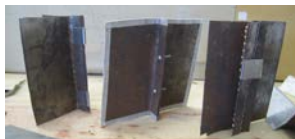
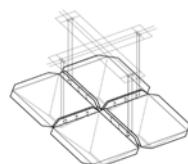
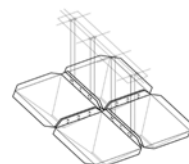
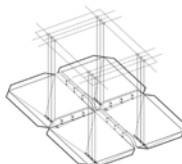
M and W module v2



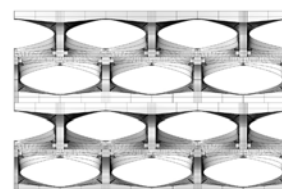
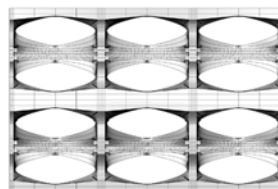
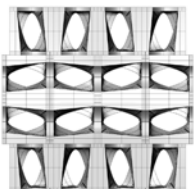
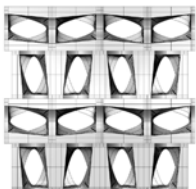
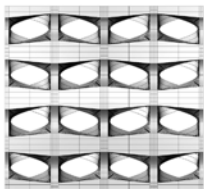
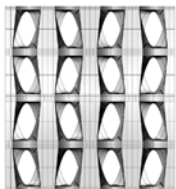
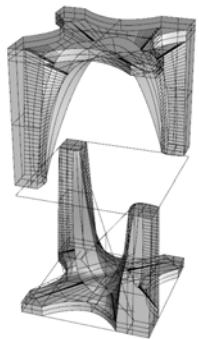
Center hook joint

Parallel tab joint

Cross tab joint



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