GOOD FAST CHEAP

DEMOCRATIZING DESIGN BUILD

Above: Morphosis 2,4,6,8 house and TAO Design Group Earth House

COURSE	**ARCH 4050	6050	6307**
	3 CREDITS
	T 2:00-4:45pm	Storrs 268

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ABSTRACT
The course will consider relationships between designing and building by challenging how project delivery methods can expand innovative possibilities for collaborative design authorship and spatial affects.

 "A blind man can make art if what is in his mind can be passed to another mind in some tangible form."
- Sol LeWitt

"To the extent the profession has used parametrics today, there is very little to instigate complexity other than the mind numbing image of complexity, falling far short of its rich potential to correlate multivalent processes or typological transformations, parallel meanings, complex functional requirements, site specific problems, or collaborative networks." - Michael Meredith

Scripting has captured a new generation of architects' imagination for its capacity as a design tool to quickly produce complex geometries and patterns while incorporating specific "performance" criteria. While many scripting practices operate under a premise of specificity, and even a lack of preconception, the body of work generated is strikingly monolithic, and modes of authorship have remained proprietary. To combat this homogeneity and insularity, this seminar will explore the performance specification as an alternative to the script as a generative design tool in architecture.

The specification is the analog precursor to the digital script, and like the digital version deploys computational rather than compositional logics. Simply put, performance specifications in architecture are the written instructions and criteria to build something. However, despite the fact that the spec's agency lies in tactile reality, (its instructions are directly linked to actions) it possesses the virtuality (open-endedness) of the diagram when considered in the context of design.

This seminar asks the question, what if the design of an architectural project began with the specification in lieu of the drawing or sketch? What does that mean for the role of the authorship in our field? Does the spec open up the possibilities for new forms and affects otherwise unavailable through the conventions of composition?

COURSE DESCRIPTION + FORMAT
In this course we will design specifications, and use those specifications to make things. The semester will commence with a brief introduction to the disciplinary history and conventional structure of the performance specification. In each of the subsequent 10 weeks we will consider one issue/resource of project delivery contained in the conventional specification (quality, quantity, coordination, sequence, fabrication, assembly, labor, etc.). Prior to the beginning of class students will be asked to procure the same nominal building material (think 2x4, or CMU block). During the first half of each class, students will design a rule based procedure for generating a new object based on the potential of each project delivery resource, but within the limits of material, available tools, and class time. In the second half of each class, students will exchange specifications with a colleague who will make an object from the instructions, documenting the process and outcomes.

In the final 6 weeks, teams will form to design a 4'x 8'x 8' spatial installation using similar principles learned during the course. Teams will be given 3 weeks to develop a specification as well as prototype and simulate possible outcomes, but visualizations will remain confidential. For the final 3 weeks, students exchange specifications with another team that will construct the pavilion based on interpreting the specification. A review and documentation of the completed work will conclude the semester.

PEDAGOGY
The seminars are structured by a disciplined, combined approach to learning via **RESEARCH, DESIGN + CONSTRUCTION.** The SoA shops and labs will be the locus of activity, for designing, modeling, and critique of work. Students should plan on utilizing the resources to build things at full scale. Careful attention by each student to scheduled hours for use of these facilities, procurement of model materials, and effective time management in the planning and execution of physical models and assemblies is critical to the project development process.

The first objective for the seminar pedagogy is to teach how given specifications and rule-based design systems effect formal and spatial outcomes. Designing in this case isn't so much about the overt formation of objects, but rather design becomes the rule by which an object (or group of objects) becomes formed.

Projects are designed to help you learn to contend with the difficulty and uncertainty that designers have in the initial stages of the process of developing a project. You must demonstrate that you are capable of using time efficiently, from the moment a project is assigned and for the project's duration.

COURSE OUTCOMES
1. Students will engage in analogical thinking as a means to construct new environments.
2. Students will each explore emerging construction and fabrication techniques during the course of the seminar.
3. Students will each explore parameterized design methods and their implications.
4. Students will be engaged in a form of collaborative practice throughout the semester and learn how to work efficiently with those constraints in mind.
5. Students will leave the course with the tools to realize a research question in built form, working in a short time frame, and limited budget.

REPRODUCTIONS/PORTFOLIO
You are expected to maintain high quality digital reproductions of your work from this course for submission to your professor at a specified date at the conclusion of the semester. Information on the methods and format of these files will be provided to you. In the meantime, you should keep all of your studio work (sketches, study models, final presentation work) in a safe and protected manner. Final studio evaluation grades will be issued following submittal of the digital files to your studio professor. Lack of compliance will result in a grade of Incomplete until such time as

the file is produced. Supplying your professor with a record of your work is also excellent insurance against accidental loss/destruction of your originals or your personal reproductions.

EVALUATION

Student work will be evaluated to the degree to which learning objectives have been satisfied, and effort, seriousness and attendance will all factor into the grades for the course. Your grade will be based on what is produced and presented on assigned review dates or when work is turned in on assigned due dates – no exceptions. Evaluation will be based on the following points and the grading criteria in the SoA policies below:

50	points	Weekly Projects 1-10
40	points	Final Projects
10	points	Class Attendance and Participation
100	**points**	**Total**

ATTENDANCE

Attendance is mandatory. Absences may be excused with prior written notice. Extenuating circumstances will be evaluated on a case by case basis. Students are individually responsible recover material lost due to absence independent of regularly scheduled class time.

SoA POLICIES

Computers/Labs Students are expected to execute work in both analog and digital environments. The machines in the SOA computer labs contain all of the necessary software. The SOA also has a digital fabrication lab, a wood lab, and a metal lab. Use of the labs may require training and/or following specific procedures. Students are responsible to contact lab managers to inquire about their use and to request any necessary training.

Printing Students are expected to print their digital work on a regular basis. We understand that printing is not cheap, and alternatives to printing are sometimes possible, but students must understand that printing their work is a necessary stage of the design process, not something that occurs only for final reviews.

Grading Grading of courses conform to the following grading scales and values and are determined according to the following criteria:
A 90-100 Excellent
B 80-89 Good
C 70-79 Fair
D 60-69 Passing
F 59 & Below Failing

A (Excellent / Commendable): Meets or exceeds stated requirements of the course; exhibits significant improvement, development, and/or intellectual growth over the course of the term; exhibits research efforts from which both the instructor and students may learn; all work turned in on time and presented in a professional manner.

B (Good / Satisfactory): Meets the stated requirements of the course; exhibits good improvement, development, and/or intellectual growth over the semester; provides a measure for student emulation; and all work is turned in on time and well presented.

C (Fair): Meets most requirements of the course; exhibits limited improvement, development, and/or intellectual growth over the semester; and all work is turned in on time and neatly

presented. An accumulation of 3 marginal C grades will result in suspension of a student's enrollment. For Bachelors of Architecture students, a grade of C is the minimum passing grade.

D (Passing): Fails to meet most requirements of the course (the work is incomplete to a significant degree); exhibits little or no improvement, development, and/or intellectual growth over the semester; and/or work is of a caliber only marginally acceptable at the university level.

F (Failing): Fails to meet the requirements of the course; and/or the work is incomplete or of a caliber unacceptable at the university level.

Research For assistance with research, students are encouraged to contact COA+A Librarian Lareese Hall at lhall62@uncc.edu and to ask questions via email or make an appointment to talk with her. Lareese is very familiar with architectural and urban subjects and is eager and willing to work with students. She will be in Storrs Monday and Friday 12:00 – 6:00 pm, and Wednesday 10:00 am – 2:30 pm. She also has a blog related to research on art and architecture: http://artsandarch.wordpress.com

Policies All courses in the SoA are governed by the rules and regulations of UNC Charlotte as stated in the University Undergraduate and Graduate Catalogs. For more information about these polices, please refer to the appropriate catalog, which can be found online at:
http://www.provost.uncc.edu/catalogs/2007%2D2009/(undergrad).

Academic Integrity All written and graphic submittals, in-class presentations, and other academic tasks should be your individual and original work unless specifically noted as group projects. No cheating. No plagiarism. It is assumed that you are aware of and will comply with the spirit and specifics of the UNC Charlotte Code of Student Academic Integrity, which is available online at: http://www.legal.uncc.edu/ policies/ ps-105.html.

Disability UNC Charlotte is committed to access to education. If you have a disability and need academic accommodations, please provide a letter of accommodation from Disability Services early in the semester. For more information on accommodations, contact the Office of Disability Services at 704-687-0040 or visit their office at Fretwell 230. All information about your disability and accommodations will remain confidential.

Please see the instructor if you are interested in being an official scribe (note taker) for this course. Your notes will be made available to others in the class with special needs (including students for whom English is a second language and/or students with learning disabilities).