University of Southern California
School of Architecture

Arch 102b: Architectural Design I
Spring 2017 / MTh 2-6pm / 4 Units

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MYTHS OF ORIGIN AND RUIN

"There is no such thing as primitive man; there are primitive resources. The idea is constant, in full sway from the beginning." – Le Corbusier, *Vers une Architecture*, 1923

INTRODUCTION

Let's go back to the beginning. No one can say for certain how (or when or where) architecture began, but that hasn't stopped the discipline from generating enduring myths about its origins. All architecture, it has been argued in various guises from Vitruvius onward, originates from the primitive yet idealized forms of the cave, the tent, and the hut. These primitive forms taken together comprise the essential characteristics of architectural space, so the story goes, and it's from these irreducible elements that the discipline emerges.

The primacy of the cave, the tent, and the hut in the origin myths of architecture can be attributed to the expansive range of spatial, structural, and social implications found within these primitive forms. Embedded in each is a particular set of spatial attributes and a related material logic. Caves are enveloping and internally-focused spaces defined by solid, massive enclosures. Tents utilize light membranes to define inside from out spatially, but not necessarily experientially. Huts are framed spatial volumes defined by an assemblage of linear elements.

From the combination of spatial types, structural logics, and social organization found in the primitive forms of the cave, the tent, and the hut, we can construct a formal lineage for all subsequent developments in architecture. From the cave, for instance, we can derive a language of vaults that ultimately produces the monuments of Gothic architecture or equally analyze and understand the spatial qualities of the pyramids of Egypt. The influence of the tent can be seen in utopian ideas about dwelling from the 1960s and 70s as well as contemporary lightweight structures. The hut leads to the temple (Greek, Etruscan, Roman, or otherwise) while also giving us the ubiquitous American stick-frame house. There's more than a bit of fabrication in all of this, of course—the historical development of architecture unquestionably is more complex and less direct—but the framework of the myth allows us to undertake an investigation into the fundamentals of the discipline unencumbered by chronological and contextual accuracy.

Architecture's origin myths, to be sure, have always been loose in their adherence to actual facts and demonstrable evidence from the past. Ironically, much speculation about the beginnings of architecture originate in its ultimate end, the ruin. If we can't be sure of architecture's origins, we can be certain where it ends; there's no permanency in architecture, only the semblance of timelessness. To combat the inevitable physical decline of building, theorists and architects routinely have conjured agendas for future architecture from the ruins of the monuments of earlier civilizations. The fragments of the Greek temple lead to architectural vocabulary of both the civic structures of Neo-Classicism and the white villas of Modernism. By forging a connection of ideas through history, a continuity of discourse on architectural form is established—this is the discipline of architecture.

Origin myths and the allure of the ruin serve as polemical positions for the present, offering theoretical justification for contemporary preoccupations. Perhaps it's time to revisit these disciplinary foundations again, to return to the fundamental tenets of architectural form in order to establish new trajectories for

contemporary architecture. What lessons can we learn from the primitive forms of the cave, the tent, and the hut? What can a deep look at the elemental relationships between form and its inevitable incompleteness? What if we created our own origin myths and speculated on their own ruination?

So, back to the beginning … and perhaps the end.

The second semester design studio is an introduction to the fundamentals of form in architecture. The studio investigates form as both a language and a material construct through the design and production of a series of three-dimensional objects originating from ideas about the cave, the tent, and the hut, followed by a critical speculation on the ruin. Utilizing a range of drawing and modeling techniques, the studio focuses on the development and representation of coherent formal strategies that are spatial, structural, and organizational. Work in the studio engages an iterative process to explore the methodologies of form-making and interrogate the potential within fundamental forms.

OBJECTIVES

This studio asks students to deliberate about the relationship between fundamental architectural forms and spatial organizations through a series of design problems.

The primary objectives of the studio include:

- the iterative use of drawings, diagrams, and models in the design process
- the demonstration of both analysis and design propositions through graphic representation
- the development of design, research, and critical thinking skills
- the introduction of digital modelling as a design tool

ASSIGNMENTS

Requirements for projects will be handed out in writing. Daily or weekly assignments may be given verbally and may differ from section to section. Full completion of all assigned work is critical to success in this course. Assignments that do not reflect adequate progress or completion will not be discussed during desk crits, pin-ups, and reviews.

DESK CRITS and PIN-UPS

Individual desk critiques and group pin-ups with the studio instructors will occur regularly throughout the semester and are a primary instrument of design instruction. The success and quality of these dialogues with the studio instructors are highly contingent upon the student's preparation and timely production, as well as the student's ability to absorb, understand, and apply critical feedback.

REVIEWS

Scheduled reviews are designed to provide students with varied perspectives and insights from fellow instructors and invited jurors. Juror comments, design criticisms, and discussions provide valuable insight and constructive feedback on a student's work and that of colleagues. Full attendance and active participation and engagement are expected for the duration of all reviews and are a significant aspect of the "participation" component of grade evaluation (see below).

LECTURES

Throughout the semester (typically Thursdays at 2:00pm in Watt One), first year instructors will address the entire first year class in order to introduce projects or lecture on design topics, skill-building techniques, and/or software demonstrations. Attendance is mandatory at all lectures. It is imperative that all students are on time and take notes.

DISCIPLINARY CONCEPTS

A collection of relevant terms and concepts fundamental to the discipline of architecture will be introduced with each project assignment and reiterated through desk crits, pin-ups and reviews, and lectures. These disciplinary concepts have specific (and often complex) meanings and usage within the discourse of architecture; as an intellectual pursuit and an academic discipline, architecture is described, discussed, and understood in the context established by these terms. Students will be expected to comprehend and appropriately utilize the relevant concepts in both verbal and written explanations of their work.

RESEARCH and ANALYSIS

Study of relevant precedents will be paired with studio assignments. Each student is expected to regularly use the library and other resources to investigate ideas and projects relevant to the course. Notes, drawings, diagrams, and other materials pertaining to this research are to be incorporated into the studio sketchbook (see below).

DIGITAL MODELLING TUTORIALS

Digital modelling using Rhino 3D software will be incorporated into each studio assignment. Written tutorials for techniques and commands applicable to each assignment will be issued periodically throughout the semester. Class assistants will lead group workshops of these tutorials. Each student should review and attempt these tutorials individually in advance of the group workshops.

READINGS

Relevant readings will be assigned and discussed in studio throughout the semester. If not found in the required texts, readings will be posted to Blackboard or handed out in class.

REQUIRED REFERENCE TEXTS

Design Drawing (Second Edition), Francis DK Ching
Analysing Architecture (Third Edition), Simon Unwin

SUPPLIES and EQUIPMENT

Please refer to the welcome letter and First Year Computer Recommendations and Supply Requirements List that you received last summer. You will also need to purchase additional model making materials during the course of the semester. Material requirements will be outlined in the assignment handouts and/or by studio instructors.

Students will need to purchase the latest version of Rhino 3D software for use throughout the semester. Rhino 3D generally offers a significant discount to students and faculty.

SKETCHBOOK

Students are required to maintain a studio sketchbook. It is meant to be a thorough and well-organized record of and instrument for critical inquiry and the design process. The sketchbook is to include (freehand and/or digitally produced) generative diagrams and design sketches, weekly process drawings, notes/diagrams/sketches from desk crits, graphic analysis of relevant precedents, class/lecture/reading notes, as well as any other material relevant to design exploration in this course. Date and label all entries clearly and in a consistent manner. Sketchbooks will be reviewed periodically during the semester.

PORTFOLIO

Each student will be required to submit a portfolio at the end of the semester. The content should be thoughtfully presented in a letter size (8.5"x11") portfolio. All assignments must be included in the portfolio; students are advised to regularly document all work.

EVALUATION and GRADING

Final grade evaluations will be based on the following breakdown:

10%	Progress, preparation, and participation
15%	Project 1 – Exercise 1
15%	Project 1 – Exercise 2
15%	Project 1 – Exercise 3
35%	Project 2
10%	Portfolio and sketchbook

In all projects, students will be required to understand and demonstrate fundamentals of formal ordering systems in their designs, and an appropriate and effective use of representational media (architectural graphics) in the visual communication of their design ideas. Additional objectives will be outlined in each of the project briefs.

Work will be evaluated periodically so that students have an indication of progress. Unsatisfactory performance warnings will be issued to students whose work does not meet minimum requirements.

A minimum grade of 'C' is required to continue on to the next semester in the studio sequence. Consult University polices for incomplete ('IN') grades and deadlines for withdrawal ('W' grade).

University guidelines on plagiarism pertain to original design work. Students are expected to do all of their own design and presentation work. Substantial assistance in the form of model construction and drawing preparation, or deliberate appropriation of the design work of others will be considered non-original work and will be treated as plagiarism. See "Academic Conduct" section below for more information.

ATTENDANCE

It is essential and required for all students to be on time and present for all studio meetings, class lectures, field trips, and reviews. Lateness and absences will be recorded and can seriously affect course grades.

A maximum number of two (2) absences are allowed without direct impact to the student's grade. A student's overall semester evaluation may be lowered by up to a full letter grade for each additional absence. Any student not in class within the first 10 minutes of class is considered late. Three instances of lateness equal one absence. Any student absent for more than 1/3 of any class period (in any form including lateness, sleep, technological distraction, bathroom break, etc.) will be considered absent. Excused absences must be in writing and must be approved by the studio instructor. It is always the student's responsibility to seek the means to make up work missed due to any type of absence.

Dates called out in the syllabus as review dates are considered examination periods. Absences on project review dates may lead to automatic failure of the assignment unless pre-approved by the instructor. Such an absence may only be due to personal illness, family emergency, or religious observance.

The University recognizes the diversity of our community and the potential for conflicts involving academic activities and personal religious observation. See: www.orl.usc.edu/life/calendar/

STUDIO PROTOCOL

Apart from lectures, reviews, and trips, instructors will meet with their sections in studio. It is imperative to respect the quality of this unique creative environment and the work of others, during and outside of class hours.

- Work Area – Students are to immediately set up and maintain a fully operational work space for drawing and model-making. *It is strongly encouraged that students make studio their primary work space for this and all other courses, so that they may fully participate in and benefit from the productive exchange of ideas, informal discussions, and critical dialogs that are central and unique to the studio environment.*
- Hours – Apart from lectures, reviews, and trips, students are expected to be present in studio and productively engaged in studio work for the duration of the class meeting time (2-6pm Mondays and Thursdays). Students should budget a minimum of two hours of work time outside of class hours for each hour spent in class.
- Food – Studio is not a café. Meals are to be scheduled outside of class hours and outside of the studio. Food and drink in studio are strongly discouraged as accidental spills can easily destroy equipment and hours of work on models.
- Music, Noise, and Mobile Phone Use – Studio is a shared work environment. Students shall demonstrate courtesy to others by always wearing headphones when listening to music and by keeping voices low. Ringers are to be turned off and phones put away during class. Absolutely no calls, texting, tweeting, Facebooking, or emails during class, lectures, or reviews. Outside of class hours, students are to keep ringers on low and take all calls outside of studio.
- Computer Use – Apart from software demonstrations, there will be NO COMPUTER USE DURING CLASS TIME. All assigned work is required to be printed in time for (i.e., well before) the beginning of class.
- Digital Resources – A limited number of desktop computers, printers, and plotters are provided in studio, for work and digital output. Additional machines are available in other studios and in digital labs on campus. Time management and consideration of others is strongly advised in the use of these shared, finite resources.
- Access – Swipe card access to studio with a USC ID is provided as a safeguard for students and their possessions. DO NOT PROP OPEN STUDIO DOORS. As a general precaution, students are to be mindful of their surroundings and watch for suspicious activity or unfamiliar faces. Students may contact the University's Department of Public Safety at (213) 740-4321 to report suspicious activity and/or request security personnel.
- Clean-up, Trash, and Recycling – Trash and recycling bins are located throughout the studio. Make use of these by sorting and disposing of trash in the appropriate receptacles and keep studio spaces clean at all times.
- Knife Blades – Used knife blades pose a danger to University cleaning staff and others. DO NOT place used knife blades directly into the trash bins or leave them on the ground or work surfaces. Collect used blades in a sealed container and then discard.
- Graffiti and Defacement of Property – Defacement of property belonging to the school or others will not be tolerated. Make use of provided butcher paper for messy tasks. NEVER SPRAY INDOORS. All aerosol sprays (glue, paint, etc.) must be used outside in conjunction with drop cloths to contain overspray.

STATEMENT ON ACADEMIC CONDUCT AND SUPPORT SYSTEMS

Academic Conduct

Plagiarism – presenting someone else's ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in SCampus in Section 11, Behavior Violating University Standards: http://studentaffairs.usc.edu/scampus/.

Other forms of academic dishonesty are equally unacceptable. See additional information in SCampus and university policies on scientific misconduct: http://policy.usc.edu/scientific-misconduct/.

Discrimination, sexual assault, and harassment are not tolerated by the University. You are encouraged to report any incidents to the Office of Equity and Diversity http://equity.usc.edu/ or to the Department of Public Safety http://dps.usc.edu/contact/. This is important for the safety of the whole USC community. Another member of the university community – such as a friend, classmate, advisor, or faculty member – can help initiate the report or can initiate the report on behalf of another person. The Center for Women and Men http://engemannshc.usc.edu/cwm/ provides 24/7 confidential support and the Sexual Assault Resource Center webpage http://sarc.usc.edu/ describes reporting options and other resources.

Support Systems

A number of USC's schools provide support for students who need help with scholarly writing. Check with your advisor or program staff to find out more. Students whose primary language is not English should check with the American Language Institute http://ali.usc.edu/, which sponsors courses and workshops specifically for international graduate students. The Office of Disability Services and Programs http://dsp.usc.edu/ provides certification for students with disabilities and helps arrange the relevant accommodations.

If an officially declared emergency makes travel to campus infeasible, USC Emergency Information http://emergency.usc.edu/ will provide safety and other updates, including ways in which instruction will be continued by means of Blackboard, teleconferencing, and other technology.

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COURSE SCHEDULE

Week 1	M	1/9	Lecture	Course Introduction Introduction to Project 1: Origin Myths Issue Exercise 1 – The Cave Section Meetings	Berry
	Th	1/12	Lecture Tutorial	Exercise 1 – The Cave: Figures Rhino 3D: Solids, 2D and 3D Output Section Meetings	Kasimow
Week 2	M	1/16		University Holiday: Martin Luther King, Jr. Day	
	Th	1/19	Tutorial	Section Meetings Rhino 3D: Contours and Shadows	
Week 3	M	1/23		Section Meetings	
	Th	**1/26**	**Pin Up**	**Exercise 1 Due**	
	F	1/27		Delirious Friday Hosted by First Year Class <u>Last Day to Add or Drop</u>	
Week 4	M	1/30	Lecture Charrette Tutorial	Exercise 2 – The Tent: Surfaces Issue Exercise 2 – The Tent In-Class Charrette for Exercise 2 Rhino 3D: Surfaces	Gu
	Th	2/2		Section Meetings	
Week 5	M	2/6		Section Meetings	
	Th	2/9	Lecture	Representation: Quantitative and Qualitative Section Meetings	Knight
Week 6	**M**	**2/13**	**Turn In** Lecture	**Exercise 2 Due** Exercise 3 – The Hut: Grids Issue Exercise 3 – The Hut Section Meetings	Kerwin
	Th	**2/16**	**Pin Up**	**MIDTERM REVIEW** **Project 1 Mid-Review** **Exercises 1, 2, and 3 (in progress)**	
Week 7	M	2/20		University Holiday: Presidents' Day	
	Th	2/23	Tutorial	Section Meetings Rhino 3D: Lines	

Week 8	M	2/27		Section Meetings	
			Turn In	Sketchbook Review	
	Th	3/2		Section Meetings	

Week 9	**M**	**3/6**	**Turn In**	**Exercise 3 Due**	
				Section Meetings	
				Begin Revisions to Exercises 1, 2, and 3	
	Th	**3/9**	**Review**	**PROJECT 1: ORIGIN MYTHS**	
				Exercises 1, 2, and 3	

SPRING RECESS (March 12-19)

Week 10	M	3/20	Lecture	Introduction to Project 2: Ruins of the Near Future	Berry
				Section Meetings	
			Turn In	Portfolio for Project 1	
	Th	3/23	Lecture	Project 2: Perspective	Ansari
				Section Meetings	
			Tutorial	Rhino 3D: Experiential Views	

Week 11	M	3/27		Section Meetings	
	Th	3/30	Lecture	Project 2: Fragments and the Difficult Whole	Shea
				Section Meetings	

Week 12	M	4/3		Section Meetings	
	Th	**4/6**	**Pin Up**	**Project 2 Mid-Review**	
	F	4/7		<u>Last Day to Withdraw</u>	

Week 13	M	4/10		Section Meetings	
	Th	4/13		Section Meetings	

Week 14	M	4/17		Section Meetings	
	Th	**4/20**	**Turn In**	**PROJECT 2 DUE at 5:00pm**	
			Turn In	Sketchbook Review	
				Mandatory Studio Clean-out	

Week 15	**M**	**4/24**	**Review**	**First Year Final Reviews (Project 1 + Project 2)**	
	Th	4/27		EXPO	
	F	4/28		EXPO	

				STUDY DAYS (April 29-May 2)	
				FINAL EXAMS (May 3-10)	
	M	**5/8**	**Turn In**	**PORTFOLIOS DUE at 2:00pm**	

Schedule subject to revision. Updates will be included in assignment handouts as necessary.