

Fall 2014

Applied Research Practices in Architecture Studio

Critic: Diana Martinez/ dianaj.martinez@gmail.com

Friday 2:00 – 6:00, Room 321 Fayerweather

COURSE DESCRIPTION:

What is applied architectural research? While research implies both experiment and inquiry, application suggests the culmination of those lines of inquiry in the development of a discrete project (though that research may suggest further or extended inquiry). That project may make an intervention into one or all of the following—the conventions of architectural processes (involving issues of representation, theories of design, the modeling of the environment, the generation of form etc.); the projection of an architectural product (involving e.g. issues of material, building technique, the use of new technologies etc.); and/or the study of building performance (involving either the calculation of a building once it has been constructed or the study of a building post-occupation). These lines of inquiry may engage architectural history, urban design, urban planning, historic preservation, building and materials science, the social sciences or all of the above. This course is intended to supplement self-directed research while critically engaging questions surrounding the idea of applied architectural research. Towards that end we will be investigating questions concerning applied research more broadly in tandem with developing individual research directions and agendas.

COURSE REQUIREMENTS:

This studio is designed in order to accommodate a wide range of research topics, while allowing for the development of a common and ongoing discussion amongst your peers and advisors. As such you will be required to participate in discussions addressing research issues more generally in addition to delivering concrete evidence of your individual progress. There are also short studio assignments associated with each workshop session. These are intended to help us bridge our broad discussions with your specific explorations. It is also expected that some of these discussions be developed for content for the ARPA journal.

September 5| Class Presentation & Group Pin-Up: please bring an updated version of your prospectus + a 5 minute Power Point presentation.

September 12| RESEARCH: Formulating Questions and the Search for Answers. What is evidence? What is Proof?

Evidence based design is today a practice mostly limited to the design of healthcare facilities—a field that excludes the majority of practicing architects, excepting a few specialist firms. Yet Michel Foucault, in The Birth of the Clinic, argues that the Hospital is the locus classicus of Modern Architecture (and the regime of Disciplinary Space). The hospital's emergence signaled a historical shift, from a practice based on a knowledge of classical models to a practice based on the application of technological and scientific knowledge. Following the modern project's supposed failure, one might argue that today we are experiencing a 'new' modernism—mainly driven by concerns about the environment. That is to say we are entering an era in which evidence is experiencing a revival of importance. In this session we will be looking at medical space as a sort of case study. In our discussion you should be able to speak of the relationship between knowledge and the construction of subjects, and the role of proof in a much more general sense, and certainly in the context of your own research.

Driving questions: What counts as proof in architecture? In architecture, to whom does evidence matter? What is privileged as performance criteria; psychological well being, environmental efficiency, mass appeal, discursive 'relevance', longevity? How will we address the dangers of scientific positivism—again?

- Carlo Ginzburg, "Checking the Evidence: The Judge and the Historian" in *Questions of Evidence: Proof, Practice and Persuasion Across the Disciplines*. ed. Harry Hartoonian (Chicago: University of Chicago Press, 1991) Pg. 290-303.
- Simon Schaffer, "Self Evidence" in *Questions of Evidence: Proof, Practice and Persuasion Across the Disciplines*. ed. Harry Hartoonian (Chicago: University of Chicago Press, 1991) Pg. 56-91.

Additional Reading:

Michel Foucault, *The Birth of the Clinic*, Introduction and selections TBA

September 19| APPLICATION: Seminar Session/ Workshop: Displaying Findings, Synthesizing knowledge, The Project and Issues of (re)Presentation

Assignment: Please put together a short presentation highlighting at least two projects that you feel have effective representational strategies. I am especially interested in those strategies that respond to a major epistemic shift in thinking (e.g. Ptolemy's use of projection representing the earth as round another example would be representation after the camera). I am also particularly interested in projects that you feel are possible precedents to your own. You should be able to discuss both the epistemic shift and the representational controversy or response to that shift. I will also be putting a small collection of representational strategies together. We are discussing this quite early, but I want to make sure that your presentation strategy is an integral part of the applied research process.

Driving Questions: What does it mean when research is applied? Is there a greater emphasis on communication, execution, or demonstrability or even market viability? How do these greater concerns affect issues of presentation or representation?

Reading: Denis Cosgrove, "Ptolemy and Vitruvius: Spatial Representation in the Sixteenth-Century Texts and Commentaries" in *Architecture and the Sciences*, Antoine Picon and Alessandra Ponte eds. Princeton: Princeton Architectural Press, 1996. Pp 52-80.

Reference: I'm assuming a familiarity with the texts below. If not please quickly review.

Stan Allen, *Architecture, Technique, Representation*. New York: Routledge, 2009.

Robin Evans, *Translation from Drawing to Building*, Cambridge: MIT Press, 1997

Robin Evans, *The Projective Cast*, Cambridge: MIT Press, 1995.

September 26| Desk Crits (focusing on the formulation of questions and presentation strategies)

October 3| Seminar Session: Environments of Inquiry (The Laboratory and The Studio)

Driving Questions: To what degree does space condition the kinds of questions we ask? To what extent does it affect the nature of the research we conduct?

Latour, Bruno and Woolgar, Steve. *Laboratory Life: the Construction of Scientific Facts*, (Princeton: 1986), pgs. 15-42

Edward Eigen, "The Place of Distribution: Episodes in the Architecture of Experiment" in *Architecture and the Sciences*, Antoine Picon and Alessandra Ponte eds. Princeton: Princeton Architectural Press, 1996. Pp 52-80.

Brendan Moran, "Research" in Joan Ockman, *Architecture School: Three Centuries of Educating Architects in North America*, Boston: MIT Press, 2012. Pp. 386-391

David Solomon, "Experimental Cultures: On the 'End' of the Design Thesis and the Rise of the Research Studio," *Journal of Architectural Education* (1984-) Vol. 65. No. 1 (October 2011) (pp. 33-44)

October 10| Seminar Session Environments of Inquiry (The Archive and The Field)

Driving Questions: What constitutes an architectural archive?

Michel Foucault, "Introduction" and "The Historical *a priori* and the Archive" in *The Archaeology of Knowledge and The Discourse on Language*. New York: Pantheon Books, pgs. 126-135. (If you want to read more I have scanned 79-126).

Achille Mbembe, "The Power of the Archive and Its Limits," in Carol Hamilton et al. eds. *Refiguring the Archive*. Cape Town: David Philip, 2002, 19-26.

Rem Koolhaas "Postscript: Introduction for New Research in the Contemporary City," in *A+U* 217 (October 1988), 152.

Alison and Peter Smithson, "The As Found and the Found," in *The Independent Group: Postwar Britain and the Aesthetics of Plenty*, ed. David Robbins. Cambridge: The MIT Press, 1990, 201-202.

October 17| Desk Crits (Focused on your site of inquiry)

October 24| Midterm

October 31| Seminar Session/ Workshop: Defining Objects/ Refining Objectives

Driving questions: Now that we are at the end of the semester can you more clearly state the object of your inquiry and the objective of your project? Is architecture the object you make or the subject position that you take?

Assignment due: a 500 word statement articulating the object of your research and the objective of your project.

Lorraine Daston and Peter Gallison "Seeing is Making: Nanofacture" and "Right Depiction" in *Objectivity* Brooklyn: Zone Books, 2007.

Additional readings:

Lorraine Daston and Peter Gallison "Before Objectivity" "Objectivity is New" "Why Objectivity?" "The Scientific Subject" and "The Real, the Objective and the Communicable" in *Objectivity*. Brooklyn: Zone Books, 2007.

November 7| guest: Dong-Ping Wong

Dong-Ping Wong will be presenting is +Pool project. Please visit www.pluspool.org to take a closer look at the project.

November 14| guest: David Benjamin

David Benjamin will be presenting his project HyFy, this year's PS1 Young Architect's pavilion.

November 21| Desk Crits

November 28| Thanksgiving holiday

December 5| Final Review

Students will give twenty-minute presentations that include:

- Revised statement of object of inquiry
- Methodology
- Presentation of results
- Assessment of contribution to the field
- Presentation Strategy
- Outline of final project format.