Doctoral Studies in Architecture  
College of Architecture & Urban Planning  
The University of Michigan

Arch 812 – Theory in Architectural Research  
Fall 2015

Professor:  
Jean Wineman  
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Office Hours:  Monday 1 – 3 p.m.

Syllabus and course materials available at 
http://www.ctools.umich.edu

Meeting Time:  Monday 9:00 am – 12:00 pm, 2227 A&AB

Overview:
This course is an advanced theory course for doctoral students. The purpose of the course is to provide theoretical foundations for students wishing to make scholarly contributions to research in architecture. We will review and critically evaluate various epistemological, methodological, and normative foundations of architectural thought and practice. We will examine a range of epistemological theories, including logical positivism, interpretive theory, pragmatism, and critical theory; the relationships between those epistemologies and theories in architecture; and selected historical perspectives relevant to the development of theory in architectural research and practice.

Format and Requirements:
The course will meet as a weekly graduate seminar. Students will be expected to do all of the readings and participate actively in the seminar discussion for all sessions. In addition, the course requirements will include:

- **Lecture Materials and Discussion Questions**: Each student will be assigned to work with one other student to prepare class materials for three different sessions over the course of the term. This will include being responsible for preparing lecture materials (for the first half of the session) and discussion questions (for the second half). Lecture materials should be emailed to me no later than noon on the Thursday before the session meets.

- **Topical papers**: Two papers will be assigned on topics to be determined. The papers will be due on October 17 and December 12. No incompletes will be issued (except for valid medical reasons) and late papers will be downgraded.

Grading:
Course grades will be based on the lecture materials for the three assigned sessions (worth 10% each or 30% of the final grade), for participation in sessions generally (10% of the final grade), and for the papers (25% for the first paper, 35% for the final paper). Grades for written work will be based on writing skills, responsiveness to the assignment, and the quality (thoughtfulness and support) of the substantive content. I **strongly urge** you to use the services of the Sweetland Writing Center in writing your two papers.

Required Readings:
The readings have been posted electronically on ctools for this course (A812).
Session Reading Assignments:

1. September 14: Introduction and Overview

Topics:
- Course outline

2. September 21: Scientific Knowledge and Inquiry – Logical Positivism

Topics:
- How do we know what we know?
- What makes scientific knowledge scientific? What are the standards for scientific knowledge?
- To what extent can scientific standards be met for architectural inquiry?
- For what classes of architectural problems is scientific knowledge appropriate? Necessary? Sufficient?

Readings:
- Popper (1959): in Popper Selections
- Bernstein (1976): Part I, p. 3-21 (Note: only read through p. 21)

3. September 28: Interpretive Inquiry

Topics:
- The critique of positivistic science. How is the interpretive method different from “science”?
- What are the advantages and disadvantages of the interpretive method for producing knowledge for architecture?
- For what classes of architecture problems is interpretive inquiry appropriate? Necessary? Sufficient?

Readings:
- Bernstein (1976): Part II
- Klemke et al. (1998): Chapters 3, 5 (pp. 54-65, 76-98)

4. October 5: Pragmatism

Topics:
- How does pragmatism differ from Popperian logical empiricism?
- By what means are claims to truth tested for validity under pragmatism?
- How are values treated under pragmatism?

Readings:
- White (1973): Chapters 7 and 10
- Bernstein (1966): Chapters 4, 5, and 8
5. October 12: Critical Theory

Topics:
- Another critique of positivistic science and technical knowledge.
- How does critical theory differ from scientific knowledge and interpretive knowledge?
- In what ways does architectural research contribute to critical theory?

Readings:
- Habermas (1984): Translator’s introduction, Chapter 4, p. 102-141
- Habermas (1996): Translator’s introduction

October 19: Fall Break (no class)

6. October 26: Theories in Architectural Research and Practice

Topics:
- The Nature and Structure of Theories
- Theoretical Perspectives
- Theory and Design

Readings:
- T. Kuhn: in the Structure of Scientific Discoveries
- D. Schon: Interview re: Reflective Practitioner
- P Rowe: “Designers in Action” in Design Thinking
- B Hillier and A Leaman: How is Design Possible? In JAR, 3(1), Jan 1974

FIRST PAPER DUE via email no later than 12 noon Thursday October 30.

7. November 2: Paper Presentations
Students make 15 minute presentations of their paper.

8. November 9: Environment and Technology

Topics:
- Theory, Observation, Measurement, Description
- Functionalism and Technology

Readings:
- M Gelernter: “The twentieth century (I) in Sources of Architectural Form
- D Bell: Technology, Nature and Society in Winding Passages
- Rees: Ecosphere
- Scheuer: Life Cycle

9. November 16: No class meeting

10. November 23: Structuralism, Semiotics, and Other Formal Systems

Topics:
- Society and systems of meaning
• Language as a relational structure
• Ideas as organizing systems

Readings:
• A Colquhoun: Form and Figure in Essays in Architectural Criticism

11. November 30: Space, Form and Culture

Topics:
• Space and the social logic of architecture

Readings:
• B Hillier: Visible Colleges, in Space is the Machine
• H Glassie: “Mechanics of Structural Innovation” in Folk Housing in Middle Virginia: a Structural Analysis of Historic Artifacts
• J Hanson: Two Domestic Space Codes Compared, in Decoding Homes and Houses

12. December 7: Theories of Ecology & Ethics

Topics:
• Ecology, ethics and social justice

Readings:
• W McDonough: Design, ecology, ethics, and the making of things, in Theorizing a New Agenda for Architecture
• S Campbell: Green cities, growing cities, just cities? in Readings in Planning Theory
• G Kaminski: Ecological Conceptualizations
• Kohler: Green Building Challenge

13. December 14: Theoretical Perspectives in Practice

Topics:
• The role of beliefs and convictions in practice

Readings:
• D Cuff: Beliefs and Practice in Architecture: The Story of Practice
• J Blau: Convictions and Agendas, in Architects and Firms: A Sociological Perspective on Architectural Practice
• R Venturi and D S Brown: A significance for A&P parking lots or learning from Las Vegas in Theorizing a New Agenda for Architecture
• S Ubbelohde: Oak Alley: The Heavy Mass Plantation House

SECOND PAPER DUE via email no later than Friday December 18 at 5 p.m.