“History of Architectural Theory” (48-341)
Taught: S01, S02, S06, S08
Architectural History Seminar
9 units, pre-requisite 48-240
Course Website: http://www.andrew.cmu.edu/course/48-341/

This architectural history seminar offers a chronological overview of architectural theory from Vitruvius to the mid-twentieth century. The last quarter of the seminar consists of student presentations and discussion on the post-World War II modern period. The course demands extensive reading, including sizeable amounts of primary source documents (in English), so that students can get a feel for the authentic voice of the architect in their day. The seminar attempts to isolate repeating themes in history in order to make clear the role of precedent, influence, and a continuity of discourses influencing some of the most central ideas of architectural theory, up to the present day. This course was created in response to constant, widespread though not often loudly voiced student demand for “more theory” in the School of Architecture at CMU. Although the students are more hungry for contemporary theory, they are regularly surprised at the relevance and continued impact of the older theory.

I am attempting to introduce some of the most well-known and basic elements of this seminar into the lecture series for the required 2nd year architectural design studio that I coordinate. As stated in my personal statement, I feel strongly that theory, which is little more than “thought” according to some definitions, should be part of every architect's education.

For other materials, including examples of student work, and class handouts, please refer both the course website listed above, as well as my professional website:
http://www.andrew.cmu.edu/user/gutschow/theory48341.html
S’08 Syllabus:
Architecture is not only building, technology, drawings, etc., but also discourse, meaning, communication, and concept: or theory. This architectural history seminar will study in roughly chronological order some of the major theories and theoreticals of architecture, from Vitruvius, through the Renaissance, the Enlightenment, the 19th-century, up to the modern era. Throughout the seminar we will chart the changing definitions of what constitutes “theory” in architecture, and how it relates to other writings such as criticism and history. We’ll study in-depth how (if at all) theory relates to the intellectual context and built works before and after. Students will discover how ideas recur, and even the oldest theories have contemporary relevance. The seminar will culminate with presentations by students on post-war (1945-75) theories of architecture. Work for the seminar will involve extensive readings, active class discussions, and a “report” on post-war theory.

Summary of Seminars
We. Jan. 16 #1: Introduction: Theory, Blobs and New Materiality
We. Jan. 23 #2: Ancient & Gothic Order: Vitruvius & Geometry
We. Jan. 30 #3: Renaissance & Baroque Ideals
We. Feb. 6 #4: Enlightenment NeoClassicism: Laugier, Quatremere
We. Feb. 13 #5: Romantic Sensations: Burke, Boullee
We. Feb. 27 #7: French Structural Rationalism: Viollet, Durand & Ecole
We. Mar. 5 #8: 19th-cent. German Materialism: Semper, Hübisch, Boetcher
We. Mar. 12 #9: German Space, Empathy & Psychology: Schmarsow, Lipps
We. Mar. 19 #10: Heroic Modernism of the 1920s: Manifestoes

POST-WAR Modern Student Presentations
We. Apr. 2 #11:
We. Apr. 9 #12:
We. Apr. 16 #13:
We. Apr. 23 #14:
We. Apr. 30 #15:

Objectives:
– To familiarize students with some of the most important theoretical tracts of architectural history up to the present, and how they build on the past
– To understand the relationship of modern theory to older theoretical ideas
– To develop an understanding of how theory is, and how it relates to design
– To develop skills of critical thinking, quality research, and clear communication through readings, class presentations, discussions, and a research report.

Resources:
Theory must be read: therefor this class will rely heavily on readings, as well as lectures about books and ideas. The reading will consist primarily of excerpts of original (translated) texts to be found in Hunt library and on e-reserve.

Required Readings:

Gelernter, M. Sources of Architectural Form, pp.1-18 (e-reserve) (720.1 G31S 1994)

Questions to think about: What are the five main theories of architectural theory described by Gelernter? (be prepared to know and discuss each one)?


Questions to think about: What are the four types of theory, according to Nesbitt? What is the general purpose of architectural theory? What are the five subject matters of theory? What are some of the possible “content” for theory?

Hearn, Fil. Ideas that Shape Buildings (MS) preface, pp.5-6 (e-reserve)

Questions to think about: How does Hearn define theory? How is it different from the other two?


Questions to think about: Consider some of the varied ideas and categories of theory presented here.


Questions to think about: How does Linder want to define theory? Is architectural theory more than just an attempt to make architecture theoretical? Should we borrow from other disciplines (such as philosophy, literature) about architecture? How can we connect theory and practice more?


Questions to think about: What was/is the great debate in architectural schools described in these readings? Can you have architecture without “theory”? What “kind” of theory is Speaks criticizing? Who are the main proponents? What alternatives is he in favor of? How do the “Letters’ criticue support Speaks’ position?


Recommended:
Gelernter, M. Sources of Architectural Form, Ch.1 pp.19-35 (720.1 G31S)

Questions to think about: What is the main paradox about theory and its relation to architecture as discussed by Gelernter? What are the three primary theories of creative production? What are the three main types of cognitive thought?


Questions to think about: Skim 1.73 for ideas on how theory relates to practice, criticism, history, myth, utopia...

Abbreviations:
* = Most important reading! Pay particular attention. (e-reserve) = on reserve, access at class website: www.andrew.cmu.edu/course/48-341 OR through CANEO, search for “48-341 Theory of Architectural Theory Reserves” on the library website
TBA = “To be announced”
ANCIENT ORDERS: VITRUVIUS & GOTHIC

Assigned Readings:

- Panofsky, E. Gothic Architecture and Scholasticism (1951) (723.5 P19G)
  Questions to think about: What is “scholasticism”? How does Panofsky relate the design of Gothic cathedrals to “scholasticism”? Is this a “theory of architecture”?

- Von Simson, O. “Gothic Form,” Gothic Cathedral: origins of Gothic Arch. & Medieval Concept of Order (1956) Pt.II pp.3-22 (720.1 A67326 Vol. 1: avail. in bookstore)
  Questions to think about: What are the main determinants of Gothic form according to Von Simson? What role did geometry play? How is this “theory”?

Recommended Readings:

- Geilerter, M. Sources of Architectural Form (1995) Chs.2,3
  Questions to think about: What were the earliest architectural “theories” in ancient Egypt and Greece? What was Thales’ “organism analogy”? How do “ideal forms” relate to reality in Platonic rationalism? How is Aristotelian empiricism different in describing how man “knows” the world around him? What are the two main theories of Greek art? What were the basic theories of Greek architecture based on? What does G feel are the main points of Vitruvius’ theory? Ch.3: What is Neoplatonism? How is it similar and different than Plato’s thought? Why did medieval architects rely on geometry in their buildings? How did medieval masons receive their “theory”? How did the role of the artist/architect change with regard to rational thought and creative inspiration? What is scholasticism? How were medieval architects trained and what was the source of their learning?

  Skim or read as interested for good background info on Vitruvius, commentary on the text, and how Vitruvius remained relevant through the ages.

ANCIENT vs. MODERN IDEALS: RENAISSANCE & BAROQUE

REMEMBER: Post-War Modern Theory/Theroietic Topic Forms Due Next Week.

Required Readings:

- Comparison of Table of Contents of Vitruvius, Alberti, Palladio (e-reserve)
  Questions to think about: Compare the contents of Vitruvius, Alberti & Palladio: how are they different? What is the general structure of the book and argument? How are various themes dealt with differently in the three?

  Questions to think about: What attributes does Wölfflin give to the Baroque, as opposed to the Renaissance? What theory does Wölfflin propose for why the Baroque evolved out of Ren?

  Questions to think about: What are “Positive” and “Arbitrary” beauty? Which does Perrault favor? Why? What is Perrault’s attitude towards the “ancients”? How do Perrault’s Baroque ideas challenge Vitruvius and Renaissance architectural theory?

- Piranesi, G.B. “Thoughts on Architecture” = Parere su l’architettura (1764) transl. in Oppositions 26 (Spring 1984): 5-25 (e-reserve) (Periodicals)
  Questions to think about: What values does Piranesi (in the person of Didascalo) defend? What aspects of Greek/classical architecture is he against? Why? Consider how even the format of the “theory” is different than past theorists we have read. Although Piranesi was not actually part of the Baroque era, why are we reading him this week?

- Wittkower, Rudolf. “Principles of Palladio’s Architecture,” Part III in Architectural Principals in the Age of Humanism (1949) also skim Part II (724.1 WA41 Ovsz) pp.46-61, 709.035 H75F1
  Questions to think about: What differentiates Palladio’s treatise from Alberti & Vitruvius?

  Questions to think about: What attributes does Rowe give to the Baroque, as opposed to the Renaissance? What theory does Rowe propose for why the Baroque evolved out of Ren?

- Alberti, L.B. Ten Books on Architecture – On the Art of Building = De Re aedificatoria = (c.1450) (e-reserve) (PITT NA2812 P413 1993) MF (e-reserve)
  Skim Bk.I Chs.1,2; Bk.IX Chs.5,9. Skim: Preface; Bk.J Chs.9,10: VI.1,2,3; VII.6; IX.1-11
  Questions to think about: Skim the entire treatise: How is Alberti’s treatise different than Vitruvius? Read esp. carefully Bk.Ix:S. what does the word Concinna (or Cotlocation) mean?
NEOCLASSICISM & ORIGINS: LAUGIER, QUATREMÈRE

Required Readings:


Questions to think about: What is the ideal upon which all future architecture should be modeled? Why? What “abuses” of the classical orders does Laugier want to outlaw? What is his attitude towards the Greeks and their orders? How about the Gothic style? How does he feel about buildings without ornaments? How does Laugier continue or alter the “Vitruvian triad” of commodity, firmness & delight?

Quatremère de Quincy, A.-C. “Architecture” from Dictionary of Architecture = Dictionnaire d’architecture vol. 1 in Encyclopédie Méthodique (1788), translated in SH 7 (1885) 25-31. (e-reserve)

Questions to think about: How does Quatremére define “architecture” as opposed to mere building? What are the three main origins of the world’s architecture? What’s special about the Greeks and their architecture? How did great Western architecture develop from the hut?

Quatremère de Quincy, A.-C. “Type” from Dictionary of Architecture = Dictionnaire d’architecture vol. 3 in Encyclopédie Méthodique (1825), translated in Oppositiäns 4 (1777): 147-150. (e-reserve)

Questions to think about: What is “type” and how is it used in design? Is it different from other types of imitation?

Assigned Readings/Presentations:


Questions to think about: What types does Winckelmann feel about the Greeks? Why? How should “modern” artists relate to the Greeks?


Questions to think about: How does Colquhoun define and use the idea of type and typology? What is his “agenda” for the architectural profession in the 1960s?

Optional:

H.F. Mallgrave, Architectural Theory: Vol.1: An Anthology from Vitruvius to 1870 (2006), pp.119-189. (720.1 A67326 VOL. 1; avail. in bookstore), read quickly!

Gelernter, Sources of Architectural Form, pp.167-182

Kraft, History of Architectural Theory, Ch.13, esp. pp.151-4; Ch.17, pp.187-93


ROMANTIC SENSATIONS: BURKE, BOULLÉE, REVOLUTION

Required Readings:


Questions to think about: What are the main points of Boullée’s essay? How does Boullée’s vision or definition of architecture differ from Vitruvius? How does it relate to Periatt’s ideas on the source of architectural form?


Questions to think about: What are the main points of Burke’s essay? What is the “sublime”? How does it relate to architecture? How does it relate to “romanticism”?


Questions to think about: What is “revolutionary architecture”? What is “architecture parlante”?


Questions to think about: What is the picturesque?

Assigned Readings:


Questions to think about: Explain the many variations of “type” as an idea in architectural theory and how they evolved over time? What is the difference between “type” and “model”?


Questions to think about: How does Colquhoun define and use the idea of type and typology? What is his “agenda” for the architectural profession in the 1960s?

Optional:

H.F. Mallgrave, Architectural Theory: Vol.1: An Anthology from Vitruvius to 1870 (2006), pp.119-189. (720.1 A67326 VOL. 1; avail. in bookstore), read quickly!

Gelernter, Sources of Architectural Form, pp.167-182

Kraft, History of Architectural Theory, Ch.13, esp. pp.151-4; Ch.17, pp.187-93

SOCIAL CRITIQUE & MORALITY: PUGIN, RUSKIN, MORRIS

REMINDER: Next class rescheduled to MONDAY FEB. 18, 6:30-8:30pm
REMINDER: 2pp.-proposal on Post-War Theory Presentation due 2/20

Required Readings:

Pugin, Augustus W.N. True Principles of Pointed or Christian Arch. (1841, 1973), pp.1-12, 50-60 (e-reserve)
Questions to think about: What are the primary characteristics of Gothic architecture according to Pugin? What ideas of propriety does he describe for religious architecture?

(e-reserve) (720.9453 R955) Excerpt in Holt, vol.3 pp.421-33
Questions to think about: What aspects of Venetian Gothic does Ruskin admire?

Morris, William. “Art & Society” (1883) in News from Nowhere, pp.139-140; “The Worker’s Share of Art” (1885) in News from Nowhere, pp.140-143
“Prospects of Architecture in Civilization” in Morris on Architecture, pp.64-98
(720.47 M87W) (e-reserve)
Questions to think about: What role does architecture play in the development of civilization, culture, and worker’s spirit? What type of architecture does he feel is most virtuous? Why?

Skim these two books (n person, in library):

Pugin, Contrasts intro. H.R. Hitchcock (1836, 1840), (726.0942 P97C2 Ovsz)
Ruskin, The Seven Lamps of Architecture (1849, 1969) (720.1 R95SAAA)

Assigned Readings:

Pugin, Augustus W.N. Contrasts, intro. H.R. Hitchcock (1836, 1840) (726.0942 P97C2 Ovsz)
Questions to think about: Read quickly the introduction by H.R. Hitchcock, then skim entire book, especially Chs. 1-5, and all the illustrations! What does Pugin feel about Gothic Catholic society & architecture? How and why was contemporary Protestant architecture degraded in Pugin’s opinion? How do the illustrations make the same point?

Ruskin, John. The Seven Lamps of Architecture (1849, 1989) (720.1 R95SAAA)
Questions to think about: skim whole book, outline the main point of each of the “Seven Lamps” and what aspects of architecture Ruskin is advocating with each.

Questions to think about: How do Morris’ ideas relate to the development of modern architecture, particularly in Germany with Gropius, the Werkbund and the Bauhaus?

Questions to think about: Read introduction and skim Pugin chapter. How are some theories of architecture more “moralistic” than others? Why is this good or bad? What does Watkin say about Pugin’s moral biases?

Other / Suggested:


ASSIGNED READINGS: PUGIN, RUSKIN, MORRIS

REMINDER: Next class rescheduled to MONDAY FEB. 18, 6:30-8:30pm
REMINDER: 2pp.-proposal on Post-War Theory Presentation due 2/20

Required Readings:

Questions to think about: What are Viollet’s ideas about materials? Rational planning? Ornament? Style? Structural honesty? Gothic architecture? How is Gothic functional? How are his views different from Pugin’s or Ruskin’s love of Gothic?

Questions to think about: How is Durand’s view of architecture like science? How did his ideas develop? How are they similar to, and different from Viollet’s ideas?


PLUS one of the following two articles (half the class each):


Assigned Readings:

Questions to think about: Discuss the significance of the “Dictionary” as a theory type.

Questions to think about: What is Durand’s theory of architecture, and how was it related to the environment and school in which it was taught? How is it similar to or different than what came before?

Optional / Recommended Readings:

Tectonics & Style: Semper & Bötticher

**Required Readings:**

**Assignments:**

**Suggested Readings:**

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Space, Empathy, Psychology: Schmarsow, etc.

**Required Readings:**

Questions to think about:
- What does Schmarsow critique Semper’s idea of “dressing”? What is the “aesthetic from within”? Does Semper argue for or against this idea of the “aesthetic from within”? How does Schmarsow argue for or against it?
- What is the relationship of “dressing” and “structural form” in Greek architecture? What practical applications does Semper dictate for current architecture? What is Semper’s theory of “dressing” (Bekleidung) or masking?

**Assignments:**
- Wolfflin, Heinrich. “Prolegomena to a Psychology of Architecture” (1886) in *Space, Time and Architecture: Fifty Years of Architectural History* (1935), pp.145-177, 228-256, 390-409 (e-reserve)

**Suggested Readings:**
MODERNISM I - HEROIC 1920s

DUE DATE: Xeroxes of proposed theory readings due next class, Mar. 28

Required Readings:
Conrads, Ulrich, ed. Programs & Manifestoes of 20thC Architecture (1970), (720.9 C75PA)
– Bauhaus & Gropius Manifestoes (1919, 1923) pp.49-53, 95-97
– Anti-humanism, CIAM, ABC, H. Meyer (1928) pp. 109-120

Questions to think about:
What are the main points of each of the five groups of readings? How were they both similar and different to each other? How do they all define a "modern" architecture?


Questions to think about:
What is modern architecture? When did it start? Why?

Assigned Readings:

Questions to think about:
Define the words "modern", "modernism" and "modernism." Summarize the differences between "Programmatic vs. Transitory Modernity," and "Pastoral vs. Counter-pastoral Modernity." Describe how modernity is a condition of "homelessness." What are the different solutions to this homelessness proposed by Norberg-Schulz and Cacciari?


Questions to think about:
This is both a review of theories we’ve discussed, and a way of seeing these neo-classical theories as leading into modern architecture. What does Frampton see as the beginning of modern architecture? Summarize how Frampton frames the many different theories of Neo-Classicism we’ve read in recent weeks into being precursors for modern architecture.


OR


Post-war Modern Theory Topics (as of 3/12/08)

Modernism
John Hsu - Saarinen, Design Process and structure
Rachel Perry - Mies van der Rohe
Elizabeth Garret - Aldo van Eyck & Dutch Modernism
+ Kühn (Kai)

Regionalism / Place / Tropical Modernism
Erica Yankowski - Le Corbusier, Climate/Regionalism
Elizabeth Duray - Oscar Niemeyer & Brazilian modernism
Christina Follard - Carlos Raul Villanueva & Venezuelan modernism
Matthew Huber - Heidegger, Phenomenology, Christian Norberg-Schultz

England
Jared Langevin - Reyner Banham & environmental controls/technology
Niko Triulzi - Brutalism, social utopias
Josh Cummings - Zoom Culture, Archigram
Josiah Haskell - Rogers/Foster/Piano, early “High Tech”

Technology
Eric Smith - Kenzo Tange: Confluence of Tradition & Western Ideas
Austin McKinley - Japanese Metabolism, Utopian urban visions
Misha Varshavsky - Buckminster Fuller, the Geodesic Dome

Isms & Post-Modernism
Ishita Gaur - Five Architects, New York Five, Richard Meier, Michael Graves
Taryn Humphrey - Situationish

Julia Martini - Robert Venturi, Complexity & Contradiction, anomalies
Julia Martini - Robert Venturi, Complexity & Contradiction, anomalies

Taryn Humphrey - Situationish