Theory of Urban Form examines the various ways architects have theorized their role in relation to the design of cities over the past four decades. The period of time covered, from the 1970’s to the present, comprises an era of radical transformation in architecture, urban form and daily life. It comprises the emergence of digital technologies, the end of the Cold War, neo-liberal globalization, and its recent collapse. Additionally we have seen an awakening of environmental consciousness as well as the emergence of a multiplicity of diverse urban subjectivities around civil rights struggles around race, gender, ethnicity and sexuality. While we will focus on the last forty years, contemporary theories will be examined in relation to intellectual genealogies and historical examples and practices reaching deeper into the past. A key theme will be examining the tension between how the city is made through collective architectural expression, and how individual buildings are informed by the architecture of the city itself. Therefore, transitions in urban form will be examined through the change in discourse both in written architectural theories and explored in representations. Urban form beyond its abstraction is a material construction establishing a specific metabolism of the city based on social, food, energy and water systems, and ultimately changes the role of the architect in shaping urban form.

Course Outline

The course is comprised of three theoretical transformations in how architects conceived of building practices in relationship to urban form, representation and metabolism.

1. **From Architecture of the City to Metropolitan Architecture.** The first third of the course will look at the transition between discourses on the formation of the traditionally formed city to the technological metropolis. This transition is framed by seminal texts about the European city which appeared in English editions in the 1980s: Aldo Rossi’s *Architecture of the City*, Colin Rowe and Fred Koeter’s *Collage City* on the one hand and European’s discovery of the American metropolis: Alvin Boyarski’s *Chicago a la carte* and Rem Koolhaas’ *Delirious New York* on the other. Mathias Ungers is a transitional figure from the fragmented metropolis of Berlin. The culmination of the metropolis will be examined in *The Making of Hong Kong*.

2. **Megalopolis: The Nature of Sprawl.** The second third of the course will look at the emergence of and subsequent theorization of the sprawling American megalopolis that put the form and the idea of the city and the metropolis in crisis. Infrastructure, landscape and a new relationship to nature have resulted in new theories of urban form in relation to ecology, energy and sustainability, and following from Rossi’s propositional turn from architecture in to the architecture of the city, we will examine the ecology of the city rather than ecology or nature as a separate system in the city.

3. **From mega to metacities.** Finally, we will look at recent theorization of informal urbanism and the emergence of mega-cities in relation to new bottom-up actors building homes outside of formal logics of planning and design and the social networks sponsored by recent digital technologies. Here urban form is theorized as an emergent social system made by multiple actors and agents, and in the metacity aided by new mobile digital technologies.

Course Structure

The course is structured by the interrelationship between theoretical readings and discussions, analysis of case studies, drawing and modeling assignments and forums with invited guests. The research theme this year will focus on the role of arts production in creating urban form. Two cities will be compared in the class: New York and Phnom Penh. Experimental representations will be designed based on readings from the primary course textbook *Digital Modelling for Urban Design* for each of the three thematic sections. Additionally, students will sign up to be discussion leaders for one of the three themes. The course will follow a rhythm of introductory lecture, student led reading discussion, drawing assignment pin-ups culminating in three public forums. The final work synthesizing analysis of the two cities will contextualize a major cultural event – Season of Cambodia – taking place in New York during the spring of 2013.
Reading

The primary textbook for the course is *Digital Modelling for Urban Design*. All students are expected to read the book over the course of the semester, and the drawing assignments are based on these readings. Additionally there will be a comprehensive bibliography in the course, and you will choose a text as your primary theoretical reading in comparison with the other readings in the thematic group. Students are expected to lead class discussion about their chosen reading and to participate in leading the public forum centered on these readings. Please sign up for a reading on the list provided for either next to a selected reading or to lead the public forum.

Drawing and Modeling Assignments

There are three drawing and modeling assignments based on chapters in *Digital Modelling for Urban Design* that are coordinated with thesis prep, and are meant to help you choose a site and formulate a program only following exploring in depth a thesis question. The three assignments are:

1. Archaeology. An archaeological modeling of an urban site examines visual archives of maps, photos, views, and written accounts of a particular area of the city in order to uncover moments of rupture or disruption in the continuity of urban form.
2. Genealogy. Genealogical modeling looks at the emergence of urban form based on a descent into its morphogenesis. Like Darwin exploring the origins of species, you will model specific building institutions as they evolve in time to meet new technological, economic, social or cultural expectations.
3. Schizoanalysis. Schizoanalysis is a meta-model developed by Felix Guattari in order to discover new social subjectivities that can emerge through altered patterns of groupings and assemblages of people, other living forms and objects.

Learning outcomes

Upon successful completion of this course students will be able to:

- Read, write, listen, and speak effectively
- Raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test them against relevant criteria and standards
- Gather, assess, record, and apply relevant information in architectural coursework
- Understand the fundamentals of visual perception and the principles and systems of order that inform two- and three-dimensional design, architectural composition, and urban design
- Understand Western architectural canons and traditions in architecture, landscape and urban design, as well as the climatic, technological, socioeconomic, and other cultural factors that have shaped and sustained them
- Understanding of the parallel and divergent canons and traditions of architecture and urban design in the non-Western world
- Understand national traditions and the local regional heritage in architecture, landscape design and urban design, including the vernacular tradition
- Incorporate relevant precedents into architecture and urban design projects
- Understand the theories and methods of inquiry that seek to clarify the relationship between human behavior and the physical environment
- Understand the diverse needs, values, behavioral norms, physical ability, and social and spatial patterns that characterize different cultures and individuals and the implication of this diversity for the societal roles and responsibilities of architects
- Understand the principles of sustainability in making architecture and urban design decisions that conserve natural and built resources, including culturally important buildings and sites, and in the creation of healthful buildings and communities

Final Grade Calculation

- Individual contribution 3 Drawing/Modeling or written assignments 25%
- Group forum reading organization, discussion 25%
- Individual class discussion, blog participation, reading or forum presentation 25%
- Final contribution to group exhibition format 25%

School Policies

Please refer to the student handbook:
http://www.newschool.edu/forms/ss_student_handbook.pdf
Schedule

August 31: Class Introduction
Assignment 1: Archaeological Analysis (Comparing arts districts in Phnom Penh and New York)
Reading (for next week): Chapters 1 and 2 Digital Modelling for Urban Design

September 7: Lecture 1: Archaeological Modeling

September 14: Architecture of the City and Collage City
Discussion: Rossi/Ungers/Rowe
Assignment 1: Pin up

September 21: Metropolitan Architecture
Discussion: Boyarsky/Koolhaas/Fauveaud 1
Assignment 1: Desk crit by appointment

September 28: Forum 1: From Architecture of the City to Metropolitan Architecture pin-up work
Assignment 1 Due, Group A lead reading discussion with case studies
Reading (for next week): Chapter 3 and 4 Digital Modelling for Urban Design
Assignment 2: Genealogical Analysis (Comparing arts institutions in Phnom Penh and New York)

October 5: Lecture 2: Genealogical Modeling

October 12: The Megalopolis
Discussion: Banham/IZenour et. al/ Gandelsonas
Assignment 2: Pin up

October 19: The Ecology of the City
Discussion: /Pope/ Haar and Marshall/Mollyvann
Assignment 3: Desk Crit by appointment

October 26: Forum 2: The Nature of Sprawl pin-up work
Assignment 2 Due, Group B lead reading discussion with case studies
Reading (for next week): Chapter 5 and 6 Digital Modelling for Urban Design
Assignment 3: Schizoanalysis (sectional analysis)

November 2: Lecture 3: Schizoanalytical Modeling

November 9: Megacity
Discussion: McGrath and Shane/Benjamin/Simone

November 16: Metacity
Discussion: McDonough/Tschumi/Deutsche
Assignment 3: Pin-up

November 23: Thanksgiving Holiday

November 30: Metacity
Discussion: /Vigano/ Kajima, et. al./ Fauveaud 2
Assignment 3: Desk Crit by appointment

December 7: Class cancelled studio reviews

December 14: Forum 3: From Mega- to Meta-City pin-up work
Assignment 3 Due, Group C lead reading discussion with case studies
**Required Text Book:**
Brian McGrath, Digital Modelling for Urban Design, John Wiley & Sons

**From The Architecture of the City to Metropolitan Architecture**

4. Alvin Boyarsky, Chicago a-la-carte, from Idea of the City, AA
6. Gabriel Fauveaud, *Return to the drama of Diamond Island: Real Estate Investment in the Grand Urban Projects of Phnom Penh*

**Megalopolis: The Nature of Sprawl**

9. Mario Gandelsonas, X-Urbanism
10. Albert Pope, Van Eyck’s Dilemma
11. Sharon Haar and Victoria Marshall, Megadelta
12. Interview with Vann Mollyvann, Nakhara: Journal of Environmental Design and Planning (also see blog http://cityofwater.wordpress.com/)

**From the Megacity to the Metacity**

18. Rosalyn Deutsche, Uneven Development/Homeless Vehicle Project
19. The Elementary City, Paola Vigano
21. Gabriel Fauveaud, *In Search of an Urban Knowledge*