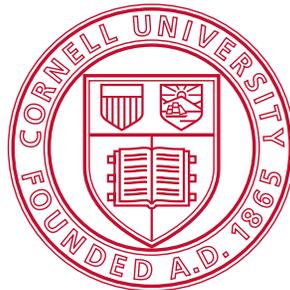


COLLEGE *of* ARCHITECTURE, ART & PLANNING
DEPARTMENT OF ARCHITECTURE
FALL 2012
ELECTIVE COURSES

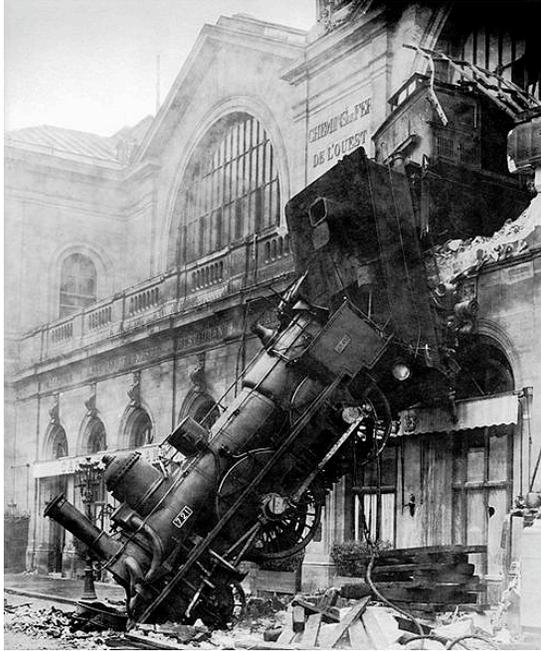
B. ARCH., M. ARCH., M.A., & PH.D.



COLLEGE *of* ARCHITECTURE, ART & PLANNING
DEPARTMENT OF ARCHITECTURE

**ARCHITECTURAL
THEORY ELECTIVES**

FALL 2012



Arch 3308/6308
Special Topics in Theory of Architecture
Tales of Two Cities:
Modern Landscape Architecture in New York and Paris.

Two of the West's greatest cities entered the modern age almost simultaneously, and in the aftermath of cataclysmic national socio-political events. Spurred on by rapid technological innovations, Paris and New York altered the fabrics of their urban personalities with dramatic landscape architectural productions. Public parks, grand avenues, social housing schemes, playground designs, urban corporate estates, rooftop gardens, waterfront recovery and international expositions are but some of the areas which will be investigated during the course. The cross fertilization of ideas between important figures in landscape architecture such as Jean Adolphe Alphand, Eugene Haussmann, Gabriel Gueverkian, in Paris, and Frederick Law Olmsted, Robert Moses and Gilmore Clarke in New York will be reviewed to understand how the "old world" and the "new" contributed to distinctly innovative approaches affecting each city's open space designs.

We will examine works over the past century and a half that have come to represent the creative edge of urban landscape architectural design. The course will emphasize three broad periods in the life of these cities: 1850 – 1900, 1900 - World War II, Post W.W. II – The Present. Class sessions will be taken up by background lectures and by student presentations of the findings of their research in aspects of similar patterns of design in both of these cities.

Some of the categories are listed below, loosely followed by specific designers and projects. There are several course objectives. These include 1) Development of a basic familiarity with the broad range of designs 2) Understanding the cultural and social distinctions differentiating each city's design approaches 3) Recognizing similarities or differences in approaches to comparable programs and problems.

Fridays 10:10 – 12:05
3 Credits

Leonard Mirin
157 Sibley Hall

URBAN FORMS OF PLURALITY

"Yet it is clear that by the 1960s Modern architects had argued themselves into a dilemma from which there was no logical escape, and from which megastructure was only a dubious deliverance: while the architectural profession would not relinquish its distinct 'Modern' claim to responsibility for 'the design of the whole human environment', it had now been forced to recognize that the homogeneously designed 'total architecture' demanded by such as Walter Gropius would be dead, as culturally thin, as any other perfect machine."
-Reyner Banham, *Megastructure: Urban Futures of the Recent Past*, 9

Throughout the history of architecture, the role of the Architect has been to determine lines that ordered the world. In the past century, however, as cities have rapidly expanded into vast urban territories that are increasingly pluralistic, the ability to determine such lines has become progressively more complex and suspect. The notion of indeterminacy within architecture and the city not only halted the project of Modernism but also spawned several trajectories of design that embraced flexible, soft, dynamic and transforming systems to respond to the new needs of the expanding city and its pluralistic inhabitants. The project of contingency embedded within these various trajectories has both plagued and resituated the role of architecture in the urban territory, but has it produced a collective or legible urban realm?

This seminar examines the urban forms of pluralism and indeterminacy that emerged during late Modernism with the breakdown of CIAM and was positioned through the projects of the 'megastructure', 'omnibuilding' and 'pod' in the postwar period. Exploring the link between this 'almost project' that was interrupted during the 1970s and 80s, the seminar explores recent analogous trajectories within systems of infrastructure, landscape and ecology in providing a platform for the continued project of plurality. Unpacked through an examination of theoretical texts and projects by Hannah Arendt, Buckminster Fuller, Cedric Price, Yona Friedman, Archigram, Archizoom, Superstudio, OMA, Stan Allen, Keller Easterling and Konstantinos Doxiadis amongst others, it positions a new role and relevancy for the architect who is confronted with an increasingly indeterminate globe and contingent city.



Neeraj Bhatia
Cornell University
Department of Architecture

Fall 2012

Arch 3308/6308: Sp. Tp. in Theory: Urban Forms of Plurality
Monday 7:30pm -9:25pm
144 Sibley Hall

ARCH 3308/6308: Special Topics in The Theory of Architecture

Location TBD

Tuesdays 2:30-4:25

Instructor: Taylor Lowe

A Spoonful of Ornament....

By Adolf Loos' account, crime is on the rise. Over a century ago, in his treatise *Ornament and Crime* (1908), Loos contended that ornamentation is nothing short of a crime against society. Rewind to the century before Loos or fast-forward to the present day, and attitudes towards ornamentation in architecture are radically more amenable. Why is this? This class explores the complex answers to this question. Our analysis will focus on the relationship between ornament and the social, always critically interrogating the ideological aspirations of each ornamental movement. For ornament has emerged, since the mid 19th century and among far-flung and even apparently irreconcilable ornamentation movements, to be a pivotal medium for architects and designers, ornamentalists some and disavowers others, to debate and construct their crafts' role in and resistance to "progress."

Starting from the ornamental movements of the Arts & Crafts and Gothic Revival schools, the class will trace an ornamental diaspora through the UK, the Continent and the US to the present day. We will begin with a consideration of mid 19th century architectural and social theory that proposed ornamentation as an antidote to the ills of capitalist modernity, including the work and writings of William Morris, John Ruskin, Owen Jones, Theodore Adorno, and A.W.N. Pugin. From there, the class will examine the forms, patterns and theories of ornament and society that circulated through Europe and the US prior to the Great War. We take up the story post WWI by interrogating the rejection of ornamentation within Modernist architecture. The class will discuss the oft-made contention that architects such as Mies, Corbusier, Kahn and, yes, even Loos abandoned the function of ornament only to become preoccupied with the ornament of function. Finally, we will unpack the theories, claims and implications of post 1968 ornamentation, which will bring us to contemporary parametric generated forms. How do we interpret the resurgence of ornament in current architectural practice within the broader history outlined in the class?

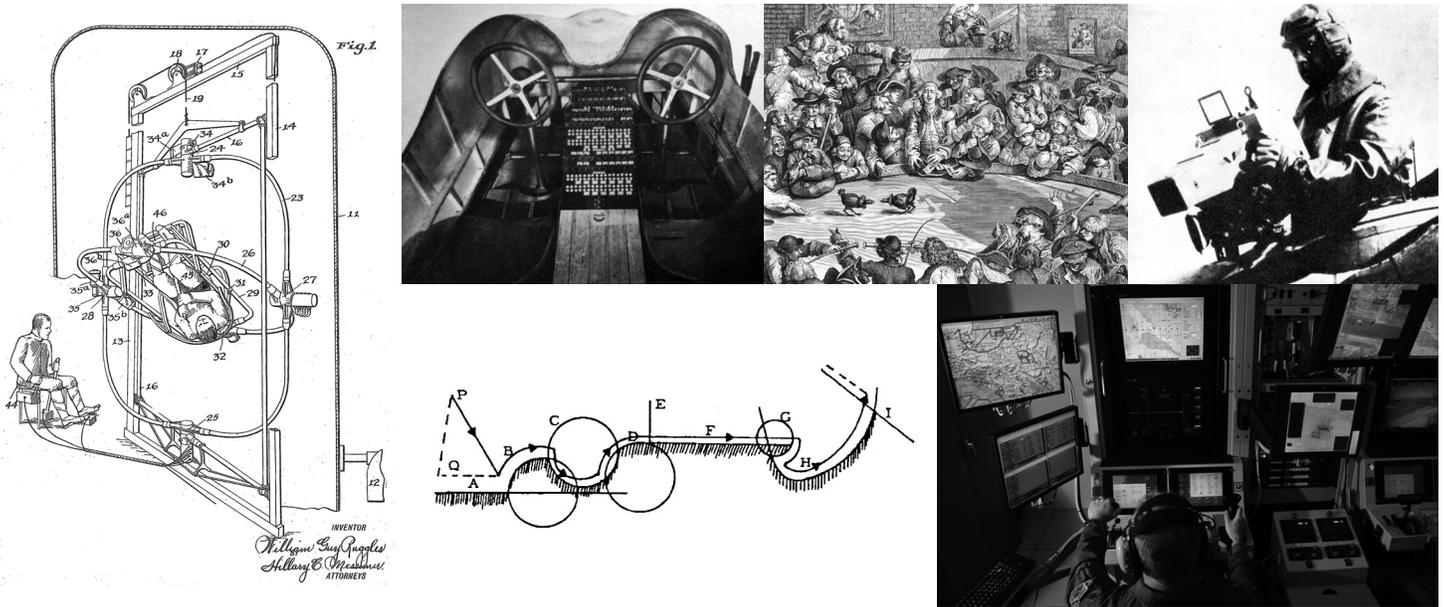
border from Owen Jones's engraving for the "Flight of Granada"

ARCH 3308/6308: Special Topics in the Theory of Architecture

Location: TBA

Mondays 9:05-11:00pm

Instructor: Branden Hookway



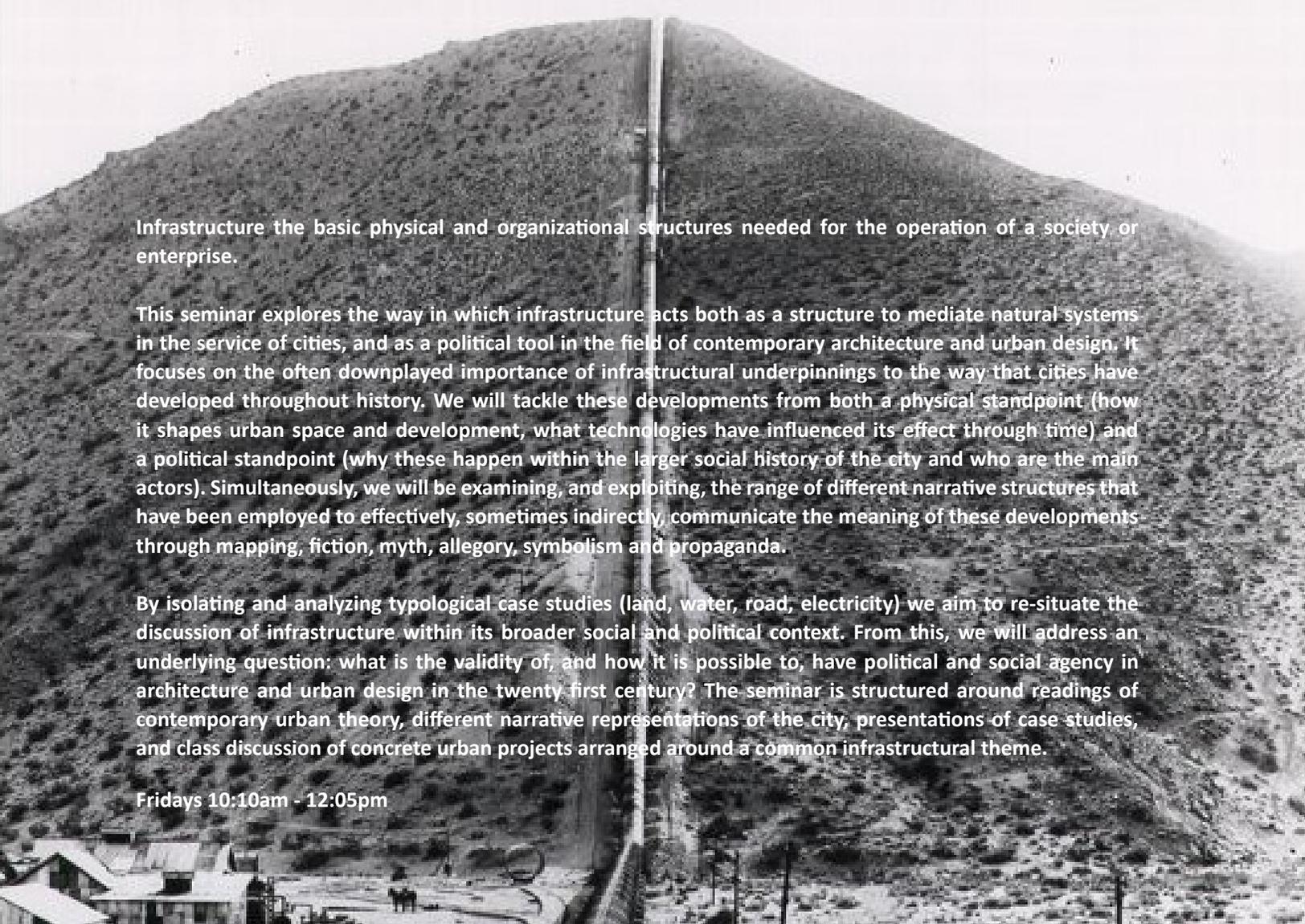
Flight and Fight

Spaces of Information and Architecture

Course Description

This seminar will examine the emergence of spaces of information, interactivity, and interface in the 20th Century, relating this emergence to present day cultural issues and spatial practices. We will address the historical formation of such spaces and the cultural implications of their inhabitation. Class research projects will propose genealogies of system architectures, spaces defined by event rather than enclosure, spaces that define or simulate other spaces, etc. Research subjects could include threshold spaces, control spaces, interfaces, arenas and gaming spaces, performance and media spaces, work spaces, software environments, simulations, virtual spaces, ergonomic spaces, and responsive or mobile architectures. Course readings will be drawn from the history and theory of technology and media as well as architecture. We will pay special attention to the role of aviation, military research, and the design of workspaces in the development of spaces of information and architecture.

Images clockwise from top left: "Orientator" flight simulator (1918); cockpit from Le Corbusier, *Vers une Architecture* (1923); cockpit by Hogarth (1759); WWI aerial photography platform from Paul Virilio, *War and Cinema*; drone pilot, Hancock Field ANGB, NY (2012); demonstration CNC machine tool path using APT programming language (1957)



Infrastructure the basic physical and organizational structures needed for the operation of a society or enterprise.

This seminar explores the way in which infrastructure acts both as a structure to mediate natural systems in the service of cities, and as a political tool in the field of contemporary architecture and urban design. It focuses on the often downplayed importance of infrastructural underpinnings to the way that cities have developed throughout history. We will tackle these developments from both a physical standpoint (how it shapes urban space and development, what technologies have influenced its effect through time) and a political standpoint (why these happen within the larger social history of the city and who are the main actors). Simultaneously, we will be examining, and exploiting, the range of different narrative structures that have been employed to effectively, sometimes indirectly, communicate the meaning of these developments through mapping, fiction, myth, allegory, symbolism and propaganda.

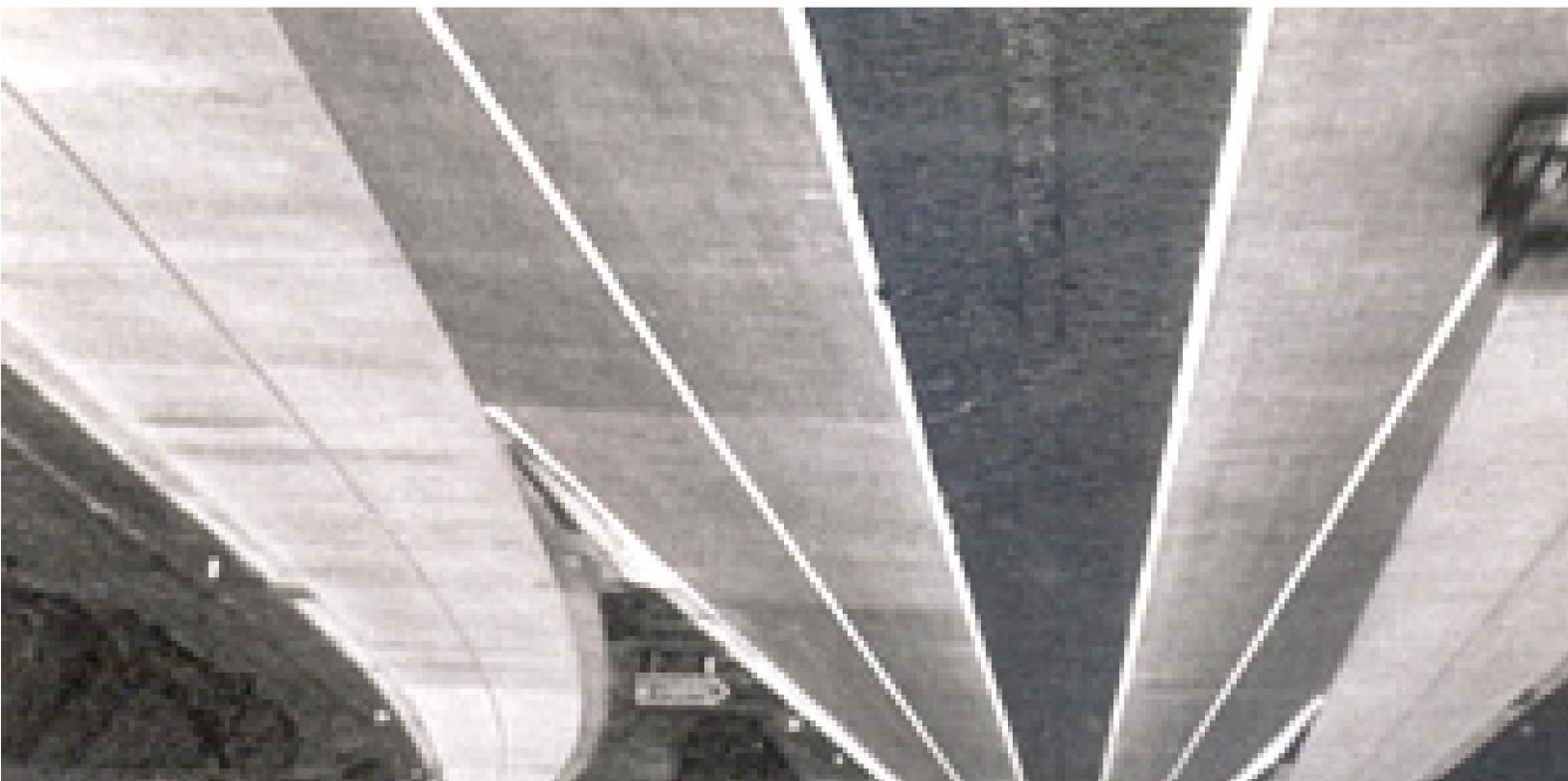
By isolating and analyzing typological case studies (land, water, road, electricity) we aim to re-situate the discussion of infrastructure within its broader social and political context. From this, we will address an underlying question: what is the validity of, and how it is possible to, have political and social agency in architecture and urban design in the twenty first century? The seminar is structured around readings of contemporary urban theory, different narrative representations of the city, presentations of case studies, and class discussion of concrete urban projects arranged around a common infrastructural theme.

Fridays 10:10am - 12:05pm

Arch 3308/6308 Special Topic in Theory

TAMING NATURE: THE FORM AND POLITICS OF URBAN INFRASTRUCTURE

Laila Seewang



ARCHITECTURE 3304/6304

Column, Wall, Elevation, Façade: A Study of the Vertical Surface in Architecture

FALL 2012- ROME PROGRAM
Professor Jerry A. Wells

Field and figure relationships (the interrelation of parts dominated by the general character of the whole) are the general themes used to study numerous issues relevant to the design of elevations and façades. Case studies from antiquity to the present, with an emphasis on Renaissance and Modern periods, are used.

The first part of the seminar traces the evolution of the elements of architecture, with the column being the primary element. The column is dealt with as an iconographic and decorative element; as a primitive marker of domain; as a structural device in the composition of façades. The geometric and spatial properties of column bays and grids, and the relationship of the column matrix to walls and wall-like structures, are differentiated.

The second part of the seminar deals with the wall, in particular, architectural walls as the fields upon which the elements of architecture are composed as figures (field and figure strategies). The role of the wall in architecture is discussed at length: wall as fence, wall as divider, wall as frontal plane, wall as façade, wall as filter, wall as compositional theater, etc. Devices such as open versus closed composition; regulating lines; scale versus proportion; field versus figure; literal and phenomenal depth; transparency; architectural content; geometric properties of forms; and various systems of organization are discussed. A series of short exercises, mostly of a collage nature, are done demonstrating an understanding of the ideas presented. A series of readings, including, for example, "The Provocative Façade: Frontality and Contrapposto," by Colin Rowe, are discussed in class (readings vary and will be handed out in class).

The final series of lectures examine Venetian buildings as models, beginning with the "Ca de Oro," and concluding with a review of minor Venetian façades using Venezia Minore by Elge Renata Trincanato. These buildings are analyzed relative to the issues previously raised in the seminar. (I have found that by using the minor buildings of Venice, many façade issues can be addressed without usurping more famous buildings to be used by the students later in their oral presentations and papers.)

The course is lecture/seminar format, third year through graduate level.

REAPPEARING ACTS OF SPATIAL PRACTICE

What Is the Role of Architecture Vis-a-Vis Contemporary Resurgence of Ideology?

Cornell University / Arch 3308/6308_Special Topics in the Theory of Architecture
THE COURSE IS BEING TAUGHT IN NEW YORK CITY

This research seminar in the area of architecture vis-a-vis ideology is designed to explore contemporary architecture that works with, or around, contemporary aspects of ideology. Here 'ideology' is positioned as a conceptual twin, driver, enabler, of spatial discharge for architecture that then performs an iconic display for all the organization, preparation and performance of design and media. These cases may include actions that stand in direct relationship to global crisis, civil war, extraterritoriality, borders, to just name a few conditions. But also the ones that are internal to capitalism, and New York, and their conditions of delivery of public space via mixed means of geometry as well as display.

What is, and what can be the role of the idea of architecture, with its organizational, skilled and the capacity driven arrangement of space? Is there a strategic 'geometry', dissent or a 'third way' of practice that can be studied vis-a-vis traditionally hard, but sometimes 'elastic' frameworks of contemporary ideology.

The explorations will include global conditions in which the United States has a special interest in the process of the dissolution of ideology, such as was the Cold War. There are the cases of former Soviet Republics that commission scores of Western architects, then leftist Latin American systems, Former Yugoslavia, North Africa, North Korea, Lebanon and other locations suggested by the students. Also the inquiries will focus on New York aspects of common space, such as spatial framework of the **Occupy** movement, as well as the dynamic developments at the Lower East Side **SPURA**, traditionally Marxist housing Co-ops developed during the Cold War.

What exactly is the new 'elastic' relationship of architecture towards ideology? The reappearing acts of design may include looking at practice

vis-a-vis pan-socialism by the former Guadaffi regime, dialectical materialism by Josip Broz Tito, idealism by American academics, quasi socialist dictators, leftist tendencies in Latin America, and the state of the US' own spatial aspects of expressing ideology. For example the events such as the *Venice Architecture Biennial* and the *Olympic Games*, and earlier *The World Expo* in China will be used to analyze how 'ideological' political systems digest architecture.

The output from the seminar is meant to deliver theoretical proposals for the ideas competition for the competition entitled: **Monument to Cold War Victory** due on November 15th. More information can be found at: <http://coldwarvictorymonument.com/> What kinds of facts, forms, fabrications, even fictions can occupy new spatial role of architecture vis-a-vis contemporary expressions of ideology?

The remaining time will be devoted to design a collective book consisted of individual student entries, essays, texts, scripts, short stories, or other mediums suggested by the students.

The seminar atmosphere will be made as collaborative as possible, with student participation, presentations, workshops and discussion based atmosphere. There will be regular seminar presentations by the instructor and also by the students. The students will be able to use the digitized collection of UN Dag Hammerskjold's online, and Cornell's UN depository library by contacting the University reference desk. Additionally much use will be done through the Lexis/Nexis database as well as Google Books available through Cornell's electronic access to those services.

Instructor:
Srdjan Jovanovic Weiss
srdjan@thenao.net

COLLEGE *of* ARCHITECTURE, ART & PLANNING
DEPARTMENT OF ARCHITECTURE

**VISUAL
REPRESENTATION
ELECTIVES**

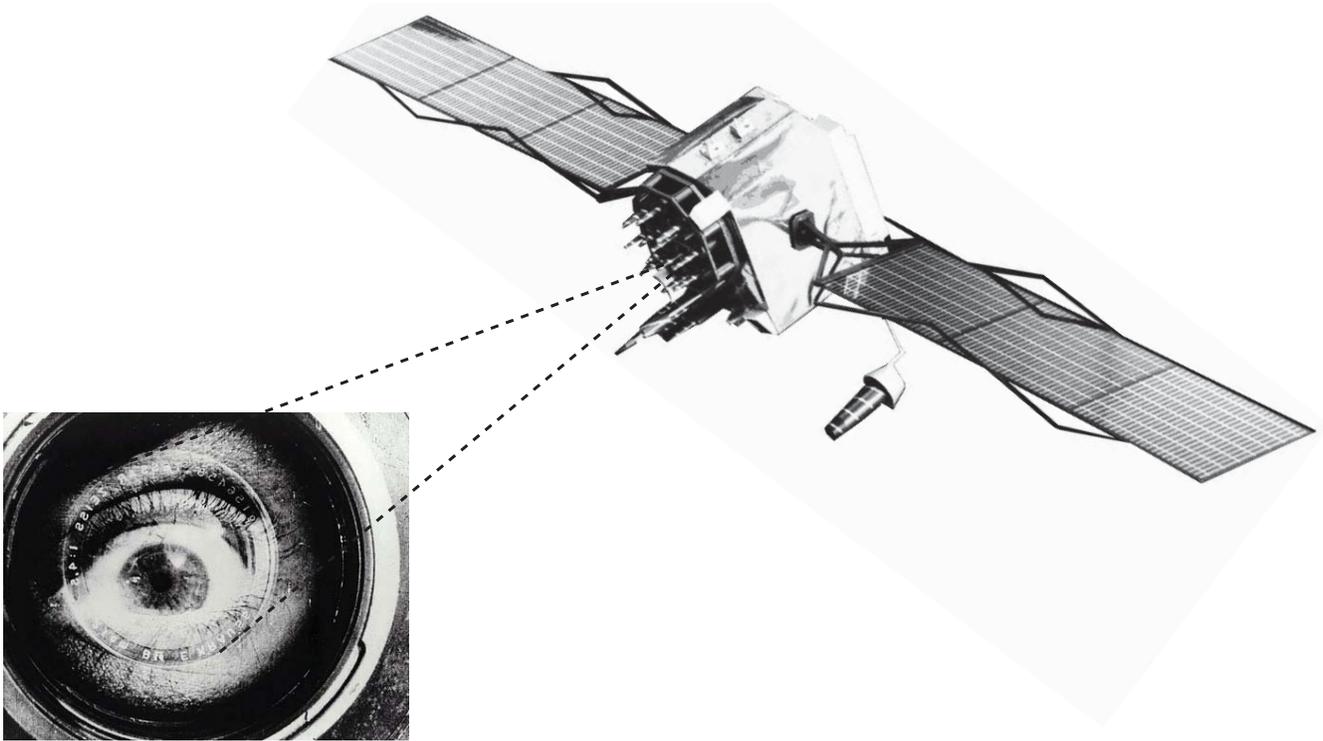
FALL 2012

**Arch 4509/6509: Special Topic in Visual Representation
Fall, 2012**

Time: Tuesday, 10:10-12:05pm

Instructor: John Zissovici

3 credits. Permission of the instructor required.



New CINEMATIC CITIES: Animating the Digital Image of the City

From its earliest days, the moving image has been used to observe and document the dynamic relationship between the city and its occupants, both human and mechanical. The mechanisms for capturing and projecting moving images emerged from the same industrial revolution that made the contemporary city possible, necessary, and inevitable. Cinema and the modern city have been linked to each other as emblems of modernity.

While cities and the way we use them have changed relatively little, today's digital imaging technologies like Google Earth have opened radically new possibilities for looking at and thinking about cities. What has been missing is a new cinematic language for the city that exploits these new modes of representation.

The course will look at the radical techniques of early film-makers like Dziga Vertov, and of the experimental film and video artists of the 60s and 70s to develop a new language of representation for the city. Students will use found images and 'footage' from Google Earth to create short animated films of the city. For their final projects students will make a 3 minute animation that examines an aspect of the contemporary city.

Arch 4509/6509:

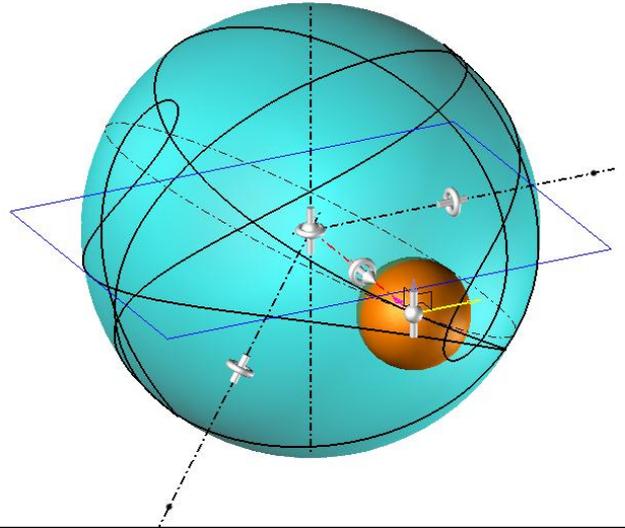
Special Topic in Visual Representation: Parametric Reading of Albrecht Durer's Geometry

Day/Time: Tuesday, 12:20pm - 2:15pm

Room: TBA

Instructor: Bernard Cache

**PARAMETRIC READING
Of
Albrecht Dürer's GEOMETRY**



In 1525 the German painter Albrecht Dürer prints the *Underweysung der Messung*, a rare case of geometrical treatise written by a non-mathematician for non-mathematicians, such as painters, carpenters, stonecutters and ... architects. Rather than propositions and demonstrations, this treatise consists of procedures to trace figures and, above all, mechanical instruments that enable to generate curves that cannot be drawn with a ruler and a compass. Central to this treatise is the serpentine line, a 3D curve that Dürer doesn't even care to draw because what he focuses on are the diagrams that enables to make vary the various components of the instruments which generate a whole variety of those lines. Interestingly enough, the main application Dürer contemplates for those curves is the generation of varying columns for architecture.

This course will follow the lines of intersection of 4 disciplines:

- Geometry
- History
- Parametric software
- Architectural project methodology

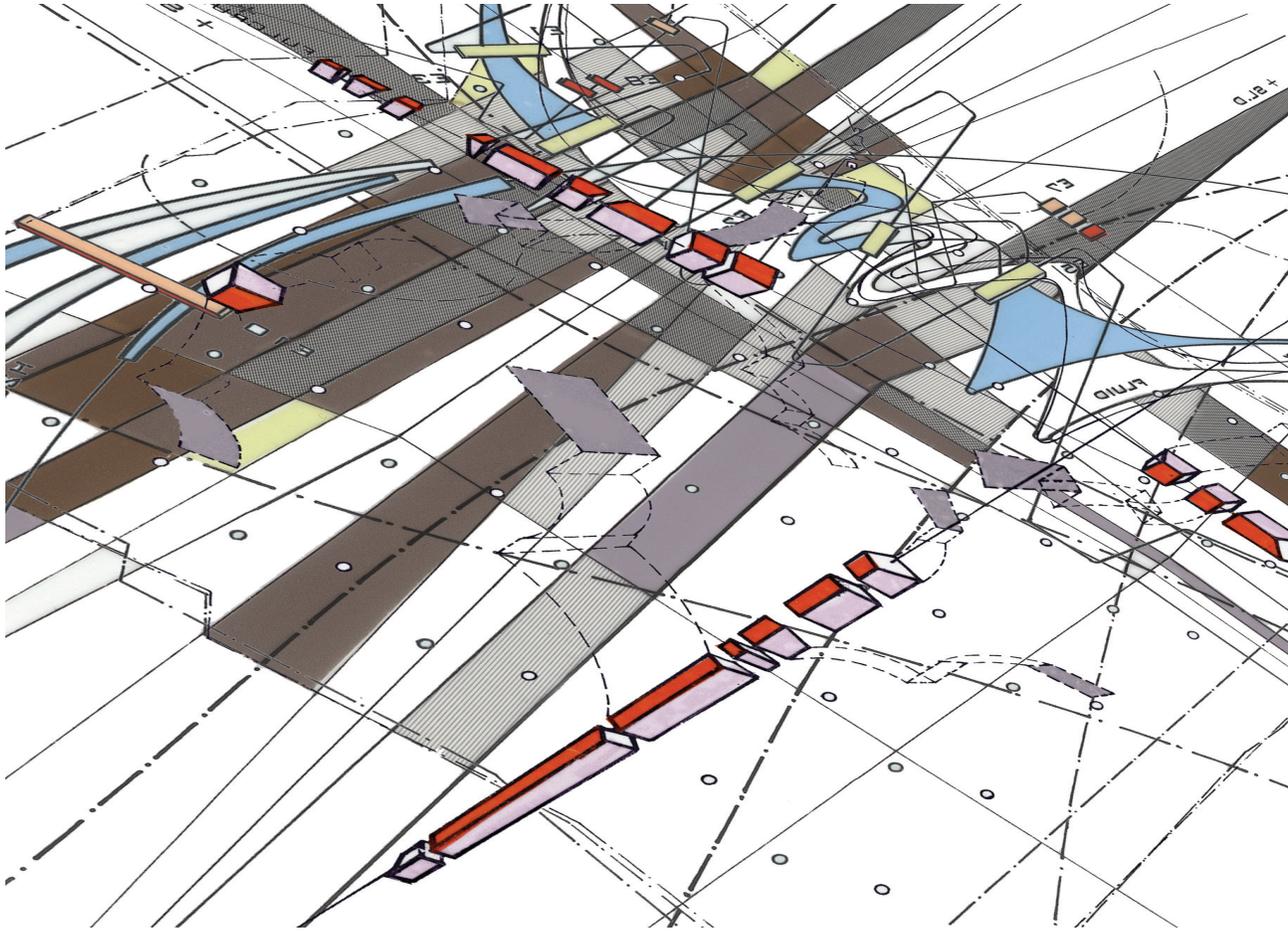
Basically, the course will consist in reading Dürer treatise and translating the procedures described by Dürer onto a CAD-CAM software : TopSolid7. The first benefit of this translation will be to experiment how the figure printed by Dürer were intended to vary. His geometry was all about "variation" to such an extent that one can find a profound affinity between this treatise and contemporary parametric software.

Starting by the simplest elements of geometry, this course will also be an introduction to the architecture of contemporary mechanical softwares which, in a way, are structured as treatises of geometry, assuming hypothesis from which a series of consequences are consistently deduced. Rather than focusing on particular softwares, TopSolid7 will be taken as a good example of a new software platform onto which one can understand the fundamental concepts of: circular references, chronology, sketch solver, kinematics and family of variable components.

It is our assumption that contemporary softwares inscribe themselves in the history of geometry. We will take advantage of Dürer's numerous references to such authors as Euclid, or Eutocius, to weave the continuous link that would enable to build up the tradition of geometry as a drawing tool for architect, providing them project methodologies. Indeed, we will see that Dürer cannot write his treatise of geometry without referring also to Vitruvius and Plato. What is at stake, here, in this treatise, is the construction of a classical tradition which paves the way to the key concept of our contemporary condition: "invariance by variation".

Urban Storytelling

The Representation of City through Mapping



Arch 4509/6509
Tue: 10:10AM-12:05PM

This course will examine the representation of physical and imagined phenomena through your personal encounters with an urban construct.

144 Sibley Hall

Urban space and cartographic space are inseparable from each other. Long affiliated with the planning and design of cities, maps have been instrumental in the creation of lived space. However, mapping differs from planning as it entails searching, finding and unfolding complex and latent forces. Mapping, from that point of view is a generative act that engenders new relationships amongst otherwise disparate parts.

A particularly important aspect of mapping in this regard is the acknowledgment of the map maker's own participation and engagement with the cartographic process. That means, the act of orchestrating and formulating maps is based on the mapmaker's particular imagination—it is a celebrated part of the whole procedure. As a motorcyclist becomes one with the motorcycle, the mapmaker also becomes one with the map. Through this kind of symbioses, the author of any given map will open up new possibilities to see, discover and engage him/herself with urban space. Maps from that point of view could function as imaginative wings—without repeating Daedalus fatal design—to transpire us into unknown territories beyond the furthest reaches of our imagination.

The primary source material for this course will be your personal engagement with the urban construct. You will explore different mapping methods using various media and recording devices.

The course will be divided into individual dialogue, student presentations, lectures, and critiques with invited guests. Students are required to present the work visually and verbally in order to instigate a discussion/critique about the ideas in their work. Class attendance is crucial to coordination of the exercises and the presentations. It will count substantially in the course grading criteria.

Petra Kempf

TIME FRAMES

EXPOSURES IN
VISUAL THINKING

CORNELL AAP NYC
ARCH 4509/6509
FALL 2012
INSTRUCTORS: dbox—Matthew Bannister & Leah White

We yearn to see how people dressed a century ago, to recognize the familiar features of our ancestors, and experience our city as an unconquered field. We trust photographs, as they allow us a window of comprehension into history. Naturally we subscribe to the idea that seeing is believing.

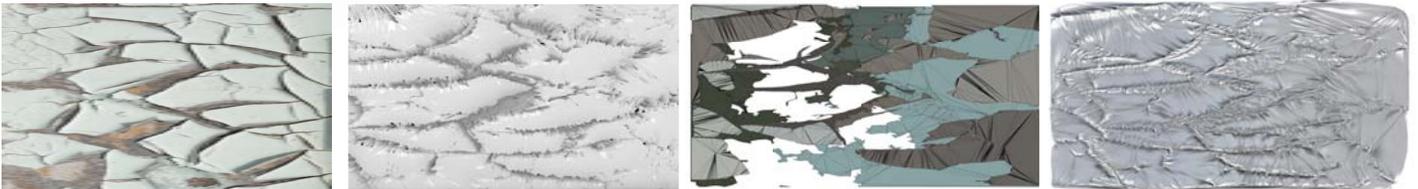
The evolution of photography however has gradually shifted from documenting and perfecting truths to constructing and fabricating alternate ones. Today's tools enable us to simulate and composite a reality from disparate times and spaces. Apps allow us to document our lives outside of our present day...to create 70's-style Polaroids or envision what our child would look like. With additional composited (and complicit) photorealistic 3D computer graphic technologies we are all communicating visually with an alternate language of enhanced truths. The flexibility of time and space in visual communications has become so fluid, yet relentlessly loyal to the idea of 'a realism', that the lexicon of this visual language has radically expanded.

In our course time will be studied as a photographic 're-mixing' device. Through a series of image-making exercises, both photographic and computer generated, we will create highly crafted and convincing narrative visions of possible 'realities'.





TEXTURAL IDENTITIES



arch 4509/6509: special topic in visual representation
fall 2012 nyc thursday 1pm - 4pm
instructor: hart marlow

Description: This seminar addresses visual representation through the study of textural elements found in specific areas of New York City. It will create a discourse concerning the social and aesthetic issues that are within New York's urban fabric. Through a series of investigations, students will develop visual identities. Those identities will consider the existing cultural, ethnic, social, and historical context found in the evolving man-made environment.

Objective: Students will analyze the visual elements of unique importance in a selected urban area to translate into a series of drawings both analog and digital through investigations. They will decompose them into fundamental elements, and finally, reconstruct them into drawing techniques using a computational work flow. Students will recognize the connection between planned and unplanned urban aesthetic that contribute to the fabric of the city.

The final project for the course will be a graphic environment based on textural analysis and social and aesthetic issues in New York City. The environments will be embedded with GPS and handheld devices in the city, using an augmented reality application. Students will be using advanced graphic modeling techniques, animation and digital workflow.

COLLEGE *of* ARCHITECTURE, ART & PLANNING
DEPARTMENT OF ARCHITECTURE

**BUILDING
TECHNOLOGY
ELECTIVES**

FALL 2012

ARCH 4605/6609 Special Topics in Construction: *Bio-Inspired Materials & Design*

Cornell University, AAP Department of Architecture

Fall 2012, Tuesday 2:30 – 4:25pm

Instructor: **Jenny E. Sabin**

Email: jsabin@cornell.edu

Office Hour: Tuesday 11:30pm – 12:30pm & by appointment, Rand Hall 101



Collaborations between architects and scientists offer up venues for productive exchange in design while revealing powerful models for visualizing complex form. The material world that this type of exchange interrogates reveals examples of nonlinear fabrication and self-assembly at the surface, and at a deeper structural level. In parallel, this work offers up novel possibilities that question and redefine architecture within the greater scope of generative and ecological design and fabrication. This course situates itself at the forefront of a new direction for 21st-century architectural research practice—one that investigates the intersections of architecture and science, and applies insights and theories from biology and computation to the design of material structures. Project work will explore a deep organicity of interrelated parts, material components and building ecology. Generative design techniques will emerge with references to natural systems, not only as mimicry but also as trans-disciplinary translation of flexibility, adaptation, growth and complexity into realms of architectural manifestation. In particular, this course will unfold long-standing traditions of shared relationships between architecture and biology, with sub-topics that include sustainability, ecological design, biomimcry, digital fabrication, experimental structures, and materials science.

Architects and structural engineers have historically looked to nature for design inspiration and models for producing and managing complexity in the built environment. Cable nets have been inspired by the high strength-to-weight ratio of the spider web; pneumatic structures after soap bubbles; vaults after shells and eggs composed of hard and curved materials; and geodesics after radiolarian. The structural designer, Robert Le Ricolais, studied the tension networks inherent to radiolarian in order to understand the dynamic properties and qualities of closed and open “skeletal” structures. Le Ricolais professed that he had “...*found no better discipline in this unpredictable problem of form than to observe the prodigies created by nature.*” (Le Ricolais 1973). Contemporary biology teaches the architect that context and dynamics count, leading to new models for building systems, structure, form and matter. This course will investigate biologically informed design through the visualization of complex data sets, digital fabrication and the production of experimental material systems for prototype speculations of adaptive building skins. Drawing upon the NSF funded *eSkin* project (Yang, Sabin, Ihida-Stansbury, Engheta, Van der Spiegel, Lucia), we will actively engage rigorous scientific research at the core of ecological building materials and design. We will explore materiality from nano- to macroscales based upon understanding of non-linear, dynamic cell behaviors on geometrically defined substrates. Our emphasis will rest heavily upon the study of natural and artificial ecology and design, especially in observing how cells interacting with pre-designed geometric patterns alter these patterns to generate new surface effects. The insights as to how cells can modify their immediate microenvironment with minimal energy and maximal effect will inspire the biomimetic design of highly aesthetic, passive materials and speculations on how these materials may be integrated into responsive building skins at the architectural scale.



"Waterwalk", 1968

Event-structure Research Group

A JOURNEY INTO PLASTICS

with Lorena del Río

The development of a wide range of plastic materials in such a short period of time (1920-1940) drew the fascination of architects and engineers. Their attention initiated a fruitful period of great experimentation seeking new concepts in architecture to harmonize with the new products. High production costs due to the oil crisis, unresolved problems with durability and yet undiscovered avenues of exploitation of the new material resulted in a period when plastics were rarely used.

Fortunately new technologies have solved most of these problems. We are witnessing a new era in the use of plastics, a new renaissance of the use of synthesized materials which now, more than ever, can meet all of architecture's requirements. But the current vision of plastics is less idealistic and less euphoric than the one held by the original pioneers. Now however the material is not the starting point of the design. Instead designers are seeking the perfect material which can fit their conceptual design approaches and notions of form.

This is where plastics meet architecture. The advantages of plastics such as lightness, cost-efficiency, climate control capabilities, extreme tailoring are not its main features. The proper characteristics of these materials in terms of light transmission, bounce, color possibilities, make up a group of new aesthetic effects resulting in the creation of atmospheric, sensual and provocative spaces. But what is the future of plastics? Should architects look for new concepts for plastics in architecture in order to best exploit its particular characteristics? Or should we keep on evolving materials in order to adapt them to our new concept of architecture?

This seminar will study the past, analyze the present and make a forecast for the future of plastic materials. The course will take the students through an overview of the history of these materials from their inception to the present. State of the art technologies in plastics will be investigated through a group of case studies to help students develop their knowledge and skills in this topic. Plastics will be analyzed by considering them in four different ways: 1) as a structural material, 2) as a fluid material, 3) as manufactured elements and 4) as fluids, i.e. as an envelope or skin in architecture. This seminar will focus on both theory and practice; students will be asked to develop an exercise in which they apply these concepts to their architectural approaches.



Transformable main space at the former slaughterhouse in Madrid

Arch 4605/6609: Special Topic in Construction

Instructor: Iñiqui Carnicero

Room: TBA

Thursday 12:20 – 2:15pm

INTERVENTION STRATEGIES FOR A “LIQUID SOCIETY”

The current economic situation is changing architectural procedures by imposing new solutions to some contemporary issues. “Liquid modernity” is Zygmunt Bauman’s term for the present condition of the world as contrasted with the “solid” modernity that preceded it. Social forms and institutions no longer have enough time to solidify and cannot serve as frames of reference for human actions and long-term life plans, so individuals have to find other ways to organise their lives. Fragmented lives require individuals to be flexible and adaptable — to be constantly ready and willing to change tactics at short notice, to abandon commitments and loyalties without regret and pursue opportunities according to their current availability.

Architecture should incorporate and respond to this new reality. The factor of time should be considered in our strategies so our buildings are prepared for unexpected demands, changes and transformations over time.

The current lot of public buildings in European cities is due to be dramatically reduced, poorly used or abandoned. Countries today are only accustomed and prepared for growth but constant construction is not the only means for developing the city. Rather we should consider improving existing buildings by adapting them to these new requirements. The recession should not be the cause of pessimism. It is an opportunity. A diet. Let’s not get ill, let’s use the reduction to achieve a healthier habitat.

During the course we will study mobile elements, precast systems, removable structures, methods of packing and transport, as strategies used to design flexible spaces allowing positive transformations of underutilized existing buildings. The aim of the seminar will be to catalogue action patterns in what will be called “Intervention Strategies” and analyze the technical systems and methods of production involved in the construction process.

By the elaboration of conceptual models the students will be asked to test and explore the technical possibilities of terms such as *adaptable*, *flexible*, *reversible* or *transformable*. This ideas will be collected in a 3 minute animation video made by each student where they will explain their own technical proposal to transform and multiply the functional possibilities of an existing built space.



The Intersection of Sustainable Architecture & Infrastructure Planning

CORNELL ARCH 4619: SPECIAL TOPIC IN ENVIRONMENTAL SYSTEMS AND CONSERVATION

FALL 2012
THURSDAY 4:30PM – 6:30PM
INSTRUCTORS: BENJAMIN SHEPHERD AND JOHN AN

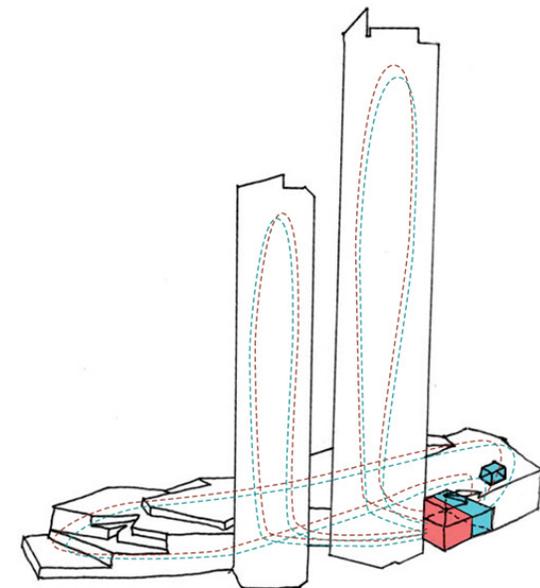
COURSE DESCRIPTION

Over the past decade, the architect's view toward sustainable design has transformed from amused disregard as just another design fad that would hinder the creative design process to enthusiastically embracing the principles of green or environmental design, transcending architectural style and often driving the design process.

Sustainable design is an integral part of the architectural profession. The goal and aspiration of sustainable architecture today goes beyond simply meeting LEED requirements, and striving for ambitious goals of net zero energy consumption, carbon neutral buildings, zero waste production, and buildings that operate off the grid. Architects design buildings that strive to meet these lofty goals.

However, in order to truly achieve the design challenges of carbon neutrality or net zero energy, designers must be challenged to think not only at the individual building scale, but also at the larger masterplan and infrastructure scale that provides services to the individual buildings. When properly conceived and implemented, district energy plants, community-scale stormwater and sewage systems, sustainable transportation networks, and other utility connections can meet the combined demands of many buildings much more efficiently than a small building-scale system dedicate to one building.

This course will reflect on the increasing interest in defining and applying sustainable design issues from an individual building to a larger and more comprehensive masterplanning scale. The course will help students develop a framework for conceptualizing which measures and strategies are sensible to address at the individual building scale, and which measures are best addressed at the masterplan and infrastructure scale. This course will use select case study masterplan projects in New York City and around the world to explore the issues of the intersection between building and masterplan design in order to achieve truly sustainable development.



COLLEGE *of* ARCHITECTURE, ART & PLANNING
DEPARTMENT OF ARCHITECTURE

HISTORY *of*
ARCHITECTURE & URBAN
DEVELOPMENT

FALL 2012

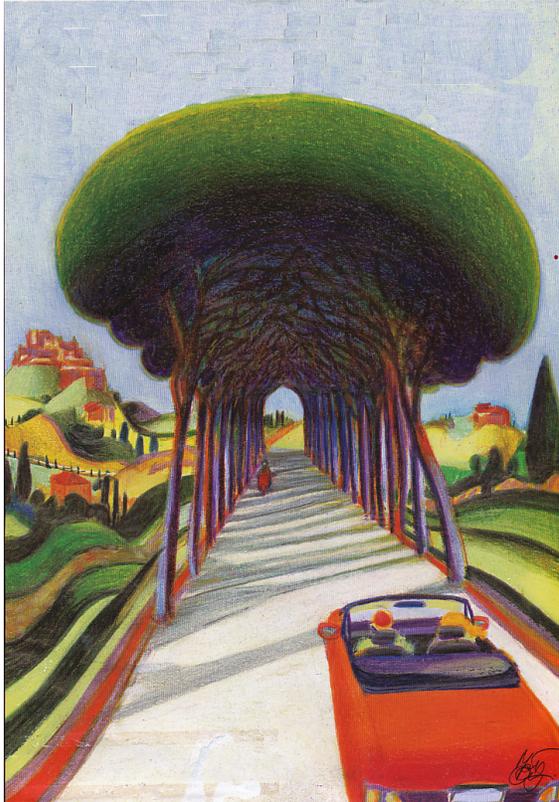
History of European Landscape Architecture

ARCH 3819/LANAR 5240

Course Schedule: Tuesday-Thursdays, 11:15 am - 12:05 pm

Location: 461 Kennedy Hall

Professor: Leonard Mirin



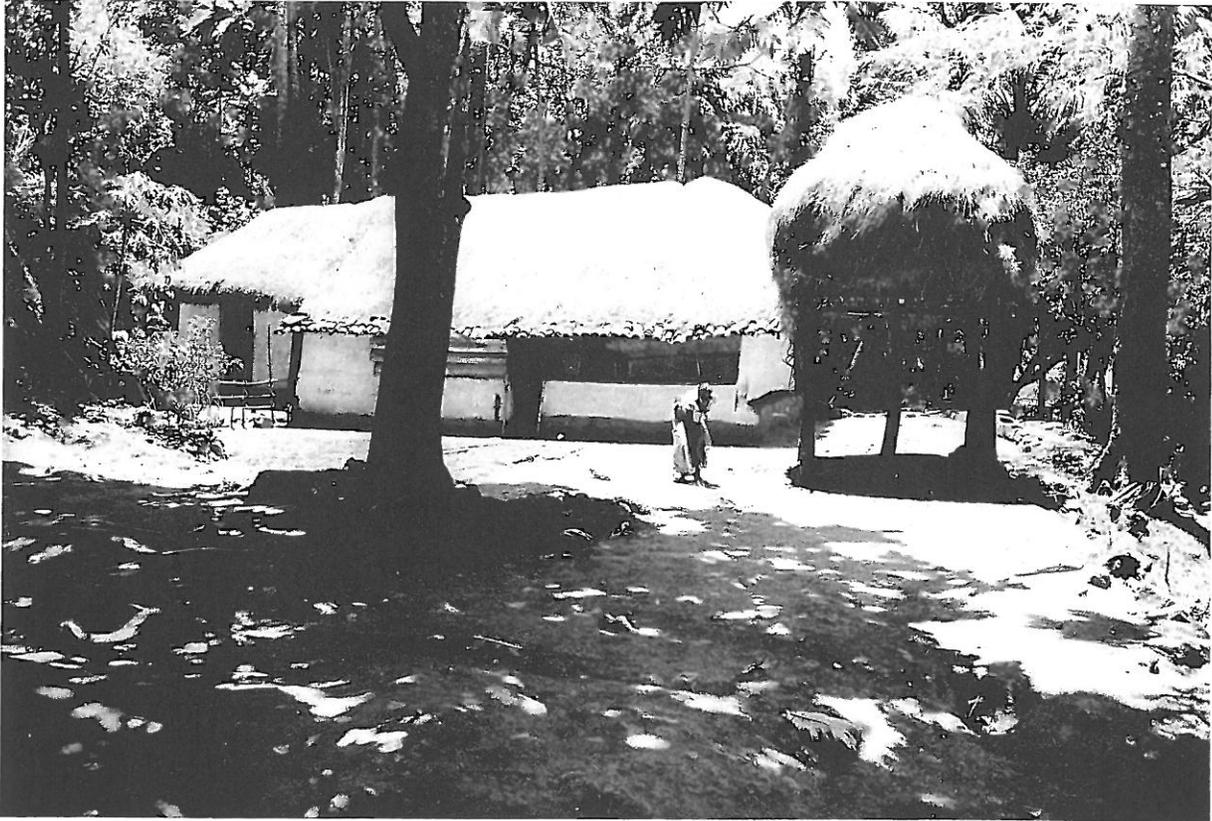
Course Overview

The course examines the influences and the forms that have established a basis for the landscape architecture tradition in Europe and parts of the Orient. Emphasis is placed upon the recognition of the principles and techniques, and upon the continuity of design imagination, inherent in specific examples of the altered environment. Public and private spaces, gardens, estates, streets, parks, housing sites, and new town plans are analyzed with reference to the historical manner in which a variety of determinants - cultural, ecological, legal, strategic, economic - suggest themselves in design solutions. As a parallel theme, the course traces the changing role of the landscape architect from designer for the elite to planner in the public service.

The course format of slide-accompanied lectures surveys the classical tradition in order to establish the focus on developments from the Italian Renaissance to the present. An understanding of material presented in class and in the readings will be evaluated through a midterm and final exam. An additional requirement will be to choose between a research paper or a graphic exercise in the interpretation of historical spatial relationships on one of several selected topics.

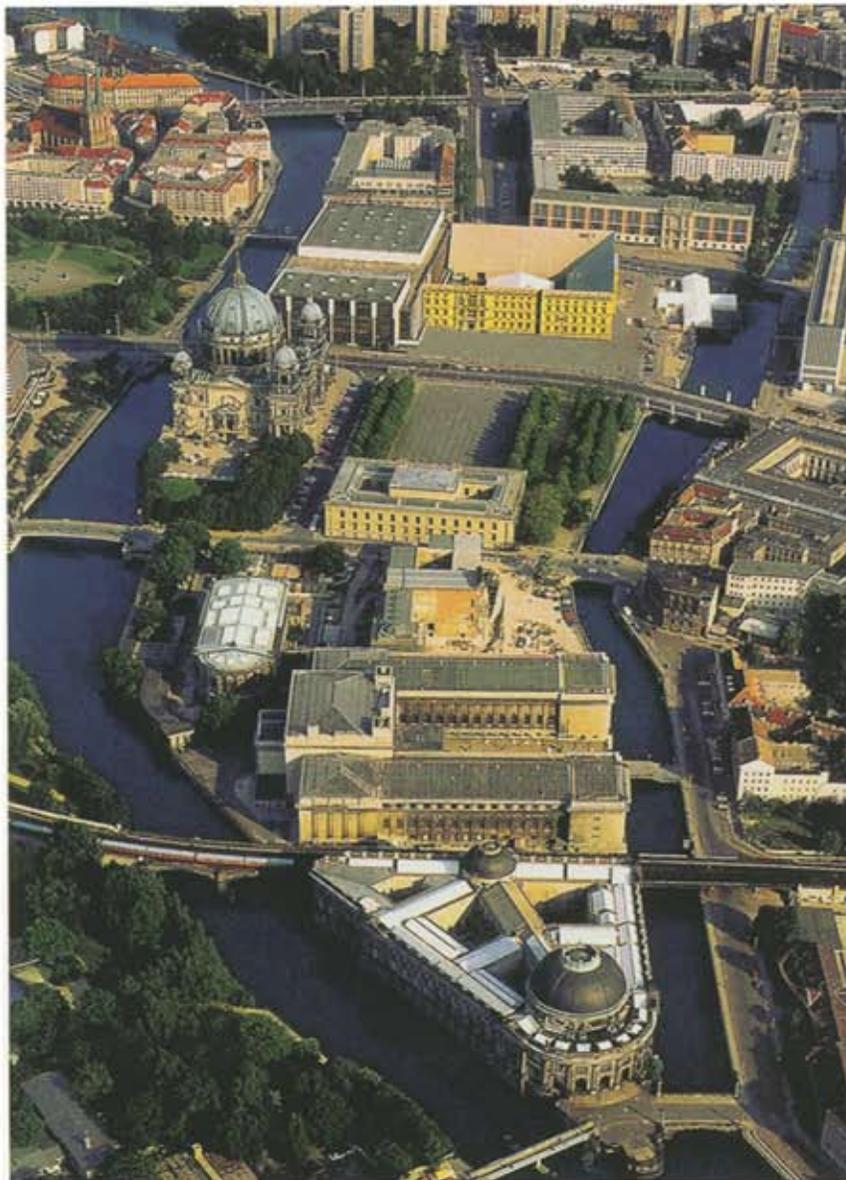
EAST MEETS WEST: THEORIZING THE VERNACULAR ARCHITECTURE 3819/6819: Fall 2012 W 10:10

BGMacDougall



The aim of this course is to provide a schedule of discussion topics, lectures and readings that draw out the ways in which the vernacular has been understood in relation to the modern and as a value in community and national identities. We will thus attempt to define the role the vernacular building has been popularly assigned in the transmission of tradition and the understanding of social history. A wide range of writers who have had something to say on these matters will be consulted including Ananda Coomaraswamy, Geoffrey Bawa, and LeCorbusier, among others. Three presentations required and attendance at every class. Final paper on a topic of your own choosing, preferably one developing a case study previously explored as a short presentation. Questions: contact bgm1

First meeting: Wednesday 10:10 AUGUST 29, 2012



Arch 3819

Christian F. Otto
3 Credits Fridays 10.10 – 12.05 142 Sibley

As the conspicuous architectural enterprise of our time, the public art museum possesses specific and significant properties that especially charge it as a case study. This course examines the public art museum and its urban condition from the late 18th to the early 21st century. The central purpose of the course is to investigate how socio-cultural circumstance informs architecture and city, and how buildings in urban settings produce and present meaning. Issues of building typology and urban design will contribute to our deliberations.

Student participation in the course includes engaged involvement in all class discussions, readings and reflections, on-site visits, an urban analysis, a research paper, and a concluding exercise.

Special Topics in the History of Architecture and Urbanism

Museum and City

architectural historiography

Fall 2012

Arch 6800 (4 credits)

Fridays 2:30-4:25

Prof. Medina Lasansky (dml34) / office hours Tuesdays 12-2 / 254.8771

prior permission of instructor is required

this course is required of all HAUD I MA/PhD Students

This seminar will provide a survey of architectural historiography paying particular attention to the paradigm shifts of the last twenty years. Through a series of readings (a combination of case studies and critical theoretical pieces) we will assess the preoccupations of current scholarship. We will consider the relationship of contemporary practice to history; the relationship between architectural history and the disciplines of art history and historic preservation; the extent to which their separation has both energized and handicapped the separate fields; canon formation and the mechanics of fame; and the changing role played by institutions (museums, universities, journals, publishers) in re-framing the field.

Through the critical readings of important texts we will discuss the current state of the field while simultaneously reconsidering our position in it. Our discussions will focus as much upon the historical studies of others, as upon our own practice of history. How can we intelligently apply theory to practice, develop research strategies that maximize methodological alliances, imbue the study of the past with contemporary relevance, and contribute as much to other disciplines as we borrow from them.

Requirements:

Completion of weekly reading assignments and participation in seminar meetings
Absences from Class must be excused. Un-excused absences will result in the severe depreciation of your final grade. There are several written and oral assignments distributed over the course of the semester



Andrew Moore, Interior of Detroit Theater, *Detroit Disassembled*, 2010

MIRROR OF THE CITY: IMAGERY FROM ROME TO DETROIT, 1450-2012

PROFESSOR MARY N. WOODS – FALL 2012

ARCH 6805- HISTORY OF ARCHITECTURE AND URBANISM GRADUATE PRACTICUM

WEDNESDAYS, 10:10 AM-12 NOON - CITRIN PHOTO STUDY ROOM, JOHNSON MUSEUM

ENROLLMENT LIMITED AND PERMISSION OF INSTRUCTOR REQUIRED

Mirror of the City explores how imagery shapes, brands, and archives cities like Rome, Paris, Havana, New Orleans, New York, Delhi, Detroit, and others from the 1450s to the present day. Inspired by the Johnson Museum *Mirror of the City* exhibit (August 11-December 23, 2012), the seminar examines varied urban imagery (maps, prints, drawings, photographs, books, films, etc.) as the student curate their own exhibition for the Johnson Museum study gallery. Visiting curators, historians, and film makers will participate in the seminar and give public lectures.

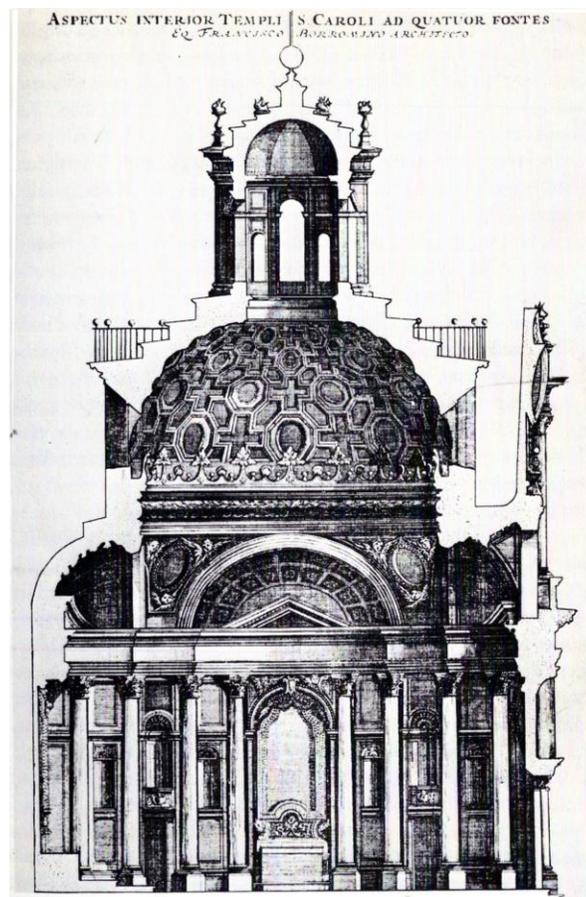
SPECIAL TOPICS IN THE HISTORY OF ARCHITECTURE: URBAN DESIGN,
ARCHITECTURE AND ART IN RENAISSANCE AND BAROQUE ROME
(ARCH 3819-120)

PROFESSOR JEFFREY BLANCHARD
CORNELL IN ROME
FALL 2012

Offered on-site at Cornell in Rome, this course focuses on the Renaissance and Baroque phases (15th-18th centuries) of Rome's history. The first class sessions will survey the city's urban history and form from its origins to the present, and we will often turn our attention to earlier and later developments, without an understanding of which the Renaissance and Baroque periods would be only partially intelligible. While the history of urban and architectural design will be our main focus, we will also look at key episodes of painting and sculpture, especially by artists who are also among the principal architects of these periods (Michelangelo, Bernini).

Class sessions will be held once a week (Wednesday 9-1) and will largely take place on-site, at times preceded by a slide lecture in our studio. There will be a mid-term exam, a paper or project, and a final exam, weighted equally in the calculation of the final grade.

The course is offered for 3 credits and is open to any student enrolled at Cornell in Rome.



ARCH 3820-120

Rome

Special Topics in the History of Architecture and Urban Development:

Topography and Urban History of Ancient Rome

Jan Gadeyne



Cornell University AAP NYC
Fall 2012 Thursday 9.30-12pm
Professor Joanna Merwood-Salisbury

Arch 3819/6819 Special Topics in the History of Architecture and Urban Design

Design for the Crowd: Making Public Space in New York City 1811-2012

The Manhattan grid and Central Park within it have long been seen as quintessentially American urban forms, symbolic of all that the nation wanted to be and achieve as it emerged in the nineteenth century. The rectilinear grid – the power of an informing idea made physical – was dedicated to convenience of settlement and ease of development. The park was equally ambitious, a universal open space designed for the use of all citizens, preserving in some way contact with the agrarian pastoral ideal on which the nation was founded. However the public spaces of New York City are not static in their form, use or conceptualization. From the starting points of the grid and the park, New Yorkers have continued to remake their urban landscape, debating the correct design and use of public space into the present day.

This elective seminar uses the 1811 grid as the basis for an historical investigation of changing and contested conceptions of public space in the history of New York City from the early-nineteenth-century until the present day. It will address not only large-scale urban design projects, but also small-scale and tactical appropriations of urban space. Subjects of investigation will include streets, squares, parks, playgrounds, markets, skyscrapers, the waterfront, the subway, and also public housing.

In addition to course reading and discussion, students will undertake a research project into one historical or contemporary public space in New York City.

Readings include excerpts from:

Hillary Ballon Ed., *The Greatest Grid: The Master Plan of Manhattan 1811-2011* (2011)

Roy Rosenzweig and Elizabeth Blackmar, *The Park and the People: A History of Central Park* (1992)

Rem Koolhaas, *Delirious New York: A Retroactive Manifesto for Manhattan* (1978)

Max Page, *The Creative Destruction of New York 1900-1940* (1999)

Le Corbusier, *When the Cathedrals Were White: A Journey to the Country of the Timid People* (1945)

Jane Jacobs, *The Death and Life of Great American Cities* (1961)

Jerold S. Keyden, *Privately Owned Public Space: The New York City Experience* (2000)

Keller Easterling, *Organizational Space: Landscapes, Highways and Houses in America* (1999)

Matthew Gandy, *Concrete and Clay: Reworking Nature in New York City* (2002)

Stephen Graham, *Cities Under Siege: The New Military Urbanism* (2010)

Topics in

Architecture Urbanism Human Rights

Professor Noah Chasin Cornell AAP NYC / Fall 2012

The course will explore the often-contested terrain of architectural and urban contexts, looking at cities from architectural, sociological, historical, and political positions. One of the fundamental questions we will explore is: How, in various historical and geographical circumstances, have architecture and urban design been used towards the construction of ideological frameworks that impact upon citizens' access to—or denial of—rights to the city?

Modern architecture dreamt of a utopian ideal of social progress and a new understanding of the relationship between space and time. After World War II, the role of the architect and designer as an organizer and facilitator of space changed. In what ways has the rise of globalization and different modes of understanding “connectivity” interceded into the conception of a unified urban context? Can the ancient idea of a “right to the city” tell us something fundamental about both rights and cities? What roles have collective action and participation played in the transformation of the urban experience over the past sixty years? Though our notion of citizenship is based in the understanding of a city as a community, why is it that today millions of people live in cities without citizenship?

We will progress thematically and historically (focusing on the 20th century) in order to discuss such issues as the consequences of architectural and urban design developments in relation to their peripheries (beginning with the normative idea of urban boundaries deriving from fortifying walls), debates around definitions of the public sphere, nomadic architecture and urbanism, informal settlements such as slums and shantytowns, surveillance and control in urban centers, refugees and the places they live, catastrophes and terror (both natural and man-made) and post-disaster reconstruction, and the exceptional spaces of sovereign areas within cities.

Formal and informal structures and spaces will comprise our objects of inquiry, ranging from Speaker's Corner in Hyde Park to the Reichstag in Berlin, from the World Trade Center Site to the slums of Lagos. Readings will be from a variety of primary and secondary sources, including:

Georg Simmel	David Harvey	Mike Davis
Henri Lefebvre	Martin Murray	Teddy Cruz
Chantal Mouffe	Cindy Katz	Miwon Kwon
Jürgen Habermas	Eyal Weizman	Samuel Delany
Mike Carr	Don Mitchell	Laura Kurgan

We will take every opportunity afforded by studying in New York City to look at specific examples of architecture and design's roles in the organization of urban spaces via field trips and site visits.