COLLEGE OF ARCHITECTURE, ART & PLANNING

DEPARTMENT OF ARCHITECTURE

ARCHITECTURAL THEORY ELECTIVES

SPRING 2016
MELANCHOLY AND THE METROPOLIS

Modernity and its Aftermath

FRAME

The industrial revolution of the 19th unleashed a number of forces which disrupted and disaggregated the organic unity of the city. New technological, economic and social constructions threatened the traditional life world in the city. The many urban theories, projects and practices immediately following this period were preoccupied with covering up the loss, trying to restore the organic unity of the city. They, however, rarely dealt with how this traumatic transformation has been experienced by the man of/in the crowd, the flaneur, the ragpicker, the dandy, the beggar, the detective, who were critical of modernity and felt threatened by the accelerated urban development.

Melancholy, as Freud described it, is the inability to come to terms with loss. The goal here is to address the loss, which has been experienced during this traumatic period on the way to modernity and the transformation of the city into the metropolis. It is the intent of the seminar to investigate the effects of these transitions on the city’s inhabitants, not as a pathological condition but use melancholy as a refined, reflective emotion with its own qualities. The seminar intents to look how melancholy with its reflective trait found its way into cultural representations in literature, social studies, art, film, urbanism, where melancholy emotions serve as an explanatory model providing additional insight.
This seminar outlines changes in the discourse and practice of architecture following crisis or turmoil as an opportunity for new potentials, exploring the social, political, and economic context and their influences on architecture and urbanism. Most recently, the disruptive events of the last 12 years contribute to the latest Post Bubble era, with a dramatic financial collapse compounded by socio-political conflicts, and the realization of predictions in climate change. These crises and turmoil upended traditional notions of the typical processes of architectural production and question top-down and bottom-up hierarchies, public and private realms, ownership, and the architectural program. The course will study the current practices of the architecture of crisis as well as the historical significance of previous post traumatic yet productive periods from post-World War II, the late 70s and early 80s, and other seminal moments that projected and shaped the modern environment.

Examining a selection of initiatives and their geographies, the course will investigate architecture in the context of the new economic landscape of post-bubble conditions, excess, neo-liberalism, vacancy, informal architecture, re-use, and resilience. The seminar will engage texts and projects from Roemer van Toorn, ANT Farm, Henri Lefebvre, Cedric Price, Teddy Cruz, Dana Cuff, Beatriz Cololina, Alejandro Aravena, and Reinhold Martin among others. The seminar will be comprised of lectures, readings, discussions, as well as a final project that will intervene in the existing context of selected cities.
ARCH 3308/6308: Special Topics in the Theory Of Architecture
Tuesdays, 2:30 - 4:25 PM
3 credits ARCH 3308; 4 credit option for ARCH 6308
Prof. V. Warke

Costume, Mask, and the Transformed Physique

MEANWHILE... there seems to be a shift — largely un-designed — from a more or less fixed and scenographic approach to the design and inhabitation of the city to one that is looser, and more carnivalesque.

This course will investigate the concept of carnival: its laughter, its persistence, its subversions, and its transgressions. Using a combination of theories rooted in fashion, literature, and architecture, we shall focus on notions of costume, mask, parody, and the grotesque as they relate to urban fashion as well as to their fashioning of the city. We will look at the important roles played by the dandy, the quaintrelle, the voyeur, the exhibitionist, the flaneur, the clown, the bohemian, and others. We will speculate on potential ways of occupying and using urban environments.

Of architectural interest (need it be said?): there are numerous forces that shape a city, from the individual to the collective, the intentional and the accidental. Today, there appears to be a slow, yet recognizable transformation in the usage of public space — of its operation and of its physique — especially as it relates to the appropriation and reassignment of structures within the city. Perhaps, underlying all of this is a tendency for social groups to conspicuously resist an urban environment that is at times intimidating and alienating, and at other times co-opting and domineering. The presence of gargantuan infrastructure, aloof and inaccessible, as well as dead industries, derelict properties, and the concrete carapaces of dubious deserted intentions, is beginning to elicit in the citizenry throughout the world — and especially in the Western world — an urge to ‘make sense’ of these things, to incorporate them into their lives as they have been forced to incorporate them into their worlds.

CLASSWORK:
- Readings 1 or 2 per week, providing the foundation for discussions [15% final grade]
- Mid-term Project Paper (10 pages) or Project (mask or costume, design, with 1 page description) [35% final grade]
- Final Project Paper (20 pages) or Project (an urban mask, masque, or costume, with 1 page description) [50% final grade]
Curatorship has become a focal point as much in the dissemination of architectural culture as in the production of architecture itself. Increasingly conspicuous, curating architecture both as a practice, but also as a field of research, seems to have reached a state of disciplinary legitimacy.

Simon Pennec

Premise: This course examines the role of architecture exhibitions within discourse, their history and design. We will consider how exhibitions function in terms of establishing critical and research agendas, the rise of the architecture biennale, and the establishment of architecture departments within museums. The use of models in diverse formats will be a central focus throughout the semester; the display of drawings, maps, projections and ephemera will also be treated. Broadly, exhibitions themselves will be viewed as models of a kind, as vehicles to communicate complex ideas in accessible formats. Students will interrogate how exhibitions prompt questions of narrative, culture, pedagogy, activism and professional identity.

A final paper in the form of an exhibition catalog will give students the chance to curate an imaginary exhibition, but one rooted to real objects, architects and venues that they select.

Key texts:
Sarah Chaplin and Alexandra Stara, Curating Architecture and the City (Routledge, 2009)
Cynthia Davidson and Tina DiCarlo, Log 20: Curating Architecture (Anyone Corp., 2010)
Henry Russell Hitchcock and Philip Johnson, The International Style (MoMA, 1932)
During the period of growth construction in Spain became the main driving force of our economy. All types of public buildings, housing projects and infrastructures were promoted by state and federal government which found architecture could be used as a flagship of their administration. Airports without passengers, Auditoriums without audience, Museums without content, Sport Pavilions without spectators were erected in places without any kind of demand. The coastlines were filled with housing and apartment blocks without any kind of consideration for the territory. Millionaire infrastructures and high ways were built in places that today have been abandoned for the lack of use. Most of these decisions were taking without reflecting on the importance of the time factor in Architecture.

The Spanish Pavilion for the Venice Architecture Biennale 2016 draws attention to the “Unfinished” architecture that we can find in the Spanish territory, and promotes creative speculation about how to subvert its negative current condition into a positive action.

- Unfinished architecture blurs the signature of the architect as an author and transforms the piece into a collaborative work that involves actions over the years of use.
- Unfinished Architecture defends strategies of adaptation, transformation and occupation of abandon or incomplete structures that are taking as a given constrain allowing unexpected solutions.
- Unfinished architecture draws attention to the aesthetic of the incomplete.
- Unfinished Architecture examines typologies that became obsolete after the difficulty of adapting it to new demands.
- Unfinished Architecture defends demolition as a powerful tool to architecturally intervene in our cities.
- Unfinished Architecture defends the importance to the consideration of the ruin.
- Unfinished architecture examines how certain architectures are more likely to be considered as part of a chain that could be continued by others.
- Unfinished architecture analyses how the cost of a building should be considered in relation to its life span.
- Unfinished architecture promotes the dialogue between the old and the new.

The course will be arranged as a “think tank,” to study the potential of unfinished architecture, speculating with new strategies of creative interventions on abandoned constructions. Lectures, readings, discussions, analytical drawings, and interviews will be part of the course. The students will be encourage to define a personal line of investigation by doing historical research to explore past strategies that could be applied in the contemporary context.

The curation of the Spanish Pavilion for the Venice Architecture Biennale 2016, as well as the design of the Exhibition, will be enriched by the seminar research.
CONTESTED TERRAIN  
SPATIAL CONFLICTS, CLIMATE CHANGE AND THE POLITICS OF DESIGN

Arch 3308/6308 Sp. Tp. in Theory  
Arch 4408 Sp. Tp. in Architecture Culture & Society  
Cornell University Department of Architecture  
Instructor: Paulo Tavares  
Course Time: Monday 10:10am - 12:05pm  
Class Location: 144 E. Sibley Hall

A fisherman sails in what is left of the Negro River near the city of Manaus, Brazilian Amazonia, during the devastating drought of 2012. In the last decade Amazonia experienced two “once-in-a-century” droughts (2005 and 2010) and equally severe massive floods (2009 and 2012). These extreme climate events indicate an intensification of the basin hydrological cycle, which is tipping toward a normalized condition. Complex interactions between global warming, deforestation, urbanization and landscape fragmentation are drastically altering the ecological dynamics of Amazonia, and thereby enhancing global climate change.

The course Contested Terrain investigates contemporary socio-political conflicts as they manifest in the complex and multi-scalar arrangements of cities, territories and ecologies. The notion of terrain is mobilized to engage with different spatial conditions across multiple scales and geographies, functioning as a conceptual device that allows connecting the architectural with the global, the urban with the geopolitical, situated ecologies with the planetary climate. Terrains will therefore be conceptualized as not merely the physical features that compose a given landscape, but instead as dynamic fields of material and symbolic relations that are constantly transformed by the collisions between various social, economic, political and environmental forces.

Disputes over land, geological resources, urban infrastructures, public spaces etc. constitute contested terrains. The course will map how the modalities of power and resistance that operate in these sites are conducted and performed through space and its representation, at the same time shaping and being shaped by the natural and built environments within which they take place. Drawing on a series of concrete sites-situations, the seminars will unpack questions related to the uneven geographies of globalization and the militarization of cities, the condition of migration and refugee-ness, geometries of colonialism old and new, forms of environmental violence and ecological dispossession, and the architecture of rights and rights violations, among other topics that define contemporary territories.

More specifically, we will focus on spatial conflicts related to climate change. Global warming, climate change and the environmental crisis have placed the ecological agenda at central stage in the most diverse disciplines and political forums, urging the construction of trans-disciplinary alliances between the sciences and the humanities. Nonetheless, the theories and practices of design have been informed by a conservative notion of ecology, which derives from traditional views of nature as a separated domain from the social.

Challenging this perspective, the course will attempt to elaborate a more complex understanding of ecological issues. This exercise will address design as both a field of knowledge production as well as an instrument of intervention. Within a context in which the natural world has been completely colonized by the human species, to the point that even the climate has become an human-made artifact, the whole Earth has turned into a problem of and for design, and this new geopolitical-geophysical condition requires critical concepts and the ethical engagement of architects and planners.
For early 20th century architects like Bruno Taut, Walter Gropius and Frank Lloyd Wright, visiting Japan and imbibing Japanese design sensibility was both a revelation and a confirmation of much of their thinking regarding the direction of their own work. The course is an introduction to and an analysis of the architecture and gardens of Japan. Interpreting the unique geopolitical situation of Japan, as a sheltering archipelago longing for continental sophistication, will suggest how isolation and borrowings continue to shape the forms of Japanese architecture and gardens. In a related context we will investigate how the revered and ethereal craft of shaping paper, wood, stone and water has transformed the simplest of materials into archetypical constructions. Cultural phenomena such as ma (space-time continuum) oku (the inner depth) yohaku no bi (the beauty of extra whiteness), shakkei (borrowed landscapes), and others will be explored to reveal the forces shaping structure and space. Since an understanding of the evolution of social and political discourse in Japan is necessary to fully comprehend the unique meaning of its constructed environment, additional attention will be given to these aspects of the culture—especially the spiritual—as they exert an influence on various expressions of form. Class format will consist of lectures, films, discussions and readings. Two exams will be given during the semester. In addition, each student will be required to complete either a project that represents an exploration of a concept, form, characteristic or influence associated with Japanese architecture and gardens, or a research paper.
Mellon Collaborative Studies in Architecture, Urbanism, and the Humanities

SPRING 2016 EXPANDED PRACTICE SEMINAR

FOREST CARTOGRAPHIES

MAPPING AMAZONIAN URBANITIES & THE POLITICS OF NATURE

BRUNO BOSTEELS & TAO DUFOUR | ARCH 6308 / SHUM 6308 / ROMS 6682 | R: 2:30 - 4:25 PM

COURSE DESCRIPTION

This seminar explores the relationship between the economies of emerging cities and the urbanization of fundamental historical ecologies. The seminar focuses on the geographical context of the Brazilian Amazon and the conditions of its urbanization, occasionally in dialogue with ongoing political processes in neighboring Bolivia.

The urbanization that is characteristic of the Amazon is an extraordinary complex phenomenon. It involves dimensions extending from the pole of industrial resource extraction and the resultant formation of advanced capitalist economies in the heart of the forest, to the fragile continuity of the traditions of indigenous societies whose economic structures and spatial environments are experienced as fundamentally intertwined with rural, communitarian, and mythic horizons. In order to interrogate the urban driven form of spatial and territorial expansion in the Amazon, the seminar will inquire into the political economies that motivate it, and thus the orienting ontology, specifically, the ontological assumptions about the meaning and significance of the natural world.

By considering ontological plurality at the level of spatial practices and technologies, the seminar aims to explore the tensions between the global capitalist tendency toward urbanization and “modernizing”, and the local traditional orientation toward “ecologizing” as the basis for an imagined political economy that is at the same time a politics of nature.

The seminar will be organized in a series of clusters with an inter-disciplinary focus combining elements of architecture, ethnography, anthropology, cartography, political economy, and political philosophy. Clusters include theories of urbanization; nature/culture and human/non-human dualisms and critique; life-world and intentionality; community, community, and state; primitive accumulation and neoeconomicism; geophysics and cognitive processes; human ecology and the anthropocene.

Course Instructors: Bruno Bosteels (Professor of Romance Studies, College of Arts & Sciences) and Tao DuFour (Visiting Critic of Architecture, College of Architecture, Art & Planning). Meeting Times: Thursdays, 2:30 - 4:25 PM.

POSTER IMAGE: Urbanismo Rural. Satellite image of the Alteirina project in the Amazon basin showing the ribon pattern of urbanization/deforestation along the Trans-Amazonian Highway based on the 1970s state plan of “rural urbanism”.

CALL FOR APPLICATIONS

The College of Architecture, Art, and Planning and the Society for the Humanities announces an innovative graduate traveling seminar for students in the humanities and design disciplines. The Spring 2016 seminar is, “Forest Cartographies: Mapping Amazonian Urbanities and the Politics of Nature.” (ARCH 6308; ROMS 6682; SHUM 6308). Expanded Practice Seminars are offered under the auspices of Cornell University’s Andrew W. Mellon Foundation Collaborative Studies in Architecture, Urbanism and the Humanities grant. Selected students receive a $1,000 stipend and a funded, week-long travel program to the Brazilian Amazon in Spring 2016.

Due to the interdisciplinary nature of the Expanded Practice Seminar, a wide range of skills and backgrounds are welcome. Advanced undergraduate students may apply, but preference will be given to students in their first three years of graduate study. Applications for the seminar and fellowships require a 500-700 word statement of interest describing your background interest in the seminar topic. No letters of recommendation are required. Questions should be directed to Mary Ahl (mean4@cornell.edu).

Applications must be submitted via http://urbanismseminars.cornell.edu/apply/ by December 2, 2015.
The theories of Lewis Mumford, Robert Moses, Jane Jacobs, and Rem Koolhaas were shaped by their very different responses to New York City’s twentieth-century development. Constructed as a debate among these four influential “urban intellectuals,” the seminar reflects on the past, present, and future of New York and other cities in light of their ideas.
COLLEGE OF ARCHITECTURE, ART & PLANNING

DEPARTMENT OF ARCHITECTURE

VISUAL REPRESENTATION ELECTIVES

SPRING 2016
**Typo**

Special Topics in Visual Representation, Spring 2016
Arch 4509/6509, R 2:30-4:25pm, 205 Rand
Visiting Critic, Michael Jefferson
mnj23@cornell.edu

Type in the field of architecture engenders many readings. At once it may suggest that which is common, dominant, a model to follow, or an ideal. It may be abstract and conceptual or concrete and literal. Oscillating between these readings, Typo will explore the method and study of type (otherwise known as typology) as an operative procedure for architectural production. Specifically, techniques of misreading and error will be presented and encouraged.

The course will be structured in two sequences. In its first phase, we will question what constitutes “typical” in architecture and contemporary articulations of it (Graphic Standards). Lectures will delve into the evolution of typology from the historical interpretations of Jean-Nicolas-Louis Durand and Antoine-Chrysostome Quatremère de Quincy to contemporary definitions of Peter Carl and Christopher C.M. Lee. Using the common understanding of type as defined by programmatic use, students will develop a taxonomy that classifies buildings according to their use with an intent toward creating their own definition of typological attributes through rigorous analysis.

The second phase will look for error in typology and develop representational techniques for formal invention. Lectures will explore representation and causes of variation, specifically: zoning laws (Hugh Ferriss), programmatic repurposing, and climatic degradation (deformations to coastal housing caused by alterations to code). Inherent in the analysis of type is the serial understanding and development of a cumulative knowledge that lends itself to surpassing type and proposing a new or alternative model. To further encourage differentiation, the course will introduce strategies of misreading to promote the intentional production of error. Techniques of appropriation, recombination, and superimposition will be used in conjunction with representational strategies of drawing (axonometric) and building (model) that transform 2-D to 3-D and vice versa.
SCREEN WORKS/SCREEN PLAYS

“...a screen dividing the human world from the Divine world, at the same time unites the two worlds into one whole in an image where all separation is overcome...”

P.D. Ouspensky

In the context of churches, mosques and synagogues, screens have been used as visually porous physical boundaries delineating sacred spaces, and separating various groups of congregants. They were made by skilled craftsmen who rendered their surfaces into decorative geometries, texts and images, the means for communicating the dominant messages of the particular religion. At the domestic scale screens provide privacy and protection from unwanted prying eyes without disappointing the gaze.

Students in the course will develop new hybrid strategies for making screens by examining the material transformations of wood through reductive processes like milling/carving, and additive methods of lamination and compressive bonding. They will also explore analog and digital tools for translating images into wood, and wood into images. The course will also ask questions about the role of the image and pattern as decoration in architecture.

For their final project students will build porous and communicative three-dimensional TRASMISSION screens, which will be part of a larger construction permanently exhibited in a Buffalo church. [http://www.assemblyhouse150.org](http://www.assemblyhouse150.org).
Figures are inherently object-like. The figure is mostly self-referential, it has a distinct boundary, and produces idiosyncratic shapes generally best recognizable in section. Figures are potentially totalitarian, semiotic, homogeneous; they imply and constitute architectural archetypes such as statues, monuments, or other singular architectural reference points. Fields are inherently non-objectual and surface-like. The field is generally understood as a form of non-hierarchical organization, it is expansive, possibly indefinite, and has sublime qualities. Fields are potentially democratic, adaptable, heterogeneous; they imply and constitute architectural archetypes such as grids, scaffolding, envelopes, or infrastructural networks.

Digital tools and processes have long transformed our understanding of the complex relationship between figure and field. Associations have become obscured while intricacies multiplied. As we enter post-digital debate (including OOO and neo-postmodernism), an interest in primitive figure, facade, shape, and meaning emerges within our discipline. Simultaneously, exploration of material systems, envelope, ornamentation, surface, and performance continues to thrive. A re-evaluation of the implied dependence between figure and field - touching upon ideas of figure-ground, gestalt theory, field condition, form and metaphor, language in architecture, syntax, notation, performance of either surface or form - seems imperative and is de-facto long underway.

This course poses the following questions: How do we define the roles of figures and fields in the production of architecture today? What is the agency of field? What are the politics of figure? How does either provide an organizational framework for architecture? Where does reciprocity start and estrangement begin? Is it time for fresh provocations? How do we prompt new figure-field relationships?

During the course of the semester, students will be introduced to digital drawing tools such as Grasshopper (& affiliated plugins) and Processing coding language. Weekly research and design exercises will be accompanied by readings which illustrate significant hypotheses and allow for debate and discussion within the classroom. This seminar will focus heavily on the development of drawings as tools for the expression of architectural ideas. Knowledge of digital parametric design tools such as Processing or Grasshopper is not a prerequisite for this course.

For questions regarding this course please contact me via email: sz382@cornell.edu / Readings will include: Allan, Alexander, Rowe & Koetter, MOS, O.M. Ungers, Eisenman, O'Brien, Lynn, Reiser + Umemoto, Picon, Mitchell, Hays, Martin, Chu, among others.
Retreat

02 Analyzing Methods of Removal

Suzanne Lettieri, stl27@cornell.edu
Spring 2016, F 10:10-12:05pm, 142 Sibley
3 credits

PREMISE

Coastal Subtraction

Retreat 02: Analyzing Methods of Removal will deviate from Modernist notions of tabula rasa and contemporary methods of managed retreat (a complete erasure of the existing). We will investigate a series of subtractive methods as a procedural and visual exercise in order to consider the creative act of removal and the potential of resultant voids in coastal buyout areas.

Questions

How may the agency of removal shift from demolition to disassembly and subsequently leverage the resultant "checkerboard effect" caused by removal? How has the double meaning of retreat, driven by leisure and/or fear, altered the process of coastal addition and subtraction? If we are to consider architectural and urban subtraction as a creative act, what are the representational methods of taking neighborhoods and buildings apart and what cues can be taken from outside of the field of architecture? How can efficiency, political sentiments, and climatic changes be assessed as players in the role of subtraction?

Context:

Keller Easterling calls for a reversal of design efforts and thought – a move away from addition to thoughtful modes of subtraction. These ideas are particularly potent in climatically sensitive and politically charged sites classified as flood zones and targeted for managed retreat.

Background

The term retreat embodies the polarities of the inhabited coastal condition. The coast as a space for leisure, attraction, and as a "get away" as defined by the seaside resort and second home is in sharp contrast to managed retreat where vulnerable coastal neighborhoods move away from the water's edge; motivated by the danger, uncertainty and fear that the contemporary coast infers. The simultaneous desire for and fear of the coast is both a historical and social construct as well as a political and economic strategy.

The process of managed retreat involves the use of public funds for the government to purchase private land, demolish existing structures, and convert land back to its natural state. This territory serves as a sponge for adjacent neighborhoods in times of flooding, but also as an area of perpetual public use in its non-flood state. The notion of converting these areas into public use opens the conversation to both meanings of retreat – the removal of one type of coastal inhabitation that is deemed vulnerable for another type of use that could be considered for leisure. We will speculate on this exchange as a potential negotiation between the two states of retreat.
Furniture Design: Nature, Furniture, Architecture
Professor: George Hascup

Furniture and architecture are related intentional design activities that share many attributes, including history, theory, and materiality. They also share the potential to have significant impacts on the natural, non-human world. This course will explore the relations of furniture design to architecture through the lens of ecological literacy to enable a sustainable, culturally relevant practice of creating furniture.

2 x 4 Challenge
Objective:
“If you see in any given situation only what everybody else can see, you can be said to be so much a representation of your culture that you are a victim of it”. (S.I. Hayakawa)

The purpose of this project is to experience the resistance and reward of the non-conventional path, in a formal sense as well as an ethical one.

Description:
This project consists of two components. The first component is to acquire an 8’ length of 2x4 piece of dimensional lumber meeting the greatest number of sustainable criteria as possible. Write up and present the results of your research and procurement efforts, listing the satisfied criteria and justifying your decisions.

The second component of the project is to invent a piece of furniture using all of the wood contained in the 8’ length of a 2 x 4 piece of dimensional lumber. A secondary material element is allowed. The furniture can be designed for any interior surface.

Glass Furniture
Prototype - Digital Fabrication
Strategies of Lamination
Bent Ply
Prototypes - Digital Fabrication Strategies

Schedule:
Mandatory Organizational Meeting: Feb. 2
Tuesday, 2:30-4:25 p.m. in 205 Rand Hall
Course Description

This one-credit course is designed to give an outline of Italian Cinema and to study of the characteristics of Italian culture. Through the analysis of some of the most representative films, students will be able to explore the peculiarities of Italian cinematography, in particular how it has always reflected and influenced Italian society in an attempt to develop new cinematic languages capable of dealing with the tradition and at the same time reflect and comment upon the transformations of Italian society.

Students are required to watch four to six films and discuss them in class with the instructor. The films can regard various aspects of historical and social developments of Italy, from the end of Fascism until today. Class discussions will be based on the analysis of the films viewed and relevant aspects of Italian society and history.

Emphasis will be given to Neorealism during the post-war years, the golden age of Italian cinema during the economic boom in the 60’s, intellectuals and Italian political cinema of the 70’s, and contemporary Italian cinema.
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 'remixing' 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'.
COLLEGE OF ARCHITECTURE, ART & PLANNING

DEPARTMENT OF ARCHITECTURE

BUILDING TECHNOLOGY ELECTIVES

SPRING 2016
MATTERS OF RESISTANCE is primarily concerned with challenging disciplinary paradigms about the role of structure in contemporary design practice. The course will investigate the operative potential of structural performance and its capacity to generate distinctive material, formal and spatial organizations. These ideas will be researched in the context of the pioneering work of a small group of architects, engineers and master builders in Latin America during the 20th century.

During the semester students will produce speculative models, drawings and diagrams implementing aspects of their research to advance the discourse around form and structure in architecture.
GLASS ENCLOSURES
ARCH 4605/6605: Special Topics in Construction
Cornell University, AAP Department of Architecture, Spring 2016
Day/time/location: T 12:20-2:15pm, 202 Rand
Instructor: Patrick P. Charles, pcharles@cornell.edu

Left: detail of the pedestal of La Croix des Verriers (the glassmakers’ cross) in Boisses-Penchet, Aveyron, France, 1861, showing the stacked sheets of glass construction. Middle: Detail of connection between the steel glass-holding frame and the exoskeletal primary steel column in Mies van der Rohe’s Farnsworth House, 1951. Right: Detail of the clamp fitting securing 4 sheets of glass in the Juilliard Alice Tully-Hall, NYC, 2008, Diller Scofidio +Renfro Architects.

“(…) glass has provided one of the earliest, and still rare, examples of controlled use of science at the nanolevel in a well-established gigatechnology.”

Rustum ROY

This course explores several of the many facets of glass as a material and its use in building enclosures of various kinds.

How is glass made, artisanally, industrially and naturally? What place does glass occupy in our collective imaginary, and in various artists’ vision? How does it shape our daily life? What linkages exist between the science-based ancestry of glass (in the form of lenses in microscopes and telescopes) and its contemporary industrially-produced counterpart? How does glass behave; what are its properties? How do coatings and other treatments modify its properties? What are its size limitations? How is glass transformed and finished? Can glass be bended? How does it break?

How is glass assembled, fastened and jointed? How does glass relate to other materials and generate new design worlds? What can we learn from experimental glass structures?

What role does glass play in building enclosure? How can glass’ transparency and opacity at different wavelengths of the solar spectrum be harnessed in building enclosure design? What other considerations should the designer take into account when designing a transparent enclosure? What tools are available to help choose the “right” glass?

What are new areas of research in glass today? What new aesthetic possibilities profile themselves with the introduction of new glass-based products? How does our evolving notion of transparency informs architectural design and building envelope design?

The course strives to cast light onto these and other questions and, by doing so, aims to equip students with fundamental knowledge they can actuate in the design arena, as well as to nourish their reflection on the role glass plays in contemporary architectural debates. The course intends to mix hands-on, analytical, research- as well as design-based learning.
THE COMFORT OF LIGHTNESS: PRIMITIVE CONSTRUCTIONS.
Spring 2016
Arch 4605/6605: Special Topics in Construction
Wed. 10.10-12.05, 202 Rand Hall
Instructor: Lorena del Río

Flexible, deployable, dismountable, temporary, transformable, innovative structures. New materials, innovative and unexpected uses of traditional materials, construction logics, new ways of relating with the environment.

We have been invited, as one of 12 international architectural programs, to participate in the LIXIL International University Architectural Competition, a design competition for university research laboratories that is hosted by LIXIL JS Foundation. Situated on a site in the Memu Meadows of Hokkaido's Taiki-cho, the committee, led by Kengo Kuma, seeks sustainable architectural solutions from nominative universities around the world. The winning university will be responsible for the project throughout the construction phase.

This elective course will advance the material research and detail prototyping that will serve to expand the design processes deployed in the OPTION STUDIO THE COMFORT OF LIGHTNESS: PRIMITIVE CONSTRUCTIONS. All students enrolled in the Option Studio are required to enroll in this course as well, but the seminar is also OPEN to any student interested in the topic.
Furniture and architecture are related intentional design activities that share many attributes, including history, theory, and materiality. They also share the potential to have significant impacts on the natural, non-human world. This course will explore the relations of furniture design to architecture through the lens of ecological literacy to enable a sustainable, culturally relevant practice of creating furniture.

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The purpose of this project is to experience the resistance and reward of the non-conventional path, in a formal sense as well as an ethical one.

Description:
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The second component of the project is to invent a piece of furniture using all of the wood contained in the 8’ length of a 2 x 4 piece of dimensional lumber. A secondary material element is allowed. The furniture can be designed for any interior surface.

Glass Furniture
Prototype - Digital Fabrication
Strategies of Lamination
Bent Ply
Prototypes - Digital
Fabrication Strategies

Schedule:
Mandatory Organizational Meeting: Feb. 2
Tuesday, 2:30-4:25 p.m. in 205 Rand Hall
**ARCH 4621 Sustainable Architecture:**
The Science and Politics of Green Building

**Rationale:**
This purpose of this course is to place the topic of sustainable architecture in a broad context that includes politics as well as building science.

**Course Aims and Objectives:**
Students will examine the five basic components of sustainable building design (site/location, water, energy, materials, and IEQ), first from a historical perspective, and then as implemented through the LEED/USGBC rating system, in each case placing the issues raised by building and environmental science in the political/economic context within which they are considered.

More information: ochshornDesign.com/cornell/courses.html

Tuesdays 2:30 - 4:25 pm
Jonathan Ochshorn
HISTORY of ARCHITECTURE & URBAN DEVELOPMENT

Spring 2016
Today, design cultures and practices involve searching for new insights, methods, and inspirations in the digital realm. In this course, we explore the digital and physical as seamless and complementary ecologies rather than as dichotomies. Digital tools and practices will be unpacked (problematized), taking into consideration aesthetic, material, social, ethical, and political questions.

The learning objective is to promote critical thinking about the challenges, opportunities, and shortcomings of new media tools and social networking practices. Among the issues examined are digital fluencies, media ethnographies, digital divides, and cultural probes with new media tools through readings, discussion and individual and collaborative projects. Guest speakers, hands-on workshops, and special collections like the Rose Goldsen Archive of New Media Art will be important parts of the course.

Students design and carry out qualitative and/or quantitative research projects as a basis for future design and intellectual work. Thus pre-thesis and thesis students are especially welcome to test ideas and methods in the safe space of this course.
This course examines the development of landscape architecture as a distinctive expression of the American experience from the early sacred and communal land manipulations of the Native Americans through to Thomas Jefferson and on into the present. The course traces the intersecting influences of the physical landscape, the cultural attitudes and assumptions of democracy, technology and Capitalism, and the immigrant baggage of memory on the form of urban parks, world’s fairs, private and corporate estates, campuses, suburban and public housing, transportation planning, recreation grounds and other contemporary aspects of open space design in which landscape architects have made significant contributions.

Course requirements include 1) a midterm and a final exam; 2) a sketchbook documenting the work of a significant American landscape architect, a typical genre associated with the American tradition and a specific landscape detail/ or a carefully documented research paper.
Today when we can download entertainment any time to devices we carry in our hands or pockets what does it mean to be entertained with others in the streets or in buildings? Beginning with children’s toys and games, this seminar explores spaces appropriated, repurposed, and created expressly for play and pleasure in Haiti, India, Germany, and the United States from the past and present. What kinds of creativity and performativity are engendered or resisted by spaces where we amuse ourselves and are amused? What happens when play and pleasure become politicized, industrialized, and corporatized? Can these spaces and architectures of play and pleasure craft new identities and reaffirm traditional ones for individuals and communities? Guest speakers include historians LeGrace Benson and Elissa Sampson on Haitian Ra Ra bands and Lower East Side Yiddish theaters respectively. Vani Subramanian (New Delhi film maker currently working on a documentary about Indian cinema halls with Woods) will be a visiting critic participating in readings, discussions, and student projects. 

Subramanian’s visit is made possible by the generous support of the Clarence Stein Institute, Cornell University.
When walking around Rome, you can not but become aware of its past, of the impact that history has had upon the city: everywhere are remains of ancient buildings, medieval houses and churches, renaissance and baroque palazzi and more. Sometimes they are right next to each other, other times they are on top of each other or mixed together into a collage of different materials and techniques. After all this city that extends along the Tiber, across the low lands on to the surrounding hills has existed for almost 3000 years, a continuous urban work in progress. Centuries of construction and restoration, destruction and transformation have created one of the most intricate layered city centers of the world.

This course intends to peel off the layers one by one to reconstruct the history of Rome within the Aurelian walls from its origins to the late Middle Ages, when a cityscape was created that became the base for the later development of the city from the Renaissance until the modern age. During this almost surgical removal of the layers of the city, we will pay attention to the development, use and continuity of the urban infrastructure (the streets, bridges, aqueducts and walls), the building typology (both public and private), the building materials and techniques.

A central theme in this course will be the emphasis upon the concept of continuity through transformation of the urban fabric from antiquity until the present day. At the base of this concept is the way a historical city continuously recycles itself. It does that in its spaces, open or closed, public or private, and in the materials and methods of construction. To understand this process we will look at the well preserved remains of the ancient and medieval city and combine them with the latest results in urban archaeology in order to gain better insight in the dynamics of the city as an ever changing living organism. Therefore, the course will also dedicate some time to the most important urban interventions that occurred in Rome after it was proclaimed Capital of Italy in 1870 and the way these projects interfered with its historical urban texture.

Every week one or two different "regions" will be studied, that cover a specific moment of the urban history of Rome. Each time the urban and architectural elements of the ancient and medieval phase will be analyzed, contextualized and interpreted in the light of what has been said before. Week after week, the layers of the city will be put in place and the complex urban history of the city reconstructed.

Course objectives.
- To unravel the "layers of Rome" by using the material evidence available for the study of city’s architectural and urban history and implementing it with other sources (e.g. literary, epigraphical, etc.).
- To gain thorough and direct knowledge of the Roman and Medieval urban landscape and the way this landscape has survived until today.
- To understand how the development of Modern Rome can not be separated from that of its ancient and medieval legacy.

Learning objectives.
- To “see” the different phases of the city through its building typology, building materials and building techniques;
- To interpret the specific nature of urban development in a certain part of the city at a certain time against the background of changing political, religious, economic or social standards.
- To understand the complexity of a historical city and the problems it creates for the management of its urban landscape in a contemporary environment.
URBAN DESIGN, ARCHITECTURE AND ART IN RENAISSANCE AND BAROQUE ROME
(ARCH 3823-020)

PROFESSOR JEFFREY BLANCHARD
CORNELL IN ROME
SPRING 2016

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 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.
Curatorship has become a focal point as much in the dissemination of architectural culture as in the production of architecture itself. Increasingly conspicuous, curating architecture both as a practice, but also as a field of research, seems to have reached a state of disciplinary legitimacy.

Simon Pennec

Premise: This course examines the role of architecture exhibitions within discourse, their history and design. We will consider how exhibitions function in terms of establishing critical and research agendas, the rise of the architecture biennale, and the establishment of architecture departments within museums. The use of models in diverse formats will be a central focus throughout the semester; the display of drawings, maps, projections and ephemera will also be treated. Broadly, exhibitions themselves will be viewed as models of a kind, as vehicles to communicate complex ideas in accessible formats. Students will interrogate how exhibitions prompt questions of narrative, culture, pedagogy, activism and professional identity.

A final paper in the form of an exhibition catalog will give students the chance to curate an imaginary exhibition, but one rooted to real objects, architects and venues that they select.

Key texts:
Sarah Chaplin and Alexandra Stara, Curating Architecture and the City (Routledge, 2009)
Cynthia Davidson and Tina DiCarlo, Log 20: Curating Architecture (Anyone Corp., 2010)
Henry Russell Hitchcock and Philip Johnson, The International Style (MoMA, 1932)
This seminar outlines changes in the discourse and practice of architecture following crisis or turmoil as an opportunity for new potentials, exploring the social, political, and economic context and their influences on architecture and urbanism. Most recently, the disruptive events of the last 12 years contribute to the latest Post Bubble era, with a dramatic financial collapse compounded by socio-political conflicts, and the realization of predictions in climate change. These crises and turmoil upended traditional notions of the typical processes of architectural production and question top-down and bottom-up hierarchies, public and private realms, ownership, and the architectural program. The course will study the current practices of the architecture of crisis as well as the historical significance of previous post traumatic yet productive periods from post-World War II, the late 70s and early 80s, and other seminal moments that projected and shaped the modern environment.

Examining a selection of initiatives and their geographies, the course will investigate architecture in the context of the new economic landscape of post-bubble conditions, excess, neo-liberalism, vacancy, informal architecture, re-use, and resilience. The seminar will engage texts and projects from Roemer van Toorn, ANT Farm, Henri Lefebvre, Cedric Price, Teddy Cruz, Dana Cuff, Beatriz Colomina, Alejandro Aravena, and Reinhold Martin among others. The seminar will be comprised of lectures, readings, discussions, as well as a final project that will intervene in the existing context of selected cities.
Elements, Principles, and Theories in Japanese Architecture and Gardens

Looking for the Bridge to Heaven, Amanohasidate

For early 20th century architects like Bruno Taut, Walter Gropius and Frank Lloyd Wright, visiting Japan and imbibing Japanese design sensibility was both a revelation and a confirmation of much of their thinking regarding the direction of their own work. The course is an introduction to and an analysis of the architecture and gardens of Japan. Interpreting the unique geopolitical situation of Japan, as a sheltering archipelago longing for continental sophistication, will suggest how isolation and borrowings continue to shape the forms of Japanese architecture and gardens. In a related context we will investigate how the revered and ethereal craft of shaping paper, wood, stone and water has transformed the simplest of materials into archetypical constructions. Cultural phenomena such as ma (space-time continuum) oku (the inner depth) yohaku no bi (the beauty of extra whiteness), shakkei (borrowed landscapes), and others will be explored to reveal the forces shaping structure and space. Since an understanding of the evolution of social and political discourse in Japan is necessary to fully comprehend the unique meaning of its constructed environment, additional attention will be given to these aspects of the culture—especially the spiritual—as they exert an influence on various expressions of form. Class format will consist of lectures, films, discussions and readings. Two exams will be given during the semester. In addition, each student will be required to complete either a project that represents an exploration of a concept, form, characteristic or influence associated with Japanese architecture and gardens, or a research paper.
FRAME
The industrial revolution of the 19th unleashed a number of forces which disrupted and disaggregated the organic unity of the city. New technological, economic and social constructions threatened the traditional life world in the city. The many urban theories, projects and practices immediately following this period were preoccupied with covering up the loss, trying to restore the organic unity of the city. They, however, rarely dealt with how this traumatic transformation has been experienced by the man of/in the crowd, the flaneur, the rappicker, the dandy, the beggar, the detective, who were critical of modernity and felt threatened by the accelerated urban development.

Melancholy, as Freud described it, is the inability to come to terms with loss. The goal here is to address the loss, which has been experienced during this traumatic period on the way to modernity and the transformation of the city into the metropolis. It is the intent of the seminar to investigate the effects of these transitions on the city’s inhabitants, not as a pathological condition but use melancholy as a refined, reflective emotion with its own qualities. The seminar intents to look how melancholy with its reflective trait found its way into cultural representations in literature, social studies, art, film, urbanism, where melancholy emotions serve as an explanatory model providing additional insight.
CONTESTED TERRAIN
SPATIAL CONFLICTS, CLIMATE CHANGE AND THE POLITICS OF DESIGN

Arch 3308/6308 Sp. Tp. in Theory
Arch 4408 Sp. Tp. in Architecture Culture & Society
Cornell University Department of Architecture
Instructor: Paulo Tavares
Course Time: Monday 10:10am - 12:05pm
Class Location: 144 E. Sibley Hall

A fisherman sails in what is left of the Negro River near the city of Manaus, Brazilian Amazonia, during the devastating drought of 2012. In the last decade Amazonia experienced two “once-in-a-century” droughts (2005 and 2010) and equally severe massive floods (2009 and 2012). These extreme climate events indicate an intensification of the basin hydrological cycle, which is tipping toward a normalized condition. Complex interactions between global warming, deforestation, urbanization and landscape fragmentation are drastically altering the ecological dynamics of Amazonia, and thereby enhancing global climate change.

The course Contested Terrain investigates contemporary socio-political conflicts as they manifest in the complex and multi-scalar arrangements of cities, territories and ecologies. The notion of terrain is mobilized to engage with different spatial conditions across multiple scales and geographies, functioning as a conceptual device that allows connecting the architectural with the global, the urban with the geopolitical, situated ecologies with the planetary climate. Terrains will therefore be conceptualized as not merely the physical features that compose a given landscape, but instead as dynamic fields of material and symbolic relations that are constantly transformed by the collisions between various social, economic, political and environmental forces.

Disputes over land, geological resources, urban infrastructures, public spaces etc. constitute contested terrains. The course will map how the modalities of power and resistance that operate in these sites are conducted and performed through space and its representation, at the same time shaping and being shaped by the natural and built environments within which they take place. Drawing on a series of concrete sites-situations, the seminars will unpack questions related to the uneven geographies of globalization and the militarization of cities, the condition of migration and refugeeness, geometries of colonialism old and new, forms of environmental violence and ecological dispossession, and the architecture of rights and rights violations, among other topics that define contemporary territories.

More specifically, we will focus on spatial conflicts related to climate change. Global warming, climate change and the environmental crisis have placed the ecological agenda at central stage in the most diverse disciplines and political forums, urging the construction of trans-disciplinary alliances between the sciences and the humanities. Nonetheless, the theories and practices of design have been informed by a conservative notion of ecology, which derives from traditional views of nature as a separated domain from the social.

Challenging this perspective, the course will attempt to elaborate a more complex understanding of ecological issues. This exercise will address design as both a field of knowledge production as well as an instrument of intervention. Within a context in which the natural world has been completely colonized by the human species, to the point that even the climate has become a human-made artifact, the whole Earth has turned into a problem of and for design, and this new geopolitical-geophysical condition requires critical concepts and the ethical engagement of architects and planners.