

2016-2017 Elective, Option Studio, and Research Studio Course Descriptions

Elective Course Descriptions

Fall 2016

Winter 2017

Studio Course Descriptions

Fall 2016 Option Studio

These courses are open to Master of Architecture, Master of Landscape Architecture, and Master of Urban Design students as topic specific advanced design studios, where a range of conceptual, technological, urban, or regional problems can be explored.

Winter 2017 Research Studio

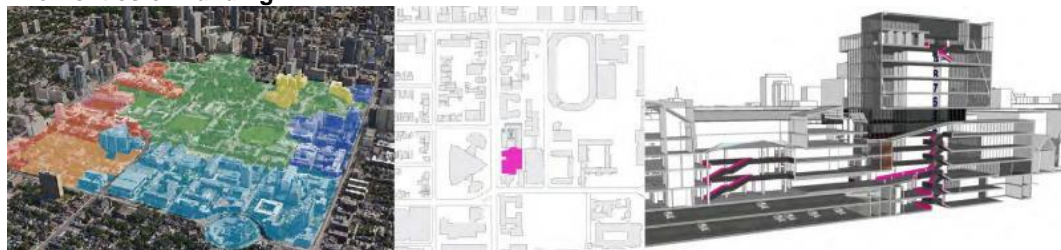
This sixth studio in the Master of Architecture program sequence is an advanced studio. The studio is organized by each professor around a focussed theme, which forms the basis for student research and design and establishes the thematic and research framework that will become the basis for the students' final thesis project.



Fall 2016 Elective Course Descriptions

ARC3100HF: Selected Topics in Urban Design - Annabel Vaughan

The Politics of Building



*When a planner speaks of implementing goals rationally, he implies that it is possible to demonstrate logically and experimentally the relationship between the proposed means and the ends they are intended to further -- Alan A. Altshuler, planner, **The City Planning Process (1965)***

During this seminar, students will explore the history of the University of Toronto campus through its founding vision, master plans and the resultant built form of its architecture. Using 6 pivotal buildings as case studies students will explore how the role of policy, politics, stakeholder interests, budgets and the pragmatics of program drive the complex decisions that architects must respond to as their building design evolves and becomes material reality.

The course will be co-taught by a number of colleagues from ERA Architects Inc with guest lectures by the case study architects and various stakeholders. The course will be run as a research lab with students working in teams and focusing their research on one of the six buildings. The heuristic process of documentation through models, conventional drawings, stakeholder interviews, source documents, photography, interpretation, post occupancy reviews, will provide students with the opportunity to explore and better understand the complexity of the various forces at play in producing built form on campus.

Each student will be responsible for:

1. Preparation of questions to begin in class discussions with case study guest lecturers.
2. Participation in, and contribution to, class discussions and critiques;
3. Research, documentation/analysis of assigned case study (drawings, photographs, text, images) (on going with mid term milestones);
4. In class presentation of the case study. (30 minute visual presentations held on the final day of the class)

This course welcomes graduate students from all programs at the Daniels Faculty: architecture, landscape architecture, visual studies, and urban design.

ARC3300HF: Selected Topics in Arch History and Theory - Erica Allen-Kim

Expertise in the City



Architectural practice involves developing expertise in the use of research and experimentation to define problems. Firms such as SHoP Architects claim an innovative approach to design that “harness[es] the power of diverse expertise.”^[1] The built environment benefits from designers who can imagine alternatives to the current condition, but the architect or designer is just one actor among many, and design expertise is shaped in reaction to other actors and audiences. Each of these types of expertise has its biases, and at the same time the city and the urbanizing landscape themselves are not simply neutral spaces but rather are shaped by and in turn influence everyday experiences and disciplinary myths. Vernacular, or non-designed, buildings often inspire architectural experimentation, as evidenced recently in the work of Alejandro Aravena and Elemental S.A.

In the spirit of Rem Koolhaas, this seminar proposes a paranoid critical method to examine the biases and possibilities contained within different kinds of expertise by applying it to both canonical and vernacular buildings. By reading other forms of expertise (the tourist, the economist, the other, etc.) in a building we can begin to reverse engineer design to challenge dominant architectural claims. Readings are drawn from disciplines in both the sciences and the humanities, including architectural history, philosophy, and anthropology. Canonical buildings and their historical contexts discussed in lecture will provide the framework for proposing Toronto site interventions that consider questions such as, how has the reception of canonical buildings changed over time and depending on audience? and how does design expertise shape choices and ways of thinking and doing?

[1] <http://www.shoparc.com/about/>

ARC3301HF: Selected Topics in Arch History and Theory - John Harwood

Architectures of Mass Media

This course begins from the premise that the wholesale critique of modernist architectural historiography is an incomplete project. Although the mythologies of modern architecture’s origins in the technical have been dismantled for decades, the particular selection of an architectural canon originally authorized by those mythologies remains undamaged. The thought experiment in this course

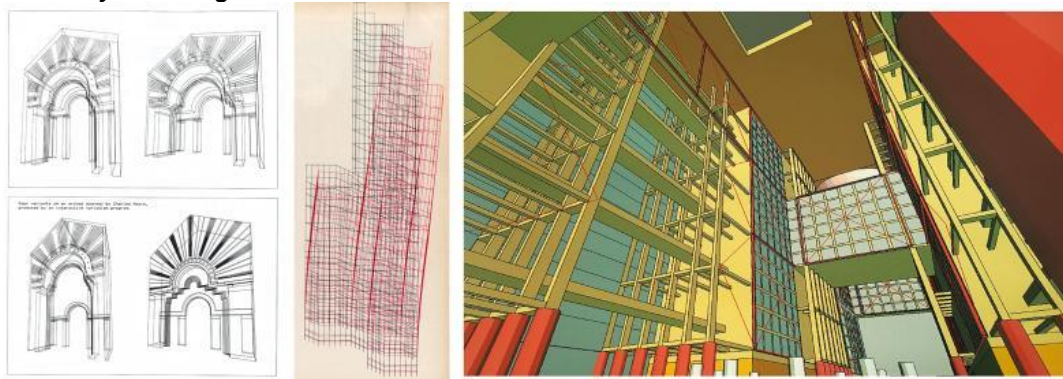


will be a simple one, albeit with complex consequences: rather than debunk architecture's commitment to a radical engagement with technics, we will simply accept that such a commitment existed, and then construct an architectural historiography that is ingenuously based upon the rapidly shifting technical qualities of architecture as it becomes increasingly entangled in the vast apparatus that produces the phenomena we describe by the name "mass media." In short, we will ask "What is the architecture of [insert medium here]?" "How does architecture function in relation to [insert medium here]?" "And what does it mean to consider architecture as, or as part of, a medium?"

Drawing upon multiple methods, ranging from art history and media archaeology to the synthetic attempts to map "cultural techniques," and upon multiple archives (sociological studies, political and economic histories, technical manuals, etc.), students in this course will look to construct a new approach to reconfiguring the architectural historiography of the so-called modernist period. We will read conventional modernist histories in parallel with more recent historical and theoretical interventions and revisions in media studies, and also present our on-going research into previously under- or unconsidered architectural artifacts in relation to their technical milieus.

ARC3302HF: Selected Topics in Arch History and Theory - Matthew Allen

Prehistory of the Digital



If, as popular disciplinary mythology would have it, digital architecture began in the 1990s, what should we make of the longer history of architects using computers? This seminar will construct a deeper history of computers and architecture, spanning from the 1960s to the present, emphasizing **1)** the many different concepts of "the computer" through this period; **2)** the divergent ways of doing architecture these resonated with; and **3)** some of the specific media technologies, image-making practices, and graphical conventions that were developed to further these architectural ambitions. We will attempt to reconstruct the theoretical foundations of several computer-related epistemes that have slipped from historical memory. Why did Cedric Price create a punch-card information storage system for his office in the late 1960s? Why did SOM turn to wireframe graphics in the late 1970s? And why did postmodernists invent parametrics in the 1980s? Readings will be drawn from new media theory, history of science, architectural history, and philosophy. Student work will develop alternative genealogies of digital architecture and resurrect historical techniques, testing them in the context of the present.

ARC3303HF: Selected Topics in Arch History and Theory- Hans Ibelings

Building Dictatorships: 1945 - present

'I think the best thing is to have a benevolent dictator — who has taste!'
Frank Gehry(1)

Whether dictators (even if they have taste) are the best patrons of great architecture is questionable. But without doubt many of them have an interest in architecture, and quite often a propensity to grand building projects, which offer architects tempting opportunities they probably wouldn't get in other circumstances.

Architecture and planning can play an important role in the exercise of authoritarian power, as instruments, products, and symbols. Yet, surprisingly, some dictatorships have shown hardly any interest in building at all. This seminar looks at the diversity of architecture in dictatorships and how it is used, or not.

We know a lot about the monumental architecture and planning of a few of European worst dictatorships from the 1920s, 1930s and 1940s – Hitler's Germany, Stalin's Soviet Union and Mussolini's Italy – but much less about the many countries that have experienced authoritarian rule since 1945.

In *Classifying Political Regimes* (1996) Alvarez et al. have developed a useful definition of dictatorships and produced an exhaustive list of authoritarian regimes between 1950 and 1990.(2) This list functions as a reference for the selection of countries this course will focus on. The yearly *Freedom in the World* report of the Freedom House, published since 1972, offers additional data for the most recent period.(3)

The aim of this seminar is to develop an understanding how architecture functioned and functions in different dictatorships in different periods, how architecture is used (or abused) to exert and symbolize power, and to which effect. Since there is not much known about the building production and spatial planning of many dictatorships, the most important part of this seminar is to catalogue the architecture, urban planning, infrastructure and landscapes of a selection of dictatorially-ruled countries.

As the second iteration of this seminar (which was first held in the fall of 2015) the aim is to complete the catalogue of building activities of all post-1945 dictatorships. Last year approximately 50 countries were covered. This time the focus will be on the remaining 50 nations that are, or have been, dictatorships since 1945.

Each student should make an inventory of the architecture of three dictatorships, present their findings in class and write an essay about each of them. As a collective, the students should build a catalogue of architecture in dictatorships.

If the catalogue turns out to have sufficient coherence, quantity and quality, it could become the basis for a publication.



image: Polimeks, The Wedding Palace, Ashgabat, Turkmenistan, 2009-2011
photo Dan Lundberg

1. Benjamin Pauker. 'Epiphanies from Frank Gehry', *Foreign Policy*, June 24, 2013.
2. Mike Alvarez, José Antonio Cheibub, Fernando Limongi and Adam Przeworski, 'Classifying Political Regimes,' *Studies in Comparative International Development*, Summer 1996, Vol. 31, No. 2, 3-36.
3. See www.freedomhouse.org

ARC3600HF: Selected Topics in the History & Theory of Arc & Health - Stephen Verderber

Health and the Built Environment

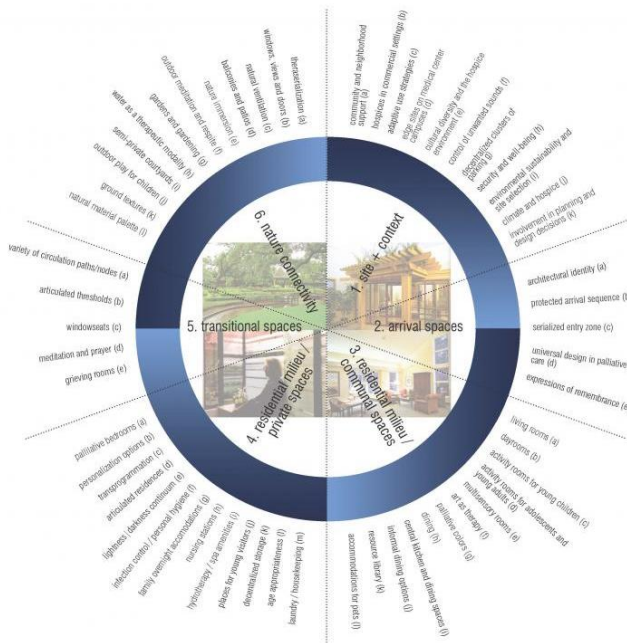


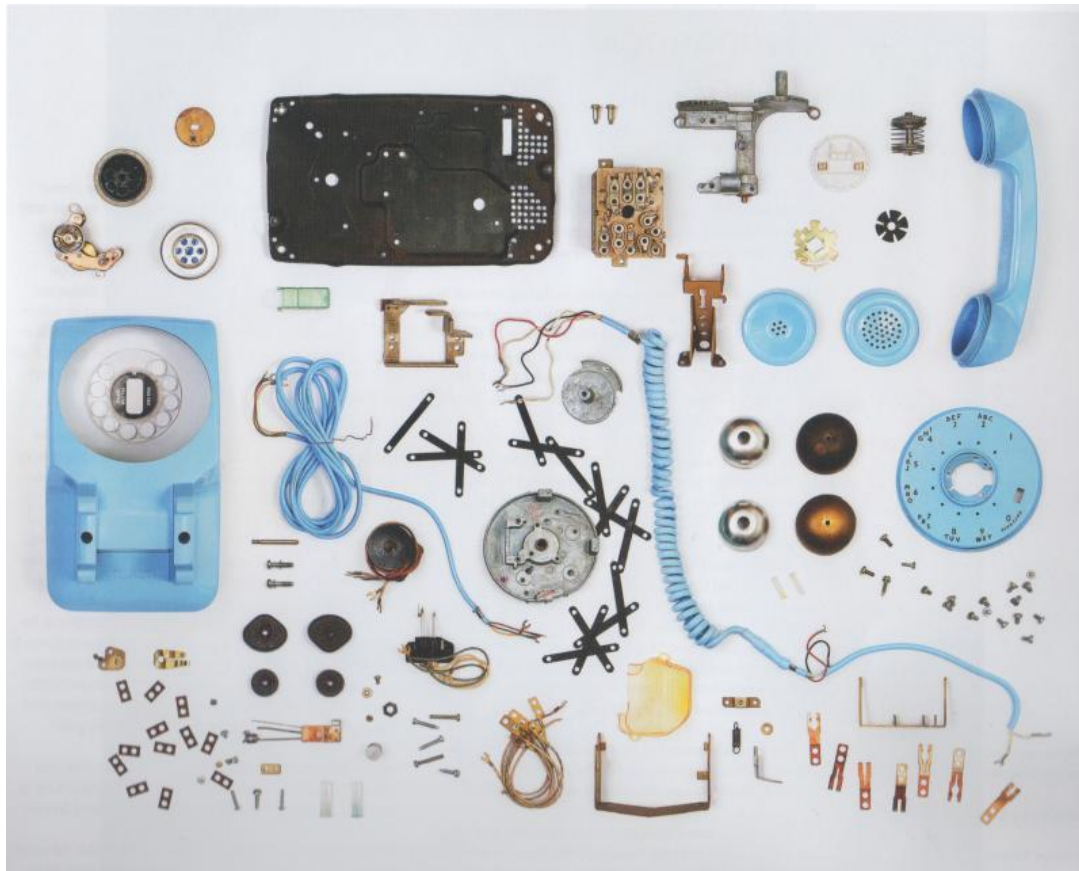
Figure 1. Architectural and Landscape Design Considerations in Residential Hospice Environments

This seminar explores the timeless relationship between the built environment, public health, and human and ecological well-being. An interdisciplinary, historical perspective highlights key events, theories, and care settings from antiquity to the present and prognostications for 2050. Healthcare delivery systems are examined in a manner transcending static disciplinary barriers. The fundamental

aim is to foster transactional understanding and appreciation of key responsibilities, concerns, and priorities in the planning and design of the built environment in both the civic realm and the private realm. These perspectives examined in relation to individuals' and organizations charged with the stewardship of human health and within the built environment (architects, landscape architects, industrial designers, direct care providers, and public policy makers) in diverse community contexts. A global space-timeline chronology provides a baseline for examining patterns of adaptation and the ability to diagnose dysfunctional, counter-therapeutic, and otherwise maladaptive care settings both in institutional settings and in the everyday built environment. Topics discussed include architectural typologies for health, affordance theory, biophilia, salutogenic care settings, health promotion and community wellness, societal aging, environmental perception and cognition, and sustainable planning and design precepts. Readings and class discussions are supplemented with architectural, landscape, and community-based case studies (and it is the only course of its kind offered *anywhere*).

ARC3700HF: Selected Topics in Architecture - Laura Miller

on the ARTIFACT



The ways in which we read and construe the value of artifacts within the material realm ultimately circumscribes what we are capable of conceptualizing and creating in our own constructions.

Through what processes and structures, then, do we apprehend the fabricated world that surrounds us – a world that we as architects and designers endeavor to simultaneously engage, and to alter through our own designs?

This seminar will examine some of the ways that cultural significance is negotiated, qualified, projected and received through the material artifact. We will read and discuss texts and images that have considered the status of material constructs according to various historical and theoretical frameworks.

It is a fundamental assumption of this course that knowledge is embedded within the act of making. As a means of researching the multiple implications of an artifact as it is seen and understood within its contemporary cultural circumstances, and as a means to test out ideas and concepts from our readings and discussions, course assignments will be based in visual, textual, and material documentation and speculation.

Each student will select a contemporary, everyday consumer artifact to examine throughout the term, according to an index of cultural conditions seen to be in a state of flux and redefinition today.

Course Assignments: Artifacts' physical form and assembly will be documented through drawing and/or photography. Artifacts' histories will be researched and constructed through images and text, and their contemporary status will be considered and critically analyzed. (Midterm)

Students will design and fabricate an 'indexical' container, one that registers the apprehension of their selected artifact through its visual and material rhetorics. Akin to the religious reliquary, the 'indexical' construction will take on the pretensions of architecture, attempting to qualify, through its multiple spatial, material and descriptive agendas, an understanding of the artifact within. (Final Project).

Each student will be responsible for:

1. Summarizing the main points for one week's readings for the class, in the form of a verbal and visual presentation, and leading class discussion for that session;
2. Responding to weekly discussion questions for readings (short written responses);
3. Participation in, and contribution to, class discussions and critiques;
4. Research, documentation/analysis of selected artifact's material and historical construction (drawings, photographs, text, images) (Mid-Term);
5. Design and fabrication of an indexical container (Final).

This course welcomes graduate students from all programs at the Daniels Faculty: architecture, landscape architecture, visual studies, and urban design.

ARC3701HF: Selected Topics in Architecture - Mason White

Inciting Architecture to Action

“Architecture is defined by the actions it witnesses as much as by the enclosure of its walls.” -- Bernard Tschumi (1978)



Image: Raumlabor, “The City as a Sphere for Action,” 2014.

But is it really only acting as a witness, as Tschumi suggests, or is it equally complicit to action? Can architecture incite and provoke action?

This elective will engage the idea that architecture, despite the celebration of its static attributes, seeks to be active within its context. In this enquiry, we will survey the various attempts—primarily since the 1960s—to produce an active architecture, not just technologically, but also socially and politically. The course will explore actions in architecture through three broader themes: (1) Transformation: moving action; (2) Occupation: social action; and (3) Interaction: participatory action.

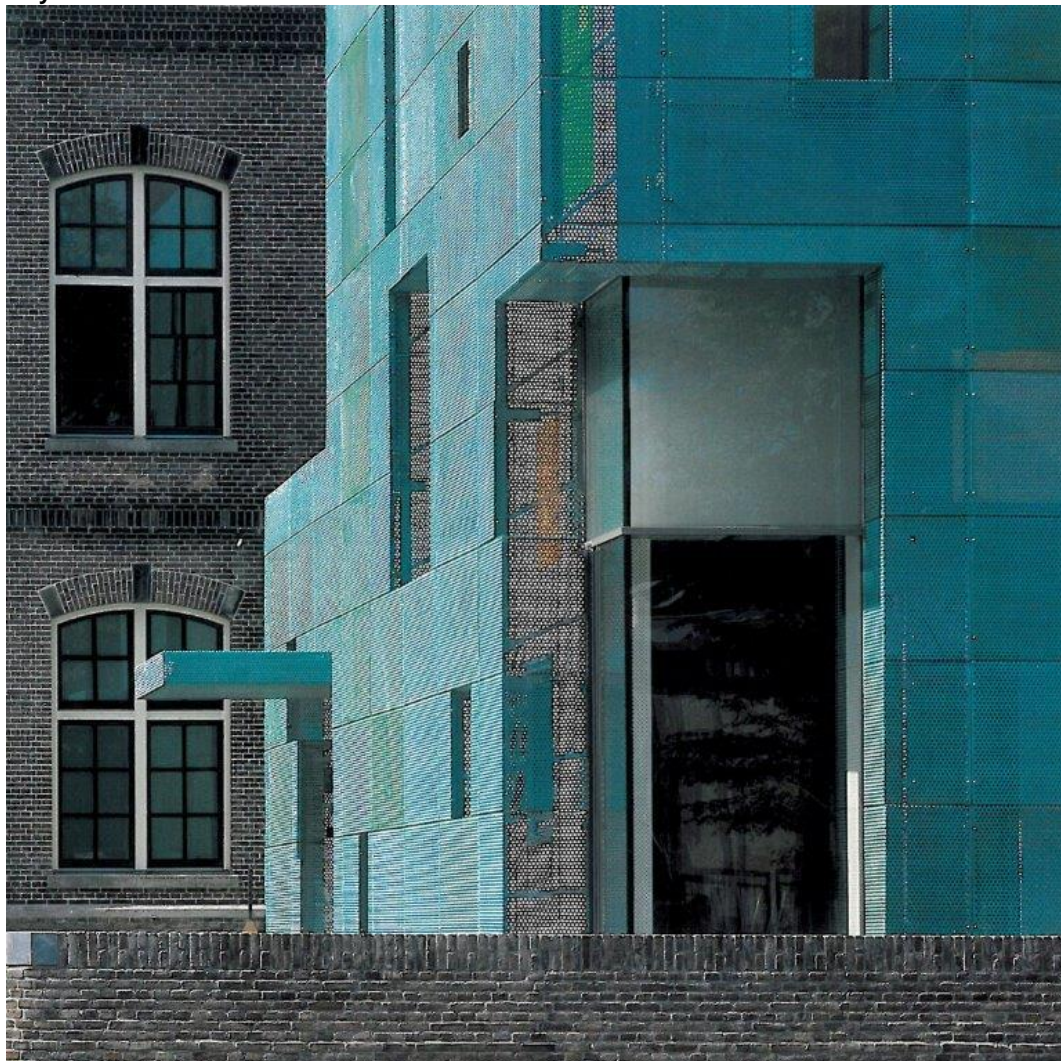
Bounding these themes is a broader question: *How public is architecture, anyway?*

Architects to be discussed range from Cedric Price to OMA; from Giancarlo di Carlo to Assemble; from Lucien Kroll to Lacaton Vassal.

We will use course-assigned readings and case studies to shape discussions and debates on themed topics for the first 6 sessions. Student groups will lead in-class presentations. The remaining 4 sessions will be focused on the development of a shared research project. Each student will complete a research project on one of the three themes primarily through analytical drawing.

ARC3702HF: Selected Topics in Architecture - Pina Petricone

City is in the Details



This course studies the capacity for building tectonics and material details to define a culturally specific, identifying context within the contemporary city. It should give students a basis for critically evaluating

building material techniques in this capacity, via the study of a series of case studies, which offer rich, yet not always obvious, defining detail moments.

Few would question whether an edifice conveys cultural meaning via the expression and poetics of its constructional and material logic – its tectonics. This course, titled *City is in the Details*, advances this assumption to broader, urban compositions as they accumulate over time and respond to issues of climate, accelerated growth, political shifts, and material technology. We will reinterpret the definition of context and the role of contextualism in the contemporary city via an examination of the building 'detail.' We will look at the writing of Ford, Frampton, Taggart, Schittich, Moussavi, and others; however, will not linger long on the question of: *What is a Detail?* We will look closer at the question of: *What is a Typical Detail?* And, work towards the assumption that even *NO-detail* is a detail vis-à-vis the avant-garde assertion that details want to be eliminated. In other words, "if they are done well, they will go away."^[1]

Classes will be organized around concentrations of various material details such as those based in glass, wood, metal, (pre)cast concrete, and unit masonry. Each will look closely at respective techniques, host cities, histories, and resources for a "faciavista" expression of the material. Students will have the opportunity to focus on a contemporary material detail(s) of their choice to analyze and test for its cultural, urban, and contextual value. We will prioritize visual readings and drawing analysis while contemporary details will be explored through both visual and written constructs.

This work will ultimately be collected into a unified, multivalent resource organized much like a travel guide navigated by contemporary material techniques.

^[1] Zaha Hadid as quoted by Edward R. Ford in *The Architectural Detail* (Princeton Architectural Press: New York, 2011) p.50

ARC4500HF: Selected Topics in Professional Practice - Steven Fong

Architecture as an Entrepreneurial Practice

The 1960's hero-architects claimed expertise over a broad range of scales of design- everything from doorknobs to cities. Architectural practice was scale-agnostic, capable of thinking that the design of a house might inform the design of a convention centre. Aphorisms from that era included Herman Hertzberger's "the school as city".

The recent generation of hero-architects were convinced of the universality of the conceptual apparatus of form-making. However their business counterparts were more pessimistic. Big businesses were notoriously bad at addressing local needs. And small companies often failed in the attempt to grow larger.

Today, businesses that have successfully scaled are still few and far between. Our class will consider the problem of scale in business. The project will be to find/make a small locally based business, rebrand it, and grow it beyond its current reach. Or, consider how a national brand could establish a local identity.

The purpose of the course is to explore emerging opportunities for entrepreneurial relationships involving the practices of Architecture, Landscape and Urban design. Students will be exposed to modes of thought that bring together design thinking with investment, retail and service environments. A key objective is to understand the role of design in addressing business opportunities

and challenges. Guest speakers drawn from outside the university community will present case studies ranging across the design and cultural spectrum, viewed through analytical lenses of strategy and marketing.

LAN2200HY: Landscape Architecture Topics: Design - Pete North

WINTER STATIONS, 2017



Image source: Azure

Daniels has been invited to participate in Winter Stations, 2017.

In this course students will participate in this year's Winter Stations international public art exhibition (www.winterstations.com). Open to all design programs, this course will provide the opportunity for students to design, detail, fabricate, and install a team Winter Stations installation to represent Daniels. Envisioned as a workshop environment, the course will guide students through the various competition phases of design, technical and material research, fabrication, and on-site assembly. Following this year's competition theme of 'Catalyst' students will develop and present individual conceptual designs to an internal jury along with a student balloting process, to finalize one scheme that will be further refined, fabricated, and installed by the class.

Run in a workshop format, the course is structured to meet the various competition deadlines. Classes will be the same duration as other Daniels electives, but will follow a unique schedule, which will be spread over the fall and winter semesters. Class will be held every other week in the fall semester starting on September 21st, with concentrated fabrication in the early winter semester in preparation for the exhibition opening on February 18th.

Winter Stations 2017 theme: Catalyst

“Converting one form or substance into another. The finger that tips the first domino over. The flap of butterfly’s wing that sets off a chain of chaotic, unpredictable reactions. The theme for WinterStations’ third year is Catalyst. In 2017, this seems especially fitting in this time of international political, social and cultural upheaval. This winter, we ask artists and designers to unearth and intervene in such a way as to open up the landscape, as well as the minds of those who come to view and interact with the installations. We ask that proposals seek to disassemble and re-shape our notions of Toronto’s waterfront, with particular attention to the earth and materials strewn across the beach.

The installations this year will also be a catalyst for change: We would like to see less waste and more re-use. Designers should consider how their materials can be repurposed and recycled; we are excited to see proposals that evolve into future iterations, as on-going research and design projects. Entrants should address in their proposals a post-Winter Stations’ life, including de-commissioning / removal and the potential opportunities they see for their design, such as possible new sites and / or new objects.”

WinterStations 2017

URD1031H: Urban History, Theory, Criticism - George Baird

This course will present a history of the development of the urban form of the city and region of Toronto from the late eighteenth century until the present.

In each session of the course, a presentation will be made by the course instructor (sometimes accompanied by visitors), and this will be followed in each session by class discussion.

It is hoped also that it will be possible to organize a series of tours of significant parts of the city, but the tours in question will need to occur outside of the regular times of the sessions of the course, and will depend on the availability of students to participate in them.

The course will explore the characteristic relationships that have grown up over the years between the distinctive topography of the city; the early patterns of its settlement, and the evolution over time of its successive infrastructures, including railways, port facilities, expressways, transit lines and underground walkway systems. These characteristic infrastructures will be described in their eventual, systemic impact on the evolving form of the city.

At the same time, the architecture of the city will also be described, but this description will demonstrate primarily how buildings became typological in the historical evolution of Toronto. One might say that buildings will be depicted to the extent that they demonstrate the typical relationships of the city’s building typologies to its emergent urban morphology.

The course will meet on Friday mornings, from 9.00am until 12.00 noon, in Room BA025, in the Bahen Centre, commencing on Friday, September 16. Unfortunately George Baird’s investiture in the Order of Canada will take place on Friday, September 23, and will require him to miss that scheduled class. This will complicate somewhat the finalization of enrolment in the course, but we will find a way to make it work.

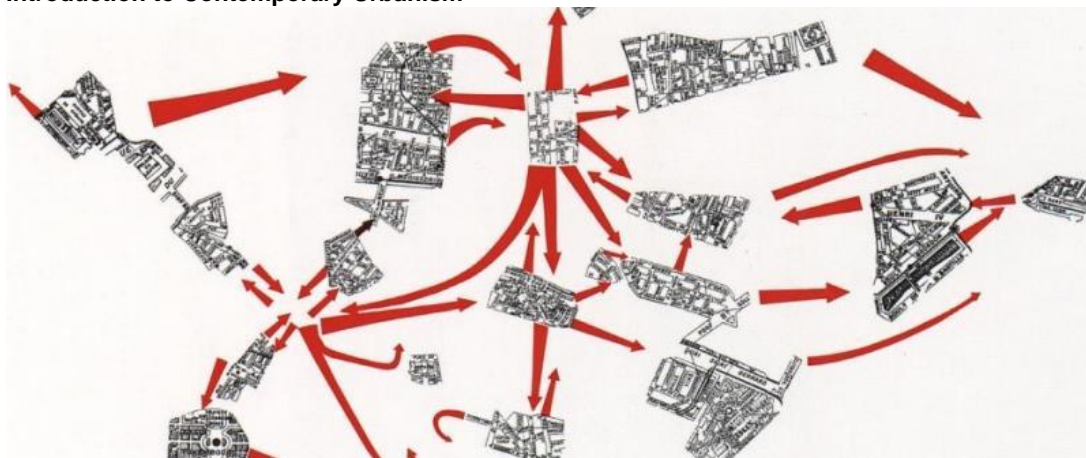
The course has been conceived to be of particular interest to urban design students, but it is open as an elective to students in the architecture and landscape architecture programs as well, subject to the limitations of space in the room in which the course will be given.



Students will be evaluated by means of two course assignments: the first due shortly after the mid-point of the term, and the second at the end of the term.

URD1500HF: Selected Topics in Urban Design - Mark Sterling

Introduction to Contemporary Urbanism



This course, delivered in seminar format, is an introduction to contemporary urban design. The seminar will explore urban design projects and practices as attempts to shape the physical organization of cities in response to the forces which drive change in modern urban society. This course is not intended to be a comprehensive history, rather it is a critical survey of urbanism as a discourse composed of theories, positions and design projects.

The course focuses on selected modern practices across different scales, from the late nineteenth century to the present, and is intended to provide a context for contemporary urban design practice which, it must be recognized, is situated in the midst of histories and attitudes that were mostly determined and established in the latter part of the last century. A critical review of these histories and attitudes is intended to raise questions for urban designers about future trajectories and territories for urban design.

The seminar is open to graduate students from all programs at the Daniels Faculty of Architecture Landscape and Design as well as to graduate students in the Department of Geography and Planning, Program in Planning pursuing an Urban Design specialization. The course is open to students in other faculties and programs at the University of Toronto subject to the availability of space and the instructor's permission. Requirements include in-class presentations, oral responses to seminar readings, a research paper and a conceptual model, exploring one canonical urban project, selected from a list provided by the instructor.

VIS1010HF & VIS1020HS - Luis Jacob & Charles Stankievehc

The MVS program for 2016-17 is programmed with a year long arc of research focusing on two case studies: Toronto and Montreal. The Fall looks at a specific city's cultural space as evolved over 50 or so years and is in conjunction with a survey exhibition at the Art Museum at the University of Toronto. The Spring looks at a specific city's cultural space at a single moment 50 years ago, Expo67. While the courses are designed as counterpoints, enrolment is separate.

**VIS1010HF: Contemporary Art Since 1960
Narrating Place in Toronto**

This course considers the various ways in which the identity of "place" is constructed in Toronto. We will explore the means by which the city is represented in art, film, literature and urbanism. We will also critically examine how questions of "place" enable an engagement with the contradictions of colonial, nationalist, regionalist and cosmopolitan frames of reference. The course is offered as a series of seminars, with assigned readings, research papers and presentations by students.

Enrolment: Mandatory for MVS 1st Year students. Non MVS students can enroll subject to approval by the MVS Program Director **Charles Stankievehc**
contact: charles.stankievehc@daniels.utoronto.ca

**VIS1020HS: Contemporary Art: Theory and Criticism
Montréal Expo67: Utopia on Fire**

This course coincides with Expo67's 50th anniversary to provide a case study of a single international event as it changed the cultural landscape of Canada. We will be looking at the architecture, exhibitions and events that brought Canada and Montreal to the world stage on the 100th anniversary of the nation's birth. As a seminar course, we will be looking at topics of colonialism, nation states, Avant Garde architecture & art, and the cultural theory of the time as it relates to contemporary questions of decolonization, international biennales, and the reworking of archives. There will be a research trip to Montreal for a site visit to the Expo grounds, research at the Canadian Centre for Architecture archives, and behind the scenes at the Musée des Art Contemporaine (MACM), who is producing an exhibition on Expo67. Course will require weekly readings responses, presentation and research paper.

Enrolment: Mandatory for MVS 1st Year students. Non MVS students can enroll subject to approval by the MVS Program Director **Charles Stankievehc**
contact: charles.stankievehc@daniels.utoronto.ca



Winter 2017 Elective Course Descriptions

ARC3304HS: Selected Topics in Architectural History and Theory - John Harwood

The Architecture of Transport

The history of architecture and urbanism is largely based upon the study of “objects”—e.g., monuments, buildings, works of infrastructure—rather than of “media.” This approach yields several advantages, not least the fact that it allows for the relatively simple classification of a *system of objects* as an orderly accounting that is clearly visible both in geographic space and in historical time. However, as with any such objective accounting, numerous aspects of architectural and engineering culture are occluded from view because they either do not produce objects or they operate in such a way as to frustrate our ability to identify things as objects.

This course will examine the rich but relatively sparse and rare architectural historical literature on transportation—including books and articles on naval architecture, road networks, bridges, railways, electric telecommunications, warehouses, mechanical services, and more—in order to explore more fully the possibilities inherent in an analysis of architecture and urbanism that privileges architecture’s status as a *medium* (i.e. its role as *logistical* machinery) over and against its role in producing putatively stable objects under the metaphysical auspices of aesthetics. In short, we will ask, “how and what does architecture move?”

ARC3305HS: Selected Topics in Architectural History and Theory - Hans Ibelings

Uncharted Territories: Iran



Gabriel Guevrekian, Palace of Justice, Tehran, 1938-1946

The subject of this seminar is twentieth century architecture and urban planning in Iran, which is still absent in the writing of global architectural history. In this regard, Iranian architecture is certainly not alone: there are many architectural cultures for which there seems to be no place yet in conventional architectural historiography.

This conventional historiography is still very much focused on what is commonly known as the West and if it takes anything else into account, it tends to categorize the other cardinal directions simply as the rest: the non-Western world. In recent years architectural history and criticism have rapidly become more inclusive, and more diverse. But the prevailing architectural discourses are still mainly based on a Western understanding of what architecture is. Even the postcolonial perspective, which is without doubt the most significant challenge of Western biases so far, is in its emphasis on everything non-Western very much determined by what it aims to avoid.

The central question in this seminar is if, and how, Iranian architecture since the end of the nineteenth century can be understood without reverting to Western presumptions about for instance modernism and modernity.

In this course students will collectively inventory and study architecture in Iran since the end of the nineteenth century. Individually they should write their own version of a chapter on Iran in the twentieth century for a future *Global History of Twentieth-Century Architecture*.

ARC3306HS: Selected Topics in Architectural History and Theory - Mary Lou Lobsinger

Histories and Theories: Architecture as Culture and Medium

This seminar begins with a challenge: despite all declarations, architecture is not post-theoretical, post-critical, or post-political. The rallying cries claiming that the design disciplines were too busy making and building to think about theory assumed that design activity does not involve thinking critically; and assumed that research and practice are activities segregated from theory making. Such a stance overlooks the fact that architecture, as a global spatial practice bound to the social, the technical, the economic and the political, can produce multiple registers of theoretical activity through varied forms of engagement.

Rather than attempt to resuscitate the significance of theory, this seminar will engage an oblique strategy. The seminar begins with a moment, the mid-20th century when architecture turned to cultural forms of the historical avant-garde and turned away from the speculative possibilities of electronic media, the idea of environment, and computer technologies. This historical turn (by figures as varied as Rossi, Koolhaas, or Branzi) gave architects a comfortable set of analytical terms and compositional strategies; while speculation about the future of new technologies seemed to lead away from architecture as a discipline (Price, the Cambridge Group). Can this foundational distinction be reconfigured? What happened to the abandoned paths of theory? Can we now think architecture as cultural form and as medium?

This seminar will draw upon a variety of interpretative methods, including media archaeology, cultural techniques, art and architectural history -- in the effort to examine the possibilities of theory's history for contemporary architecture. The seminar will be composed of lectures, discussions of assigned materials, an individual research presentation and a final project.

Students who have a design project or inquiry in mind are welcome to bring these to the seminar as the base material from which to pursue an individual term project.



The course welcomes students from all design programs. For more information contact marylou.lobsinger@daniels.utoronto.ca.

ARC3307HS: Selected Topics in Architectural History and Theory - Susanna Santala

The City Hall



Viljo Revell, Toronto City Hall (1958-1965) during opening ceremonies in 1965.

How were citizens defined in the discourses of modern architecture and how was this reflected in the status, aims and use of civic building in general and the city hall in particular? Taking Toronto's City Hall as the point of departure, this seminar explores the genealogies and imaginaries of the modern city hall. We view this civic center as a curious hybrid: it is simultaneously an assembly hall, office building, archive and public square. We ask how Toronto was modernized in the twentieth century, what was displaced by the City Hall, and how were Torontonians imagining themselves through this building project? What was the impact the international design competition organized for the Toronto City Hall had on the debates concerning the role of competitions in commissioning public buildings and the acceptance of modernist architecture as an appropriate style for civic projects in Canada? What is architecture's communicative role in the construction of collective identity?

To answer these and other questions, we use the Science and Technology Studies theoretical lens to describe the design process of this technologically advanced building as a network of politically, economically and socially motivated actors. Discussing the traditional histories of modern architecture, we examine the status assigned to the assembly hall as one of the seminal modern building types and discuss its relation to the emerging definition of the modern citizen. Drawing on studies of governmentality, we analyze the citizen within the structures of power and governance of the modern welfare state. Relating the Toronto City Hall to other assembly halls constructed in the postwar years, we view this civic complex, designed by Finnish architect Viljo Revell, as an important node in the international networks of modernity. Through it we examine how the architecture of the assembly hall was taking shape in the architectural debates. Specifically we focus on debates concerning the construction of the welfare state, the aesthetics of new monumentality, and the hybridizing idiom of modern architecture that aimed to represent citizens in as varied and geographically marginalized locations as Säynätsalo in Finland, Chandigarh in India and Brasilia in Brazil. Using these and other examples, we examine how in the postwar years the traditional centers of modern architecture were defining the margins to a lesser extent than the marginalized locations were defining the center. It is these influxes from the margins to the center that we will follow in discussing the architecture of the assembly hall.

In this seminar, students are asked to examine a city hall, assembly building or civic architecture project of their choice and contextualize it in the postwar architecture culture. Students will engage in presentations and write final papers to analyze how architecture has represented citizens and how it may in the future communicate shared values in order to construct communities and collective identities.

ARC3400HS: Selected Topics in Architecture and Technology - Ted Kesik

Wood-Frame Construction Technology

This is a practical, introductory-level course aimed at providing students with an understanding of wood-frame construction technology within the context of the Canadian housing industry. The course examines wood-frame construction technology within the scope of residential and small buildings. It explores the various technical elements of residential buildings from foundations through to finished exteriors and interiors. In addition to reviewing conventional wood-frame house construction, the course will also review advanced framing, structural insulated panels (SIPs) and engineered wood products such as cross-laminated timber (CLT). Students will be given the opportunity to apply the requirements of the Ontario Building Code to gain proficiency in sizing structural elements and detailing the building enclosure. The course will conclude with a survey of contemporary wood-frame construction technology, innovations and trends. NOTE: This course is not suitable to students looking for advanced level studies in wood-frame construction technology.

This course is intended to provide students with the opportunity to engage the following learning objectives:

1. Gain an understanding of the numerous applications of wood-frame construction technology in building design.
2. Become fluent in the various methods and materials of wood-frame construction technology;
3. Cite the relevant codes and standards, including better practices;
4. Develop the ability to render a set of drawings and specifications for small-scale wood-frame building projects; and
5. Establish a framework for future exploration, research and study of wood-frame construction technology.



ARC3401HS: Selected Topics in Architecture and Technology - Shane Williamson

Working Out from the Center: Investigations in Wood Fabrication



Student Work: Justin Smith

With the advent of digital tools and fabrication methods, we are experiencing an unparalleled approach to the means by which wood can be shaped, formed, and deployed in architecture. Through a series of lectures, site/shop visits, and hands-on workshops, this course will investigate fabrication in wood construction ranging in scale from buildings to furniture. Students will be asked to produce a series of iterative studies in wood utilizing both digital and traditional tools, with a focus upon tactility, joinery, and the vestigial artifacts of subtractive CNC machining. We will be working from both historical precedent as well as more recent studies that have engaged the possibilities and limitations of digital fabrication. Although our studies will be modest and intimate in scale, they will be directly informed by a broader discussion of tectonics in architecture.

No prior woodshop or fabrication experience is required but it is anticipated that students will have a sincere interest in making physical artifacts. It is also anticipated that students will have a basic understanding of surface modeling in Rhino that will complement the introduction of various modeling and fabrication strategies introduced by this course.

Prerequisite: ARC 2023H: Intermediate Computer Applications; for students outside of the program, permission of the instructor.

ARC3500HS: Selected Topics in Sustainable Design - Marianne Touchie

Heating, Ventilating and Air Conditioning (HVAC)

Residential and industrial buildings require heating, ventilating, and air conditioning systems in order to provide a comfortable living and working environment. This course is designed to explore the fundamentals of HVAC systems. The first step to achieve this goal is to understand the Psychrometrics

which deals with the properties of moist air and how it responds to different air conditioning processes. In the next step, some of the common elements of HVAC systems are studied, followed by air quality requirements including thermal comfort, physiological considerations and environmental indices. The last step is the estimation of a building's heat gain and loss through heat transmission in building structure as well as solar radiation, and overall heat transfer coefficient. Having access to this data, space heat loads, cooling loads, and energy cost calculations can be conducted.

ARC3703HS: Selected Topics in Architecture - Jonathan Enns

Towards Design Automation System Aesthetics & End User Development



1

Our sister design industries (interaction, experience, industrial, environments) today produce products through the design of systems rather than singular objects. Built from webs of adaptable relations, these systems have tended to place the user at the centre of their alibi for form making –enabling non-experts to control outcomes through ‘end user development’. We are familiar with these products – the spreadsheet, squarespace, and CAD are common examples.


Of course the material nature of architecture is different – but what’s at stake in ‘end user development’ for architects? Do users have a direct role in design, or is interpretation by the architect necessary for ‘capital A’ architecture? This course will discuss the issues of authorship and control through the study

of both the material and virtual technologies involved in the race towards increasing user participation in architecture.

Over the course of the semester we will analyze examples of systems-oriented projects. We will look at their material capacities and study their interfaces. We will position this work on an arc (extending as far back as Durand) that seems to be moving towards total project automation. Could it be that interfaces for end user engagement will replace the architect altogether at some point in the 21st century?

You will study the material and virtual systems employed by precedent work using advanced digital tools in attempts to find new potentials & relevance today. Over the semester you will be required to employ equal measures of design and analysis. Each week will consist of a reading discussion and precedent project presentation. Students will employ research documentation skills for an analytical midterm, then advanced digital tools for a final project proposal. Knowledge of Adobe Suite and Grasshopper is required with a focus on Kangaroo 2.0 and solid body simulation.

Email me ahead of time for prep materials: jonathan.enns@utoronto.ca

 Ken Isaacs, Living Structures

ARC3704HS: Selected Topics in Architecture - Brigitte Shim

Embedded Light: Illusion and Tectonics



Physical study model – partial building section used to examine light conditions for sacred space. Congregation Bet Ha'am, Portland Maine by Shim-Sutcliffe.

This elective course explores the fundamental role that natural light plays in shaping and defining architectural space. Light in architecture is defined by its latitude, its seasonality, the earth's curvature, cultural norms as well as the architect's skill manipulating, editing out or amplifying this valuable and often untapped natural resource. Nature's gift of natural daylight when used with artistry and precision has the potential to transform ordinary spaces and link them powerfully to the human condition.

The interrelationship between the illusion of light and the tectonics of light will be unpacked and interrogated in this elective course. Students will be asked to select a building or space in the city and document it from day to night. This will be followed by a lighting case study where students will select from a list of significant spaces. Each student will build a physical model of an appropriate portion of their space and will study the illusion of light and the tectonics of light in their chosen space. Students will use sketches, drawings, photography along with digital tools to fully examine the role of natural light in their space.

LAN2201HS: Landscape Architecture Topics: Design - Rob Wright

“Really, Really Cheap Landscapes!”: Designing, Detailing and Making

“Design is built theory...we all have good ideas but unless we can put them in the ground, our ideas don't count “

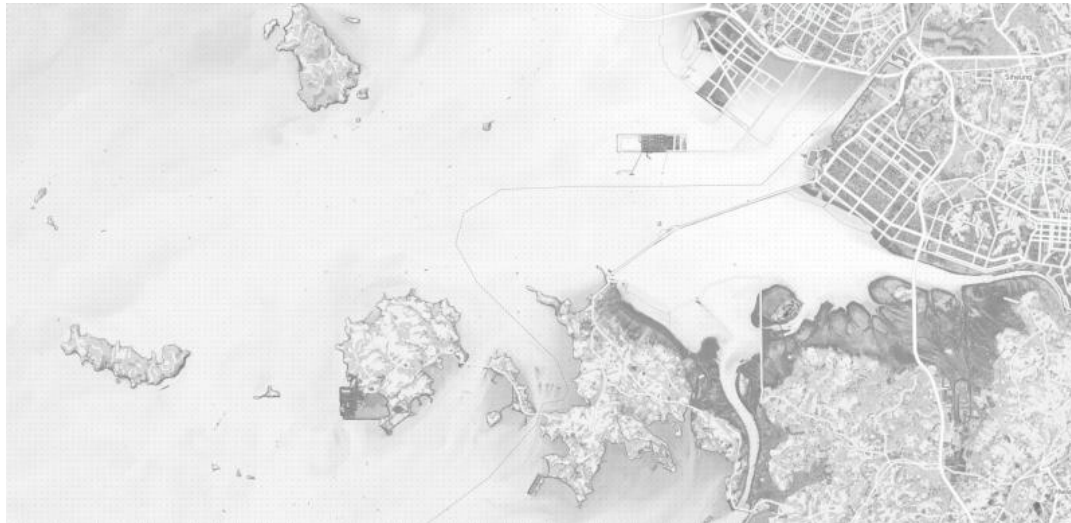
The day to day reality that every designer faces is how do we implement, and construct our designs in creative, effective and efficient ways. In a world where “value engineering” and cost cutting is a constant issue, where long term design durability and maintenance are ignored; how do we navigate the construction of our ideas?

Creative design detailing is a critical skill. This design elective focused on understanding the challenges and skills sets required for creative design detailing, Students will learn to perform “forensic audits” of failed details and will learn the skill sets required in detailing, considering materials, connection, jointing, component aggregation and cost implications to create cost effective and innovative details.

Is God or the Devil in the Details?

LAN2700HS: Landscape Architecture Topics: Society - Fadi Masoud

Terra-Sorta-Firma: Urbanism on Reclaimed Land



Songdo Incheon - Korea from Developing the Littoral Gradient Atlas (Masoud / Ryan - 2016)

40 billion tons of sand a year goes into urban development, twice the amount of sediment carried by all the worlds' rivers combined. In large quantities, sand can be engineered into the most fundamental of all infrastructures - land itself. In a time where coastal conditions, associated activities, and abutting settlements are especially vulnerable to variable environmental forces, the process of land reclamation for urban development has acquired an unprecedented capriciousness. Half of the world's population lives within a 100 km of a coastline. Where the demand for additional land for real estate is becoming steadily more acute, expansion through land reclamation has been the preferred solution. The process of creating new land from oceans, riverbeds, or lakebeds by importing rock, sand, cement and gravel

has been a part of urban expansion and transformation ever since the 16th century. At times it was deemed necessary and systematically linked to broader hydrological and infrastructural networks, in other cases it is a speculative real-estate practice that results in outlandish formal schemes.

This course aims to establish a link between coastal urban expansion and the physical terrain it occupies. By associating the act of artificial “land creation” (terra-forming, land-reclamation), larger indeterministic environmental forces at play (erosion, waves, wind, currents..etc.), and city building (provision of infrastructure, buildings, open space.. etc.), we diametrically impart the relationship between landscape and urbanism.

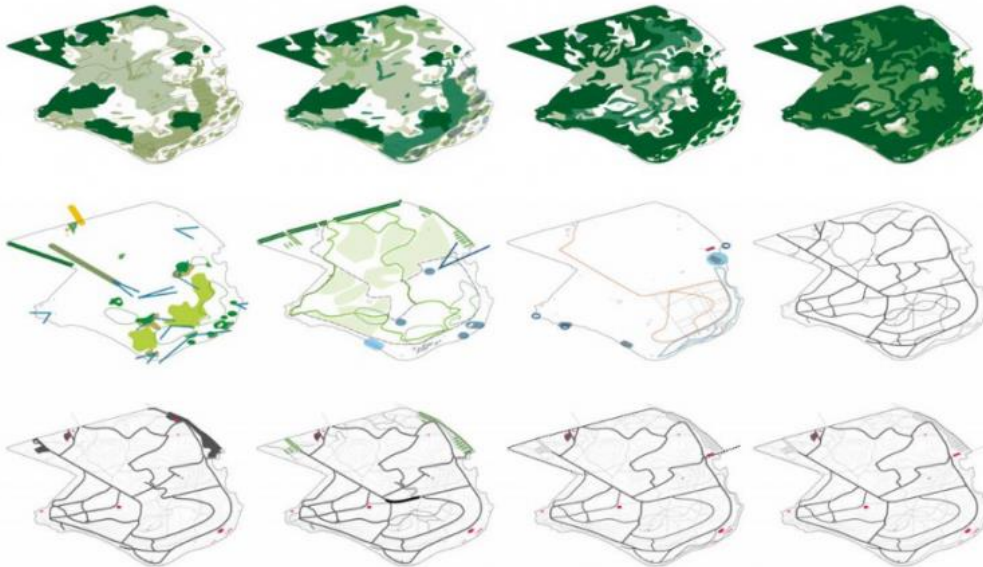
Globally, the success of projects on reclaimed land has proven to be variable. In some places the cost of reclamation has not added up to the value of the original master plan, leaving behind acres of undeveloped plots. In other cases the success has increased the value of properties resulting in exclusive development projects that limit affordability and diversity of form. In both instances, increased exposure to the sea’s variability, the rising stock of the construction material, and the cost of the maintenance of artificial terrains, is putting into question the value of these developments and the process of land reclamation itself.

Through research, drawing, and modeling, we will assess and evaluate the “sustainability”, “resiliency”, durability, and robustness of select global projects built on reclaimed land. We will explore urban districts such the Back Bay Fens in Boston, Flamengo Park in Rio, Battery Park in New York, Darling Harbour in Sydney, Jurong Island in Singapore, Fukaehamamachi in Osaka, Silvertown in East London, Flevopolder and Beemster in The Netherlands, The Spartly Islands in the South China Sea, Yas and Palm Islands in the UAE, Songdo Incheon in South Korea, and the East Bayfront and Lower Donlands in Toronto, among others.

Over the span of the semester, students will document the development and evolution of a project / district; illustrating the progression of each site from its current condition to its original hydrological state. Students will then forecast, depict, and animate various environmental forces (sea level rise, wave action, currents, erosion, wind...etc.) affecting their chosen sites. The research should yield various quantitative and qualitative matrices and indices to assess the quality, value, and durability of each project. These indices will then illustrate the cultural, economic, ecological, and structural significances of their districts over time. While proposals for “resilient” coastal planning and design are plentiful, this course ultimately looks at land reclamation as an untapped lens for developing novel forms of coastal urbanization in the future.



LAN2900HS: Landscape Architecture Topics: Theory - Alissa North



North Design Office, Phasing Diagram, Point Pleasant Park International Design Competition, 2005

This lecture and seminar course investigates contemporary landscape architectural theory through the lens of design competitions. Structured around the rich theoretical discourse of design proposals for prominent Canadian landscape competitions, the classes will examine the important submissions, with the aim to understand how designers position their proposals to interact with and influence urban conditions. Readings, presenting multiple attitudes toward nature, will encourage students to formulate their own positions and design sensibilities within the theory and practice of landscape architecture.

URD1022HS: Topics in Computer-Aided Design - Ultan Byrne

CODE-LAW-FORM: Computable Regulations for the Built Environment

one day humanity will play with law just as children play with disused objects, not in order to restore them to their canonical use but to free them from it for good

- Giorgio Agamben, reflecting on Walter Benjamin's "Critique of Violence"

1. The pace of technological development has brought about numerous societal tensions between the new capabilities available and the regulatory tools in place to manage their impact. At the close of the 20th Century, this situation manifested itself unavoidably in the domains of personal privacy and intellectual property law because of the digital sharing made possible by the Internet. Since then, as the effects of new algorithms and devices have increasingly permeated the physical space of cities, the tensions have only become more pervasive. Witness, as current examples, the debates over regulation of the "gig economies" of über and AirBnB. On the

horizon, we can anticipate still more fundamental legal implications emerging from the widespread adoption of technologies such as autonomous automobiles^[1] and unmanned aircraft delivery services^[2].

2. Not only do new technologies seem to achieve ubiquity before regulations can be developed, but perhaps more significantly, legal scholars have begun to acknowledge that these algorithms and codes enact a kind of regulative function on their users and on the physical and digital spaces of our cities^[3].
3. What opportunities exist within this 'law-like' aspect of computer code? In what ways could a new regulatory instrument governing land-use and spatial planning be built from code? How could it change the process of contemporary urban development – possibly tempering the forces of (a) optimization embedded in new logistical systems and (b) short term profit motivations of large property development firms by (c) opening up a new stage for the collective imaginings of the city's many residents?
4. In this course we will begin to develop an experimental computable law tool and – using Toronto as a reference – we will speculate and test its potential influence on the future form and configuration of the built environment.
5. The course will be split into two portions:
 - a. First, we will develop a toolkit of regulations by researching the kinds of land-use laws that have been applied in a variety of historical and cultural contexts. Examples of potential studies include the 'right to light' in London, Harry Chaddick's "Economic Compatibility" zoning in Chicago, etc. Research will be collected in the form of primary documents (Court Case Briefs, City Planning Documents...) with special attention paid to the kinds of media employed (textual, cartographic, numerical chart...) and the social values that were thought to be protected or encouraged.
 - b. Second, we will work together to translate this toolkit into a set of relational-CAD-models and assemble these models into a single speculative instrument. This translation will involve identifying key variables and constraints in order to define a range of possible implementations for each regulation, establishing a "parameter space" of possible urbanisms.
6. Above all else, students should enroll in this course if they are prepared to enthusiastically participate in the development of both a theoretical framework and practical toolset for code-law-form. Having said that, a strong foundation in either Processing or Grasshopper will be an asset. Students lacking these capacities will be expected to develop them by working extra-diligently during technical workshop sessions spread through the semester. Students should enroll if they are interested in: tool-making as a category of design agency, the relationship between regulation and built form, the influence of contemporary technologies on urban development, and related questions. Students in thesis and research studios are particularly encouraged to enroll if this course description synchronizes with aspects of their research.

Some questions that it might interest you to consider over the course of the semester:
How can computable regulations,

- allow us to visualize the outcomes of planning decisions with specificity for any given site or region, rather than relying on abstractions or isolated case studies?
- enable new kinds of representation and dialogue for neighborhood groups and individual citizens to engage with the future development of their city?
- be used to manage the effects of new technologies on the built environment by adapting more quickly to changes than conventional regulations?
- be employed to rethink the relationship between human and non-human occupants of the city, and the status of the latter in planning law?
- provide an interface between the built environment and ecological systems and enable new kinds of urban resilience?

- respond to the demand for “certainty outcomes” in land-use law as defined by Justice Shaw in *commonwealth v. Alger*, 1851?
- respond to the premise of “rationality” mentioned in *Euclid v. Ambler*, 1926?
- respond to the question of the final objectives of land-use regulation – as in for example *Nectow v. City of Cambridge*, 1928: are they only about promoting health and safety, or should their scope include an orientation towards a concept of the good (or even ideal) city?
- avoid reductionism, instrumentalization, and technocracy in favor of open-endedness, play, and broad engagement?

[1] Smith, Bryant Walker. *Automated and Autonomous Driving: Regulation Under Uncertainty* – White Paper, 2015.

[2] “Small Unmanned Aircraft Notice of Proposed Rule-making” – Federal Aviation Administration, 2015.

[3] See for example, Lessig, Lawrence. *Code, and Other Laws of Cyberspace*. Basic Books, 1999.

URD1501HS: Selected Topics in Urban Design - David Lieberman

Global Urbanisms

The seminar arises from a series of pre conditions or assumptions, conditions that welcome challenge and are set as provocations to speculative thought:

- *The necessity of cities is the necessity of a place in which to exchange ideas.*
- *In the age of the Anthropocene, we are confronted with increased urbanization, environmental and climatic changes that demand an active responsibility of invention and innovation beyond sustainability considering resilience as an opportunity for the new and unprecedented, rather than a return to that which we think we know or knew.*
- *The distinctions of public and private and the conventional accepted borders, boundaries, and conditions in terms of property ownership, occupancy, and tenancy are no longer valid for the individual, the community, the region, or the nation. It is a global economy and a global challenge.*
- *The spaces of the City are the spaces of the individual, spaces of intimacy, solace and refuge and the spaces of the collective, spaces of gathering and congregation.*

D AN IELS



Photograph Daniel Vivat

The study of urban design and the development of strategies and policies has been prioritized by Western thought, rooted in the traditions of European models and crystallized and or formalized through American scholarly discourse. The seminar will interrogate late twentieth century urban critiques through the intellectual philosophers of French thought including *Henri LeFebvre*, *Jacques Ranciere*, and *Paul Virilio* furthered by the more recent works of American scholars *Frederic Jameson*, *Saskia Sassen*, *David Harvey*, *Wendy Brown*, and *Judith Butler*.

Gender, ethnicity, and cultural traditions suggest that a global discourse will evolve a set of spatial understandings unlike that which we have come to accept as familiar. In seeking the utopian and the constructed landscapes of cities of possible futures, *kunstlandschaften*, we must look to science and to fiction, cognisant of the history of many cultures from disparate parts of the world, parts unfamiliar and unknowing of each other's social morays and spatial distinctions, and traditions of space making to make possible varieties of engagement and collective political action.

Films will be used as the lens to appreciate, investigate and engage different cultures. Arguably, the twenty first century is a post cinematic culture in which we most effectively learn from the cacophonous barrage of light and sound, and of constant movement at different speeds. It is the conditions of abrasion and friction that create moments of pause rather than stasis. Invited guests will present cities and traditions from around the world.

The critical discussions of seminar will arise from the films and film clips, and from the guests' presentations. In the first couple of weeks, subject to enrolment, the assignment for the term will be agreed upon: a paper including both written and visual texts clearly identifying the compositional strategies and conceptual underpinnings of a selected, preferably non European, ethnic or cultural tradition; alternately, to take a City such as Beirut and to as a group, appreciate the layers of history and of conflict over 3500 years of change and of difference as a model for reference and a site for an as yet unprecedented urbanism.

"THE SHAPE OF A CITY, as we all know changes more rapidly than the heart of a mortal."

Charles Baudelaire as quoted by Julien Gracq

URD1502HS: Selected Topics in Urban Design - Michael Piper & Mona el-Khafif

Operative Analysis: Design Oriented Analytics for Contemporary Cities

Topic: Parking Lots to Parks

Urban analysis is a seemingly objective process of observing and describing cities as they currently exist. However, the choice of what conditions to observe, the selection of parameters for analysis, and the choices for how to represent the findings are inherently subjective processes. From this perspective, there is an artful intention to how urbanists understand and describe the city. In this sense - and particularly for designers - analysis is always operative, or directed toward desired ends.

This seminar will explore how methods of mapping, diagramming and data analysis - as an art and set of practices - relate to techniques of design. We will introduce traditional and contemporary techniques of urban analysis, including ArcGIS software and remote sensing technology, in order to understand the spatial effects and challenges of contemporary urbanization. The creation of analytical techniques—developed through maps, city indexes, infographics and other forms of visual documentation—will be supported by the study of contemporary urban theory. The class will investigate methods used James Corner, Raoul Bunschoten, Carol Burns, and Atelier Bow Wow among others.

Aside of mapping as a form of operational analysis the class will use Toronto's urbanization process as a site and thematic umbrella. Responding to rapid urban development in the downtown core, and parallel underdevelopment of open public and green spaces; this seminar will explore a proposed idea to transform existing municipal parking lots into open public space, or parks. We will study precedents for such transformations of parking lots, and consider more generally their spatial and social dimensions. Through mapping, students will investigate issues of adjacency, existing open spaces, population density and demographics. From this study, they will further develop techniques of typological analysis, and qualitative description of selected sites. The class will include a series of workshops introducing ArcGIS software, mapping techniques, and typological analysis.** In cooperation with the University of Virginia, who started to work on this topic this fall semester, we will compile this analysis and research into a booklet to be shared with relevant city agencies and for public view.

**Note: The GIS workshops, normally in the space of four class periods, will be compressed into one weekend. The workshop sessions will take place on Feb 4-5, 2017 (Sat-Sun). Students will therefore have the corresponding four class periods free during the semester, the dates of which will be detailed in the class syllabus.

VIS1020HS: Contemporary Art: Theory and Criticism - Charles Stankieveh

The MVS program for 2016-17 is programmed with a year long arc of research focusing on two case studies: Toronto and Montreal. The Fall looked at a specific city's cultural space as evolved over 50 or so years and was in conjunction with a survey exhibition at the Art Museum at the University of Toronto. The Spring looks at a specific city's cultural space at a single moment 50 years ago, Expo67. While the courses are designed as counterpoints, enrolment is separate.



VIS1020HS: Contemporary Art: Theory and Criticism
Montréal Expo67: Utopia on Fire

This course coincides with Expo67's 50th anniversary to provide a case study of a single international event as it changed the cultural landscape of Canada. We will be looking at the architecture, exhibitions and events that brought Canada and Montreal to the world stage on the 100th anniversary of the nation's birth. As a seminar course, we will be looking at topics of colonialism, nation states, Avant Garde architecture & art, and the cultural theory of the time as it relates to contemporary questions of decolonization, international biennales, and the reworking of archives. There will be a research trip to Montreal for a site visit to the Expo grounds, research at the Canadian Centre for Architecture archives, and behind the scenes at the Musée des Art Contemporaine (MACM), who is producing an exhibition on Expo67. Course will require weekly readings responses, presentation and research paper.

Enrolment: Mandatory for MVS 1st Year students. Non MVS students can enroll subject to approval by the MVS Program Director **Charles Stankieveh**
contact: charles.stankieveh@daniels.utoronto.ca



Fall 2016 Option Studio Course Descriptions

ARC3015YF LEC0101: Architectural Design Studio 5 - Mason White

Three Dualisms



Yellowknife, Northwest Territories

This option studio will consider three dualisms: (1) contemporary with traditional; (2) architecture with landscape; (3) part with whole

Through these, we will pursue the possibilities of a contemporary traditional architecture, a proto-vernacular. The context of Yellowknife, Northwest Territories will serve as a site, a place where cultures and traditions come together in a complex way. Today, Northwest Territories is comprised of 50% Aboriginal people with Yellowknife as the highest territorial concentration of First Nations, Metis, and Inuit residents in the small city of just 20,000. Historically, architecture has not served Canada's Aboriginal people well. Inadequate models of architecture have been imported often leading to a subtle colonizing impact. The studio seeks an architecture that is culturally grounded, yet resists nostalgia.

These questions will be examined through the lens of health and wellbeing, toward the development of an Aboriginal Wellness Centre. The Stanton Territorial Health Authority, an existing health network in NWT currently under renewal, will form the basis by which to develop a design response. In addition to the provocation of "contemporary traditional," we will also consider the relationship of part to whole through the design of a facility supporting health and wellness for Aboriginal peoples throughout NWT. This will involve recognizing the challenge of health access and delivery for a dispersed population with minimal infrastructure. In addition, an architecture with integrated relationships to land, seasonality, and

territory are essential in this cultural climate. Questions of complementary programs that support a broad notion of wellness will also be considered. For many Indigenous peoples, urbanism is almost antithetical to cultural wellbeing, presenting a fundamental conundrum to architecture's agency in this context.

The studio will begin with collective research, then leading to the development of an individual design project. The studio will work across scales, from the scale of community to building and material investigations. There will be an optional trip to Yellowknife to visit project sites and meet with stakeholders including Dene leaders, the Government of Northwest Territories Department of Health and Social Services, and the Institute for Circumpolar Health Research.

ARC3015YF LEC0102: Architectural Design Studio 5 - Laura Miller

Lost Toronto Found



Toronto is being transformed by a rash of new construction projects. Alongside the appearance of cranes and the numerous new, gleaming condo towers that soon follow, another transformation is

occurring that is all but invisible: the discovery and excavation of thousands of artifacts of cultural and historical significance, culled from these construction sites. Hidden for many years beneath the surface of the city, they have recently been unearthed due to the construction boom. Newly found, these artifacts are in danger of being lost again. Toronto's emerging modern landscape has literally exposed the city's past, and raised questions about how to curate and safeguard the city's histories and artifacts.

The artifacts and histories being unearthed reveal earlier lives of the city and of its former occupants, and, importantly, the lives of indigenous peoples during 'pre-contact' times within the geographic region that includes what is now Toronto. The implements of daily life, from buttons to combs, arrowheads to tools, as well as evidence of various sites of occupation and earlier buildings important to the historic civic and commercial life of the city have been found. This rich material evidence is a testament to the cultural legacies of diverse earlier peoples and different time periods. These artifacts are part of our larger collective cultural heritage.

Given the importance of this heritage, it is curious then, to discover that there are over 20,000 boxes of artifacts unearthed in archeological excavations from throughout the city that currently are being informally stored in garages and basements of archeologists. This is because there are not enough storage facilities to hold them. Some artifacts are not yet catalogued, and this, combined with their being in private hands makes them inaccessible to public access and study. They are in danger of being lost or simply forgotten over time. Unlike other major cities, Toronto does not have an archeological museum where artifacts from its past can be safely stored, assessed and presented to the public for educational and artistic enrichment.

This studio will address the absence of an institution and facility dedicated to archiving and curating, and raising consciousness about Toronto's built histories. We will propose a new Centre for the Material Histories of Toronto, consisting of not only storage and exhibition spaces, but as is increasingly common in projects with a cultural focus, an additional program (office and/or housing) that will help offset the development costs for the Centre. The project site is itself a site of 'archaeological potential' according to the City's Planning Office, part of what will soon be the newly-available parcels near the lakefront created by the future reconfiguration of the Gardner Expressway off-ramp (known as the Hybrid 3 Option). The focus of the studio will be on designing a developed work of architecture (building or complex of buildings) for the Centre for the Material Histories of Toronto.

The studio group will meet with professional and academic archaeologists to discuss our project and learn more about the archeological surveying of urban sites. The studio will host guest talks by several archaeologists who will share their knowledge of that discipline's techniques and practices. We will visit an archaeological site in the city to see how it is investigated. There is the possibility of two studio trips, which will be discussed with the studio group at our first meeting. 1) A trip to Montreal, to visit the Pointe-à-Callière, Montreal's Museum of Archeology and History; 2) a visit to Sustainable Archaeology Facilities at Western University (London) and McMaster (Hamilton).



ARC3015YF LEC0103: Architectural Design Studio 5 - Stephen Verderber

Architecture, Landscape Therapeutics, and Health



The Context: Due to their size and complexity, most healthcare environments are virtual islands, disconnected from their surroundings amid a sea of urbanity. This condition denies genuine connectivity with green spaces that could otherwise aid therapeutically in healing patients and improving the day-to-day experience of families and staff. The presence of green space interwoven holds the power to improve occupants' morale, attitude, and overall disposition. Too often, hospital exteriors appear fortress-like, uninviting. This occurs both by design as much as by default, resulting from ineffective or insensitive campus master planning and from over-expansion, often, across decades. The immense megahospitals of the late 20th century were conceived and built in a manner that isolated patients from the natural environment. These complex structures cut building occupants off from the therapeutic affordances of natural daylight and ventilation, and from the many benefits of landscapes and gardens. A growing body of empirical research evidence strongly suggests that patients, visitors and staff experience environmentally induced stress in sensory-deprived architectural settings due to one's lack of control, combined with and insufficient connectivity with the exterior world. These adverse outcomes are associated with a lack of engagement with nature in healthcare facilities.

Salutogenic Environments: Poorly designed healthcare environment consume valuable former open green space, including gardens, lawns, and open vistas, and destroy once-interesting views. In the

most unfortunate cases, successive waves of expansion result in windows and views overlooking nearby walls, and parking decks. Such conditions are counterintuitive and counter-therapeutic to the ideals of a physical, salutogenic-healing environment that would otherwise aim to celebrate and promote the presence of nature. A major shift is underway in the healthcare campus planning and landscape architecture discourse. This movement rejects excessive hospital campus densification, not unlike excessive suburban sprawl. This movement draws upon 19th century precedents, and holds the promise of healthier *places* than at present.

The Thesis: I coined in 2010 the interdisciplinary concept of *theraserialization* to define a hybrid assemblage of the terms ‘therapeutic’ and ‘serialize.’ This concept provides a promising ‘best practices’ alternative to the status quo. It defines a continuum of indoor to outdoor space consciously designed in support of biophilic environmental design principles. It is about creating spaces that are consciously serialized in function and with regards to their sensory and cognitive affordances—by means of layering, collage, superimposition, and genuine transparency.

It is about the provision of sequenced spaces from the most highly public areas such as parking and main entrance approaches, to the interior main arrival lobby, to corridors throughout the entire facility that open up to and from corridors, gardens, and which afford views outward from semi-private spaces—and ultimately the quasi-private aesthetic realm of the inpatient room. The aim of this studio will therefore be to explore the functions of design in eradicating counter-therapeutic spatial conditions with regards to patients and families and staff, to foster more direct, sustained involvement with nature as a means to reduce stress and fatigue. In this studio, landscape architecture students will collaborate with architecture students throughout the term.

Learning from CAMH: The Centre for Addiction and Mental Health has its origins in the Provincial Lunatic Asylum that opened on Queen West Street in January of 1850. In the intervening decades CAMH and its predecessor institutions have sought to meet the mental health needs of a continually growing urban area and region. The organization is committed to remaining at its Queen West campus and is in the midst of a comprehensive, phased redevelopment initiative that is to be completed in about 2020. In addition, CAMH operates a state of the art outpatient clinic in Liberty Village. We will learn from CAMH’s past and its present facilities, drawing from its history, as a case study. To do this we will analyze its future goals for the main campus, the campus on College Street, and the Liberty Village clinic.

Studio Structure: The course will consist of two phases:

- A literature review on the topic of environments for mental health. Simultaneously, we will be interacting with CAMH staff, learning about the organization’s history, and learning about its current facilities with the aim of critiquing its master planning process together with recently completed buildings (Weeks 1-3). This will occur in tandem with precedent analysis, internal functionality studies, and a site analysis workshop.
- *Architecture for mental health* will be explored, based on the design of a 24/7 care and treatment environment that challenges the status quo regarding this rapidly evolving building type. A comparative site analysis/selection process will (at this point your site is to have been selected—Week 4) be followed by the design of a 25-bed inpatient/outpatient mental health centre (Design Phase—Week 4 to end of term).

Testable Hypotheses: Theraserialization is expressed as a continuum of landscape-to architecture (and vice versa) fluidity. Transparency, as examined by architecture theorists, denotes continuous spatial sequencing, the blurring of demarcations between interior and exterior realms. Twelve hypotheses, or design considerations, will be ‘road tested.’ Each is derived from recent research, including a recent study of hospital outdoor environments. Collectively, they express a conceptualization of salutogenic space, i.e. to at once ‘be therapeutic’ and ‘to serialize’ within a continuum. Baseline hypotheses are: hierarchy of landscape realms, courtyards that breathe, vertical cutouts and hanging gardens, positive outdoor spaces, micro-landscapes along *light wings*, cascading

roof terraces, transparent movement arteries, landscaped arrival zones, dematerialized boundaries, atrium gardens and green lightwells, half-hidden gardens, and framed views of nature. The studio's activities will be reinforced and supplemented by field trips and interesting historical and contemporary readings.

ARC3015YF LEC0104: Architectural Design Studio 5 - Mark Lee & Sharon Johnston

**THE TOWER IN THE HYPOSTYLE CITY
(OR LATE LATE ENTRIES TO THE CHICAGO TRIBUNE TOWER COMPETITION)**

Mark Lee / Sharon Johnston - **Frank Gehry International Visiting Chair in Architectural Design**
Please note this studio will follow an irregular schedule. More details will be provided in the Sept. 7th presentation and course syllabus.

The studio will investigate the urban model of the detached, object-oriented city through the design of a high-rise office tower based on the criteria the International Competition for a New Administration Building for the Chicago Tribune of 1922.

While recent research in design has generated a set of theoretical inquiries into the dissolution of boundaries; this trajectory is being countered by the opposite phenomenon of privatized, isolated programs. Rather than viewing such autonomous and detached monocultures as fissures within the inclusive mentality of globalization, the studio will embrace these organizational models as opportunities to promote another form of connectivity through the precise demarcation and delineation of borders.

The high-rise tower will be utilized as the primary building type to investigate the model of the detached city. Although assembly techniques in high-rises have been evolving steadily, the programmatic effects caused by economics, zoning regulations, cultural identities, and geographies has been developing in a state of flux. These two trajectories propagate two design predilections. The first adheres to the efficiencies gained from repetition and interchangeability. The second relies on the idiosyncrasies gained from simulation and dynamics. In seeking to explore a third, alternative model; the studio proposes the exacerbation of extrusion for the base, the shaft, and the capital - the traditional components the high-rise tower type and classical column, privileging the investment of design energy on the plan over the section.

The studio will begin by conducting research on the Chicago Competition of 1922, the Late Entries of 1980, as well as built and speculative precedents of tower types. With this initial research, each student will proceed to design an office building equivalent to the Tribune Tower to be situated collectively on a speculative site. Throughout the semester, the individual towers will be periodically reinserted into the site at different stages of development to inform the overall form of the Hypostyle City – a collective urban form of detached towers.

LAN3016Y LEC0101: Design Studio Options - Alissa North

TORONTO RAVINE RE-CREATE



Rivers are dynamic systems. Temporal river changes are crucial considerations of river conditions. What if Toronto's ravines were thought of as a system of flows, rather than delimited non-dimensional green shapes on maps? How would their relationship with the city change? Could they productively erode and deposit, change shape, or even spread? How could the city's ravines be imaginatively visualized to ignite new perceptions, understandings, and interactions?

In early 2015, various City of Toronto divisions, along with the TRCA began consultation with the public and a wide range of stakeholders to develop a Toronto Ravine Strategy. Currently, the city has developed a *Toronto Ravine Strategy: Draft Principles and Actions* document, which it intends to form into a full document in the coming year. The students in this Option Studio will work collaboratively with The City of Toronto to help envision and develop innovative design ideas for Toronto's ravines.

With the overriding idea that rivers are dynamic systems, studio participants will be asked to imagine and represent the pressing issues within the ravine in new and novel ways. Always thinking about how the ravine can accommodate change, the studio intends to imagine new methods for mutual and optimal productivity between the ravines and the city. Studio members will be guided through a series of design projects at various scales with this larger goal in mind, but based on their own interests will outline focused parameters as a way to develop specific design criteria. It is clear that city bound rivers need to operate on criteria beyond restoration of previously existing ecosystems and versions of sustainability, and instead look toward optimizing the current and potential urban relationships toward a system of dynamic ecological integrity.

SCHEDULE

The studio is coordinated by Professor Alissa North and will include occasional guest instruction by Harvard Graduate School of Design Professor Brad Cantrell, author of *Responsive Landscapes*. The studio will meet weekly on the regularly scheduled studio days and times. Studio members will partake



in guided and individual site visits (which will include cycling in the ravines), and will be joined at the school by a variety of guest lecturers. A field trip and a workshop run by Professor Brad Cantrell at his lab, will take place in Boston/Cambridge from September 30-October 4, where students will be responsible for handling their own travel arrangements and expenses. MLA students will be able to apply for travel reimbursement grants through funding provided by the OALA.

LAN3016YF LEC0102: Design Studio Options - Victoria Taylor

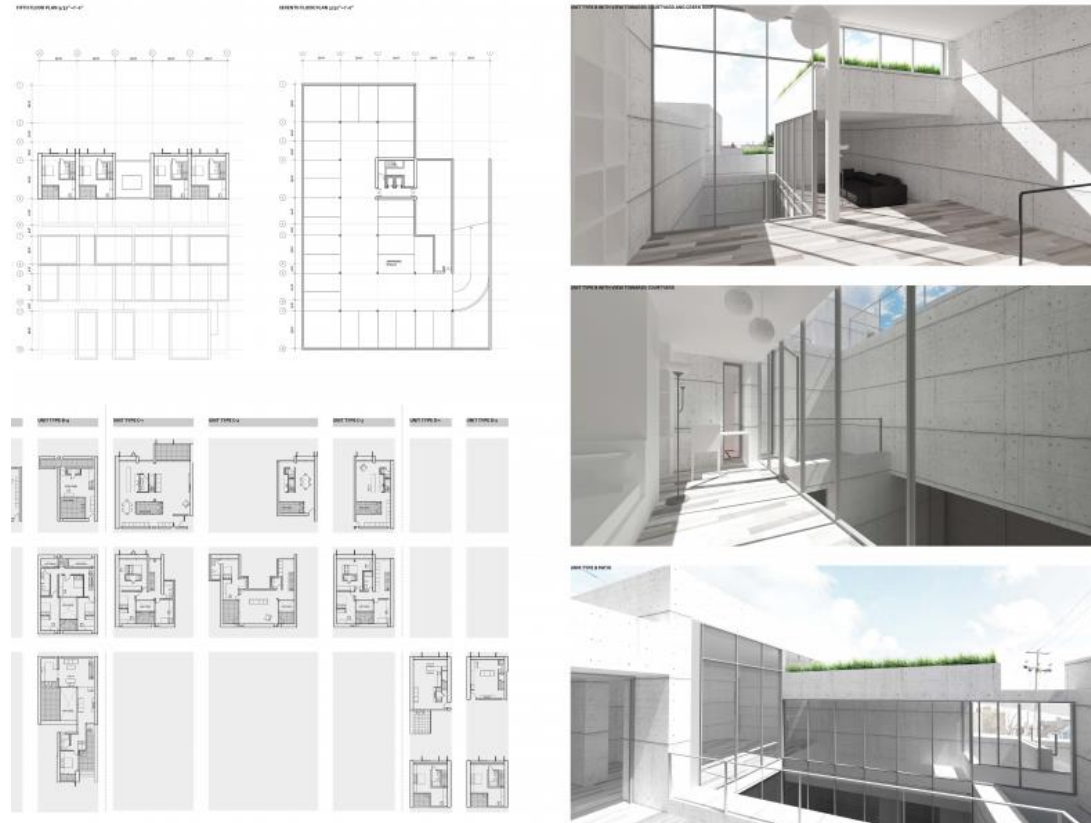
ART SITE URBANISM

Global interest in public art and its contribution to urban culture and urban form has grown significantly over the past decade. Since 2008 in Toronto in particular, the city-led policy initiative to mandate public art in the development process of public and private lands has meant that planners, architects and landscape architects are part of design teams that include artists at some stage of the site planning process. As the architects of new urban sites we must embrace this opportunity and the potential it presents for exploring deeper ways of reading and understanding site through a public art approach to site planning. The studio will encourage students to develop an active and critical engagement with this rich collaborative process and to be exposed to new ways of seeing and experiencing the world around us as we gain new insights into the benefits of engaging with an integrated team of cross disciplinary creative thinkers. Incorporating these ideas of art and site, the studio will seize a timely opportunity to contribute to the design of a new public park located in Toronto's Lower Junction neighbourhood. The three hectare former industrial /brownfield site presents rich layers for design and program exploration via zoning, industrial heritage, dynamic ecologies, site contamination, challenges and opportunities related to land use adjacencies (an active adjacent rail corridor - Metrolinx /Go Transit, UP Express and the 2.4km car free linear cycling path – The West Toronto Railpath) and the site's location within an emerging contemporary art community and new home to the Museum of Contemporary Art (museumofcontemporaryart.ca/). With the site plan in the early stages of City approval, the studio offers students the opportunity for their work to influence the actual design of this park. This studio seeks to build a critical understanding and familiarity with the contemporary discourse around public art and its integration into public space design in order to develop new insights into how to more effectively work toward the goal of creating cultural vibrant and livable cities. SCHEDULE The studio is coordinated by landscape architect Victoria Taylor. The studio will meet weekly on the regularly scheduled studio days and times. Studio members will partake in guided and individual site visits to various public parks and public art sites often accompanied by staff from the City Planning, Parks, Forestry and Recreation and other stakeholders associated with the selected studio site. As well there will be opportunities to meet with artists and curators working in the public art sector. A field trip to Cleveland, Ohio has been arranged as an unique opportunity to work together with the not-for-profit group LANDStudio. We will meet this team of designers and planners and learn more about their unique approach to city planning and site design and their mandate managing the city's 1% for Public Art funds. The trip will take place in late September when we will have the opportunity to work with one of their clients to contribute to the early site design process of a new master plan project in the Flats, the city's former industrial lands along the Cuyahoga River. Students will be responsible for their travel costs and expenses. Accommodation is available in the Ohio City neighbourhood near to LANDStudio office. Top image: Mirage Paul Raff Studio. Underpass Park, Toronto.



URD2013YF LEC0101: Design Studio Options - Meg Graham, Kevin Weiss

URBAN PARTICULARITIES



Jiefei Zhang (2014)

A City evolves with each of the thousands upon thousands of daily decisions that shape it -- some of which are so small they seem inconsequential, some large and abrupt. These are social and economic decisions, as well as built ones. They are made by individuals acting alone, and governments acting on behalf of larger groups or ideas. A City evolves simultaneously through its people, its public realm, its landscape and its buildings, through social, economic and physical change.

This complex and synergistic relationship is the context for the Studio, and Toronto is the site.

The City of Toronto continues to grow in population, and in certain areas of the City, in density – as seen in the swift, recent wave of development of the downtown core, the Waterfront, and former industrial lands along the rail corridors. The City has struggled from a planning perspective to keep up with the pace of development in these areas (and others), in particular the downtown core, where the

demand for affordable housing units far outstrips supply, and the provision of community services, transit and municipal infrastructure has lagged behind the delivery of residential density.

The development of Toronto in recent years has pushed beyond the boundaries of what the Official Plan and Zoning can accommodate in a normative way. We have been witnessing a fundamental reshaping of the City, and the infrastructural gaps and inadequacies relatively rapid growth can cause.

Rather than concern itself with the whole system, the Studio addresses a particular aspect of planning for an economically, environmentally and socially sustainable future for the City: new models of housing density and diversity. Targeting an area already identified by the City for development, a series of apparently typical urban sites on Toronto 'Avenues'.

Through an engagement of a performance-based approach to architecture and zoning, site specific research and design, the studio will seek to establish new precedents of architecture and city-building on these sites. In the planning and design of a mid-rise infill building on a Toronto "Avenue", the Studio will explore the development of housing models that provide a greater diversity (including grade-related, accessible, and multi-generational typologies) and density of housing, in response to current and projected demographics and live-work patterns, and issues of affordability and sustainability. The studio will further to this emphasize a contextual approach to building design that considers the 'edges' of the site, the ground plane and immediate context of the site as instrumental to the design of a building and a connected public realm.

In this way the Projects will aim is to recognize the unique and particular context of the sites, and configure a blend of domestic and commercial/retail/institutional spaces reflective of a forward-thinking future both for the individual sites and the greater City.

To do this, the Studio will touch on some of the over-arching planning, legal and other regulations attached to the sites. These include zoning bylaws, development guidelines, and the Official Plan.

Simultaneously with this the Studio will, through an examination of the notion of 'flexibility' and 'adaptability' in architecture and urban form, shape domestic and mixed-use program at an individual building level. Without relying on typologies, the modular, the repetitive or the obviously formal, the studio will aim to resolve these sites not as conceptual diagrams, but as highly tectonic, site-specific and materially developed proposals, by both critically testing existing zoning bylaws and through a design inventiveness that aims to resolve and integrate issues of daylight and fresh air, view, accessibility, circulation, construction systems, and so forth.



Winter 2017 Research Studio Course Descriptions

ARC3016YS L0101: Research Studio - Brigitte Shim

Beyond Earthworks



The term earthworks coined by the American artist Robert Smithson describes an art movement in which conceptual thinking, landscape and earth moving are intertwined. The artist manipulates natural materials - soil rock, boulders, logs, leaves and water. Perhaps man-made materials such as concrete, metal or asphalt are added. These site-specific land art pieces shook the world when they were first realized in the late 1960's and they still resonate and have profoundly reshaped the allied discipline of architecture.

Earthwork, as a movement generated by artists has forced a rethinking of the boundaries between architecture and landscape and art. Land art like architecture is bound to site and establishes a relationship to its larger surroundings. The boundaries between the art object and its setting is not clear at all. Earthwork art works are not discrete objects, intended for isolated appraisal, but fully engaged elements embedded in a specific landscape.

This Thesis Research Studio will interrogate earthwork and land art and its enormous impact on the future of built form. This fertile territory invites energetic and insightful research and speculation into site specificity versus universal object, scale versus scalelessness, the pressing need to rethink and redefine our understanding of sustainability and ecology. This thesis research option studio provides students with a framework to understand the relationship and reciprocity between research and design.

The first part of the studio will focus on research skills, critical and analytical thinking and the representation skills required to make subtle and seemingly invisible things visible and palpable. Students will delve into case studies of significant works in this territory and collectively will build a shared knowledge base of research bringing to the surface relevant and pertinent issues.

A studio field trip to selected significant earthwork sites is proposed during the University of Toronto Reading week. Double Negative by Michael Heizer, the Spiral Jetty by Robert Smithson, the Hoover Dam and other sites will be included in our field trip itinerary. Students considering this Thesis Research Option studio should be sure that they are able to travel to the USA and can obtain any necessary visas to cross the border.

During the second half of the studio, each student will focus on the design of a new intervention that addresses and makes legible the issues researched during the first portion of the studio. Each student will propose a site and a program that will provide them with a vehicle for design exploration. Each student will produce an individual design project addressing the territory in-between earthwork, architecture and landscape.

ARC3016YS L0102: Research Studio - Michael Piper

Project Suburb 3: Territorial Towers and a Typology for Suburban Site

Overview

Market driven cities are made up of repetitive building and open space types. While this is true for nearly all parts of the city, it is particularly relevant for the expansive territory of North American suburbs. Mostly built over the last 60 years, suburban regions are made up of hastily-produced, self-similar components: malls, subdivisions, office parks, churches and – in the particular case of Toronto – clustered groups of modernist towers. While often lamented for their generic or monotonous quality, the repetition of these types also suggests a method for producing systemic change. If you are able to pragmatically reimagine one, then the rest may follow. The studio will use such a pragmatic method of analysis and design and seek to leverage existing realities of contemporary urbanization with the intent of producing more civically oriented space.

This studio will reimagine modernist tower clusters in Toronto's suburbs, focusing on their potential to systematically carry new forms of affordable density across the suburban region. To that end we will conduct a typological study of the tower sites, identifying their recurring features with a particular focus on how property subdivision will affect the potential locations for new density. After learning about how these sites presently work, students will conduct a precedent study that will guide their specific choices for how to place buildings. The final project will synthesize these two types of knowledge and speculate on new building types and site configurations.

This studio will be coordinated through the PROJECT SUBURB Research Group, now being formed at the Daniels Faculty. As a multi-disciplinary project, it will be run in collaboration with Graeme Stewart of ERA who coordinates the tower renewal initiative, and with Paul Hess who is coordinating an urban design studio in the Geography and Planning department on the same topic. Graeme will lecture, and participate in discussions and reviews, and Paul's studio exercises will be coordinated with ours. Details of these collaborations will be announced at the beginning of next semester.

Site Typology Study: Property Logics

Belying the appearance of public ownership and collective occupation is the reality that these sites have been divided up – at times literally with fences – among a series of individual property owners. This typological analysis will address the nature of this subdivision. Each student will analyze a different tower cluster in the Greater Toronto Area, using its parcel patterns (or property lines) as a base over

which to analyze a series of other conditions such as: built form, ground materiality, pedestrian or car access, or topography. The analysis will highlight how these conditions either abide or transgress property lines. We will review and compile this research in order to understand what is common or different among the sites, providing a knowledge base that will enable typological design strategies.

Precedent Study: Missing Type

Given the city's development practices and regulations, there are currently three models for building new density in Toronto: towers, townhomes and midrise. None of these are particularly adequate for tower cluster sites. One reason is that these types prioritize frontage to public streets and would front existing towers with a back-door, service face. To explore alternatives, we will study a series of precedents and then conduct site design tests that place given models on the tower sites to identify the problems and opportunities these precedents suggest.

Final Design: Placing New Types

The final project will take place on one tower cluster site and synthesize these previous two exercises. Students will identify some typological characteristic of the site that they believe would best accommodate new density in a manner that can be reproduced on the other sites that they analyzed with the *Site Typology Study*. We will also review the precedent studies to identify a potential building configuration that might work best with this repetitive condition. Students will create new building typologies and site strategies that are both specific to the site and transferable to other locations.

Thesis Preparation Topics: Urban Architecture, Urban Design, Urbanism

It's safe to say that there will never be a single roadmap for how architects should address urban issues. The more this field of study progresses the more perspectives, practices and self-described "urbanisms" there seems to be. But when you look beyond the methodological differences within the discipline you can see that there are essentially two opposing approaches to making urban architecture: those that look to the city to understand what kind of architecture to make, and those that look to architecture to learn what to make for the city. Both camps are convincing and when you start researching the field you're likely to jump back and forth between the two. The truth is, or at least a truth that I'm pitching with my studio proposal here, is that urban-minded architects should always do both.

With this studio and through thesis prep you will be asked to articulate how these two kinds of knowledge relate. To this end we will consider a number of topics that will serve as a starting point for your thesis: group form, typology, urban territory/suburbia, ordinary/everyday, realism for architecture. During the first few weeks of the semester we will do readings and have discussions that will then serve as a basis for your work in our research options studio and for your thesis. Students will be required to situate their thesis within the broader context of urbanism, urban design or urban architecture; and specifically within one of the aforementioned topics.

ARC3016YS L0103: Research Studio - George Baird

High Density Buildings and Heritage: Finding a Better Way to Have Both

During the winter term, the Research Option Studio I will conduct will investigate the recent Toronto phenomenon of the construction of high density housing buildings on sites that also have significant heritage buildings on them. I have found a number of the strategies for working on such sites



problematic, sometimes involving moving heritage buildings from their original locations, sometimes involving dismantling them, storing their components, and then reconstructing parts of them back on the construction site in the late stages of construction of the high density buildings, and sometimes retaining only their facades.

The objective of the studio will be to develop more historically sensitive and imaginative solutions to the design of high density buildings on such sites. We will investigate precedents for approaches to heritage preservation by such architects as Carlo Scarpa and Robert Venturi, and artists such as Robert Smithson, and will attempt to apply lessons from those precedents to sites in Toronto. At the same time, we will develop structural ideas with which to render those solutions feasible, and will also address the question of appropriate outdoor living space for dwelling units, at the building heights that such buildings typically reach in Toronto today.

This will be the last research option studio that I will conduct.

ARC3016YS L0104: Research Studio - Aziza Chaoui

Design strategies for applied research in the Developing World: Envisioning Ecotourism in Morocco's Guelmim Oasis Valley.

"Architecture is a process of giving form and pattern to the social life of the community. Architecture is not an individual act performed by an artist-architect and charged with his emotions. Building is a collective action." (Hannes Mayer, director of Bauhaus 1928-1930.)

In the past decade, a series of projects that arguably embrace this view of architectural practice has been permeating both the public and academic arenas, through exhibitions such as "Reporting from the Front", the 2016 Venice Architectural Biennale curated by Alejandro Aravena, and numerous publications like Architecture for Humanity's "Design Like You Give a Damn", "Expanding Architecture: Design as Activism" (Badanes), "Public Interest Design Practice Guidebook," (Bell and Abendroth), "By the People: Designing a Better America" (Smith), and "Ground Rules in Humanitarian Design" (Chun and Brisson). At the core of this new form of practice, is the shifting role of the architect as an activist, responsible for revealing users' needs or deficiencies in the built environment, assembling constituencies, closely working with communities, and coalescing the act of building with social practices, with the ultimate goal to improve people's quality of life. This expanded agency of the architect, despite its lofty intentions, is far from being devoid of predicaments, especially when it is deployed in Developing World contexts, in which scarcity of means and socio-cultural complexities can often prove challenging to tackle by local architects, let alone by foreigners.

This studio will investigate, analyze and critique this peculiar mode of praxis and its research and design methodologies, while testing it in situ in a collaborative ecotourism project in the Oasis Valley of Guelmim, with the Moroccan Ministry of Tourism. Due to its remoteness, the southern pre-Saharan province of Morocco where Guelmim is located currently attracts a small number of tourists, despite its stunning oases landscapes, rich cultural heritage, and unique rammed earth architecture. The local population, composed mainly of low-income farmers, has been facing many challenges caused by successive droughts and rampant desertification. As a result, more and more locals flee towards urban centers, abandoning their land and leaving behind cultural practices that are highly at risk of vanishing. After an in depth field study, the Moroccan Ministry of Tourism determined that the development of a sustainable and environmentally conscious form of tourism could be the best tool to support this fragile arid region.

The goal of this research studio is for students to imagine ecotourism strategies and their associated architectural typologies, which could ameliorate the socio-economic conditions of locals of this region while improving their built and natural environments.

As a sponsor to the studio, the Moroccan Ministry of Tourism will not only fund all expenses of the students' trip onsite, but also offer a vibrant platform for interaction between students, local stakeholders, and landscape, ecology and ecotourism experts.

Through this continuous collaboration and exchange, students will develop a repertoire of research tools and design strategies that will be used to envision how ecotourism can help shape the future of the Oasis Valley of Guelmim. Since students' strategies will be considered by the Moroccan Ministry of Tourism as development guidelines for the region, the studio will act as an applied research project which simultaneously tackles and integrates social, economic and environmental processes.

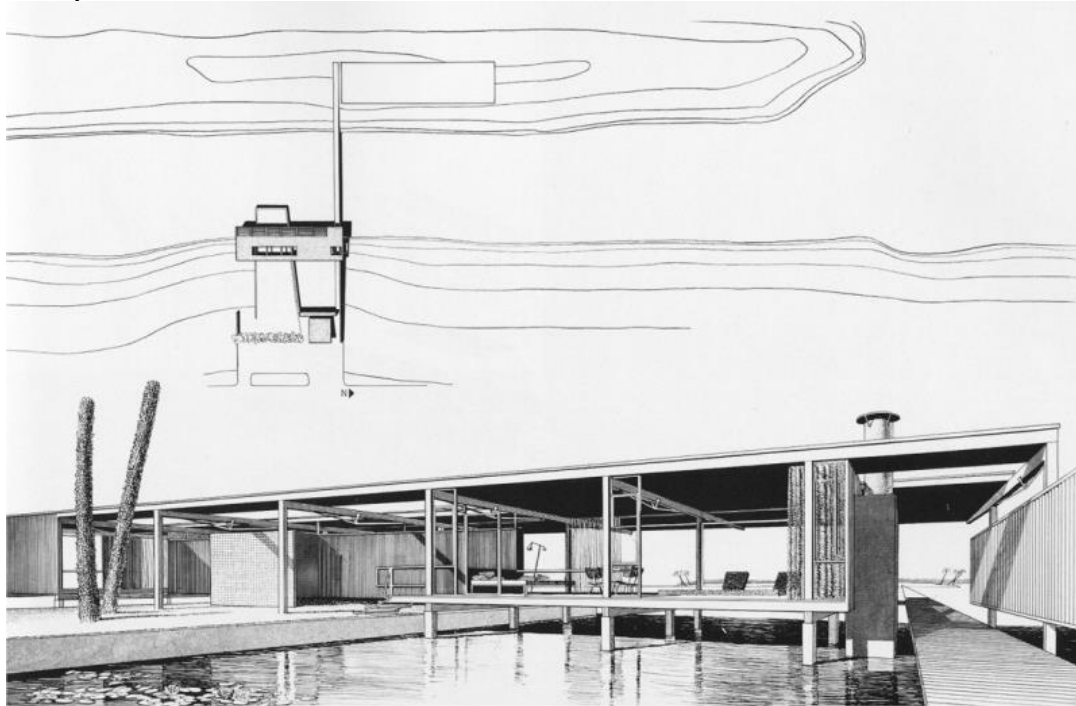
This research studio is designed to serve as a springboard for students interested in developing a thesis that wishes to make a tangible difference: bringing immediate and direct design solutions to pressing problems faced by marginalized and underserved communities.

This studio is part of the Designing Ecological Tourism (DET) research platform created in 2009 at the Daniels Faculty by Associate Professor Aziza Chaouni. DET has completed applied research projects in Morocco, Jordan and Brazil. (www.designingecologicaltourism.com)



ARC3016YS L0106: Research Studio - Shane Williamson

Rudolph Reconsidered



Paul Rudolph, Finney Guest House, 1947

All of architecture is colored by the problem of the house. - Jean Helion

It seems inevitable that we should leave behind the nostalgic notions of a site as being essentially bound to the physical and empirical realities of a place. Such a conception, if not ideologically suspect, often seems out of synch with the prevalent description of contemporary life as a network of unanchored flows. Even such an advanced theoretical position as Frampton's Critical Regionalism seems dated in this regard; for it is predicated on the belief that a particular site/place exists with its identity-giving or identifying properties always and already prior to what new cultural forms might be introduced to it or emerge from it. In such a pre-(or post-) poststructuralist conception, all site-specific gestures would have to be understood as reactive, "cultivating" what is presumed to be there already rather than generative of new identities and histories. - Miwon Kwon

I hate vacations. If you can build buildings, why sit on the beach? - Philip Johnson

This research studio recognizes that specific locations provide particular conceptual and physical clues relative to the generative aspects of architectural design and tectonic expression. Through the critical analysis of Paul Rudolph's Florida houses, we will address the following questions:

1. What is a site?
2. How is a site constructed?
3. How can a site inform building and architecture?

These obvious but remarkably resistant questions stem from a conviction that architecture is not constituted of buildings or sites but arises from the studied relationship of the two and from an awareness that site is received as an architectural construct, even if unconsciously.¹

For Paul Rudolph, and many others of his generation, defining and utilizing the essential characteristics of a region became an inherently important ingredient in problematizing the inherited framework of modern domesticity as it was understood in the 1950s. Regionalism became the vehicle for inserting specific notions of place and cultural context into the vocabulary of contemporary architecture. It also allowed this generation to look deeply into its own history beyond the now iconic textbook examples of European modernism.²

This period is notable for Rudolph's openness to new and experimental methods of construction, stretching the structural possibilities of materials, and exploring the interrelationship of the interiors and exteriors of his buildings. We will be taking all of this into account as we engage an expanded discourse of domesticity and privacy nearly seven decades after Rudolph built his first house in Florida.

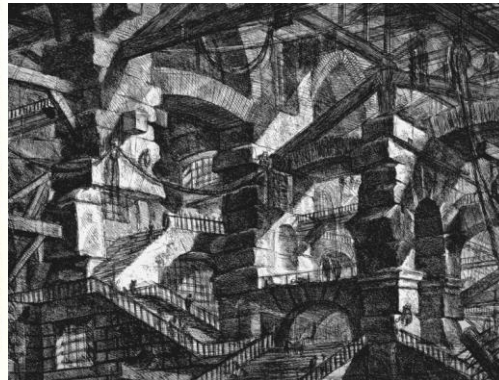
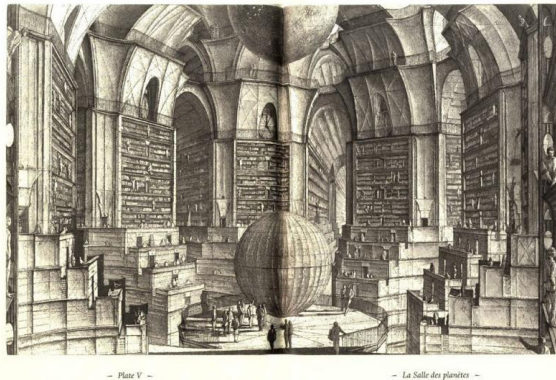
In short, you will be designing a house and visiting Florida in February.

¹ Carol Burns, "On Site," in *Drawing/building/text : essays in architectural theory* / Andrea Kahn, editor. (New York : Princeton Architectural Press, c1991.) p. 56.

² Domin, Christopher, and Joseph King. *Paul Rudolph: The Florida Houses*. (New York: Princeton Architectural Press) p. 74.

ARC3016YS L0107: Research Studio - John Shnier

The Ecstasy of Piranesi: Drawing as Thesis The Library of Babel



COURSE DESCRIPTION: Drawing has always been the activity that, perhaps more than any other, defined the practice of architecture. And by drawing, we mean all aspects visual communications; from free form stream of consciousness doodling and ideation to polished presentation drawing to use of new and motion based media. The act of linking mind and idea through the manipulation of instruments via the hand had evolved over 1000's of years to the point that drawing could be considered a second nature. The territory between intuition or instinct and method and logic was easily transited. This studio proposes to examine drawing as an end in itself and to (re) establish drawing as a primary artefact in

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architectural discourse. The objective of the studio is to transcend the drawing as an illustration of a project to propose drawing as the conveyor of layers of information that expands the critical space of architectural ambition. We will explore the potential of the critical imagination that exists within the gap between iterations of representation as well as the different modes of representation that might be possible. Underwriting this studio is your (proposed) thesis project. As you complete this semester you will develop a discourse through exercises that will be applied to your thesis. Our subject uses the various activities of the architectural polymath Gian Batista Piranesi as a filter for thematics and Jose Luis Borges' seminal and mysterious tale The Library of Babel as the subject vehicle.

COURSE OBJECTIVES: The aim of this Research Studio is to be a true preamble to your thesis: Amongst other concerns you will: Treat drawing as a conveyor of discourse and not merely as an artefact of illustration; Students should be able to use the medium to demonstrate salient conditions of a well thought out position; Your drawings will strive to examine and create a tension between invention and convention. Most importantly, students will create a space of critical imagination and become authorities on their subjects. Students should develop confidence towards undertaking a thesis where the drawing is the thesis.

EXERCISES: There will be 3 exercises including a transformative interpretation, an interpretation of palimpsest and finally the creation of a final exhibition whereby each student will be creating a display and folio of images redolent in support of your anticipated thesis semester.

FIELD TRIP: We are considering a field trip during Reading Week as a palimpsest and inspiration for the final project.

THESIS PREP: As is now customary, your Thesis Prep course will be highly integrated into the studio with the creation of a "moving image" as a parallel discourse supporting both your anticipated thesis and the thesis around drawing and image creation.