ARCH 2220: Sustainability in the Built Environment
Moore

Buildings, in their construction and operations, are one of the largest consumers of our natural resources-- they have a tremendous impact on the environment. But architecture protects us, delights us, and gives structure and culture to our world in the form of landscapes and cities. The sustainability of the built environment is a global concern. Students will gain an understanding of the social, geographic, political, and economic factors, as well as the technological innovations that good design must harness to create a more sustainable future. GE soc sci human, nat, and econ resources course.

3 credit hours

ARCH 3420/4420: Cast in Place
Baumberger

The Greek word for architect is arkhitekton or “master-builder”. While the contemporary definition and expectations of such an individual has become much broader to engage and take on the characteristics of various disciplines, we always come back to building. In this studio you will design, fabricate and assemble three small pavilions sited within a 200-acre farm Northeast of Columbus. Each pavilion, implementing both conventional construction techniques and more advanced digital techniques, will explore how particular materials and fabrication processes engage and adapt to the surrounding area. Given the logistics of the problem, the dichotomy of prefabricated versus in-situ construction will be addressed as an integral part of the process. As the pavilions are intended to be free standing and inhabitable questions of structure and its relationship to form making and aesthetics will be a topic of study.

6 credit hours

ARCH 3420/4420: Growing CCAD
Livesey

As an advanced undergraduate design studio, the studio problem will be a complex program on a complex urban site. The studio will be broken up into two parts. First the students will do a master plan for Columbus College of Art and Design (CCAD) allowing it to grow from approximately 1200 to 1600 students. The emphasis will be to establish a sense of place for a small art school in the downtown and to give the College a presence in the City. Second, each student will design at least one building resulting
from the master plan. The building could be the renovation of an existing building with or without an
addition or an all-new building. Building types will vary from a dormitory to a materials fabrication
laboratory. During the course of the studio, there will be an emphasis on drawing plans and sections as
three-dimensional drawings and making physical models. Students will be encouraged to investigate a
contemporary architectural practice or architectural idea as a driver for their project.

6 credit hours

ARCH 3420/4420: Ohio Shrimp
Rosenthal

This studio will explore the feasibility and viability of developing vacant or abandoned sites in the city
with a primary focus in Olde Towne East.

The first proposal will examine the typology of the market place, be it commercial, co-op, or public. The
North Market exists as the only public market in the city and this project will examine the possibility of
creating an “East Market” near Children’s Hospital. The proposed site is the old Buster Douglas lot a 3.5
acre lot bounded by 17th, 18th, Mound and Main Streets. Students will investigate the possibility of
accommodating a home improvement store much like the Home Depot stores in New York and Chicago
with the market.

We will also explore the opportunity to revitalize the old trolleybarn just south of Franklin Park. Various
proposals suggest a public market, antique market and live-work studios for artists with public outdoor
space. This studio will look at the possibility of creating a culinary incubator in this historic site. This
project proposes creating a restaurant/cooking school featuring locally sourced ingredients from
operations onsite including aquaculture (local shrimp farm), hydroponic farming and seasonal outdoor
gardens. For these proposals we will research funding opportunities and incentives from the City,
County and State. Students will also be required to identify any regulatory or zoning authorities that
oversee development at these sites.

If time allows additional sites to be considered for interventions are in Franklinton and on the South Side
along Parsons Ave.

The primary tool for the class will be Revit and class will begin with an introduction to the program and
will be supplemented with weekly working sessions on Wednesday’s.

6 credit hours
Prefabricated housing and systems of modular construction have occupied the minds of architects over many years, setting up an important and often unresolved dialogue between the aesthetic of standardization and the efficiency of construction systems. In recent years, however, prefabricated houses have gained great popularity as "green" alternatives to traditional, stick-built houses. Advances in assembly-line production have cut down on the waste of materials leading to factory built systems that bypass the obstacles of typical on-site construction. Innovations in construction techniques, implementation of sustainable practices and the use of earth friendly materials have pushed the standardized "living box" to a new level, one that challenges the fundamental paradox of the modular house, that however well-designed such buildings are, it is difficult to create a system of modular construction that avoids banality.

The studio proposes a look into current developments of prefabricated, modular housing and invites students to make proposals for prefabricated systems that can provide flexible, efficient, customizable and site adaptable solutions for a residential development consisting of single family and multi-family housing. The intent of the studio is to reopen the dialogue between architecture, nature and construction in an attempt to join the practical with the poetic through the development of architectural research and inquiry, an understanding of the practical forces at work on and within architecture, and an awareness and comprehension of multiple-scale design strategies.

6 credit hours

Against all the best intentions of academic integrity policies worldwide, the architectural design studio is perhaps the one educational construct explicitly devoted towards training in the fine art of thievery. From its Beaux Arts emergence, employing strategic acts of copying, towards its contemporary ubiquitous use of the ‘precedent’, the design studio is now situated amidst the continual blur of text-less imagery, unhinged from discourse, populating architectural blogs and RSS feeds at an exponentially expanding rate. Perfect right? We grow up in houses, copy-pasted by the thousands from builder’s catalogs, buy groceries in decorated-shed-shopping-centers ripped-off down to their most-minute details or tour great works of architecture we’ll never see through liquid crystal reproductions. Barring a few truly exceptional moments, the city itself is one great simulacrum, drawn who-knows-when by who knows-who and multiplied ad infinitum at a continental scale. But while plagiarism arguably lies at the very core of the act of architectural design, its capacity as a legitimate form of creative activity is continually deferred in favor of the ever-alluring myth of originality and the authenticity.
But perhaps we’re different? We watch remakes before the seeing the originals and recognize the real thing by remembering its sampled mashup. We understand that authenticity is not a precondition for significance. We recognize, and in fact value, forms of cultural production which draw out and play upon often-bizarre and contested relationships between the artifact and its source, whether a piece of music, a novel or a film. So in an age in which even the well-worn narrative of avant-gardism, authenticity and authorship are themselves copies of ideas from an older time, this studio will attempt to give plagiarism its long-overdue attention.

We will argue that while none of the older stories which once positioned architecture within culture seem as clear or compelling as they once were (or at least as we imagined they were), we can nevertheless form new narratives for creative production by rigorously mining, re-tooling and re-mixing scraps from the junkyard of long-forgotten architectures. Beyond the watered-down idea of ‘precedent’ this studio will attempt to develop precise methodologies of adaptation which explore the ambiguous ethics of creative stealing.

This studio will unfold the generative possibilities of plagiarism through three successive exercises.

6 credit hours

ARCH 3420/4420: The Cunning of Lies and How They Shape the World

Kochar

The premise of this studio will be based on Fyodor Dostoyevsky’s statement of “Why do we have a mind if not to get our way?”

In the twenty first century, population, information, and technological explosions are changing the nature of power shifting it from nationalism to resource---ism and consumption---ism. As demands are responding to rising power houses, the gaze is shifting expediently from the West to the East, especially to Asia as the eye of the storm. Architecture is emerging as pop---ups, changing the iconic image maps of the region. Asia can be treated as grounds for experimentation, inventing and testing new ways of making architecture. The current tendency in the architectural practice is to export ideas from the west to the east: projects conceived here in the US or Europe are taking shape elsewhere. If this is the trajectory in the next coming years, it would be best to fabricate a manifesto, a manifesto that scripts architecture as this excessive compulsion to build the quixotic based on a series of lies construed on opportunistic moves. This manifesto will record a scripting of lies as a thematic plot, developing episodes and scenes, refabricating the original set of lies through diagrams that would serve as an architectural gene/meme, ready for imprinting in lands known and unknown.

The goal of the manifesto is to critically evaluate Kantian’s doctrine of schematism and Emmanuel Levinas’s: the notion of alterity. Kant’s concepts of schema associated with the mental image of an object will be recorded as imagination produced in time and the manifesto will also critically evaluate the ability for the architecture gene to subsist/ or to become autonomous without the reality of the
whole. Emmanuel Levinas’s: the notion of alterity will be questioned through on and off positions arguing for the possibility of simultaneity rather than alterity.

The validity of this manifesto will be tested through the speculation of a project.

The end goal is to have a manifesto/book that would take on characteristics of an architectural graphic standard that can be the run to book if designing in the outsourced world.

6 credit hours

ARCH 3420/4420: The Thrill is Gone

Blostein

In September of this year New York Mayor Michael Bloomberg proclaimed that Staten Island needed The Attraction and unveiled plans to build the next in the trajectory: The New York Wheel. At 625 feet in height, it will trump both the London Eye and Singapore Flyer. Despite being designed by a team including architects (the same as The Eye’s) and the size of each capsule approaching that of a small building, “The Wheel” is undeniably more attraction than architecture. Amid this critique, however, this attraction will take its occupants high above the city, providing an unmatched perspective of the world below. At this moment The Attraction is no longer about the spectacle of the object; suddenly it becomes the attractor, delivering a gut-wrenching affect which pulls the rider and the space of the city into a new relationship.

An alternate scenario is the attraction that is hidden, accessed through dark passages and unassuming spaces; this attraction claims and creates territory in the most unlikely ways. Chicago’s 1927 Jewelers Building provides an example. Given the generic nature of the building’s name and its architectural fit with the Chicago-style fabric, the building gave no evidence of the spectacles within. In a surprising twist, the office core was refigured to accommodate a car lift that would safely deliver wealthy tenants directly to their assigned floor. An ironic programmatic juxtaposition and strikingly hidden in plain sight Blostein Studio 1 of 2 was a Capone-era speakeasy, the Stratosphere, with its illegal activities strategically inhabiting the building’s dome. Much like the view from The Eye (or The Flyer, or The Wheel), the space of the dome provided the thrill of The Attraction to Chicagoans who were in-the-know with its exclusivity, propensity for danger, and intrigue. But unlike the immediacy of its seemingly inferior cousins, the elusiveness and slyness of the attraction offered here was multivalent and unfolded over time.

The studio will be a speakeasy for investigating the full spectrum of this topic. Through the program and typology of the DESTINATION HOTEL, we will explore the slippery boundary between The Attraction as gimmick/side-show/one-liner and attraction as a serious endeavor to break new ground in creating space.

6 credit hours
There are all sorts of skills required to put a decent building together, competencies in using section, plan, programming, facades, uses of structure, materials, site planning, monolithic or heterotopic composition, creative uses of circulation, balancing the general and the particular, formulaic and the exceptional or event he odd. This studio would like to focus on a number of these or sets of some of these, by breaking the fourteen weeks into a series of separate problems, some quite short, exercises or studies really, and others longer and in the format of more traditional studio design problems. Some might be running simultaneously, and there might be occasions where pieces of a small study might be incorporated as particular element into a larger project, or at least productively inform it. The hope is that the end result would be greater skills in a number of areas and also a greater ability to integrate one area with others, so that programming is influenced by section and circulation to produce a much richer, more thoughtful design. It is anticipated that the output will be diverse. It is also anticipated that the output might prove to be portfolio enriching. Studio participants should expect to be asked to produce numerous iterations of drawings and models to subject a particular proposal to productive scrutiny. To me, this seems essential in order for a studio to successfully address its role as an activity that is simultaneously speculation and research.

The shortest projects might be a week or a weekend, the longest might be five or six weeks. It should be expected that one will go through a lot of tracing paper and cardboard over the course of the semester.

6 credit hours

ARCH 4880: Barcelona Pre-Travel Seminar

Moore

Pre-tour seminar, Barcelona.

3 credit hours

ARCH 5120: History of Architecture II

Gargus

History of architecture from ancient to contemporary: historical inquiry, physical and cultural influences, theories, and analytical techniques. Continuation of 5110.

4 credit hours
ARCH 5290.01: Topics in Architectural Theory

Jones

This seminar is part of Italy Program coursework.

Prereq: Enrollment in Italy Program or permission of instructor.

1.5 credit hours

ARCH 5290.02: Topics in Architectural Theory

Jones

This seminar is part of Italy Program coursework.

Prereq: Enrollment in Italy Program.

1.5 credit hours

ARCH 5290: An Interrogation of Le Corbusier’s “Practice”

Oubrerie

Le Corbusier’s “method” approached through the study of several projects of the last period (1958/65) in L-C’s Studio i.e: Venice Hospital, Strasbourg Conference Center, Visual Art Center Boston, Zurichorn, Firminy Church and complex etc. and their relationship to precedents in Le Corbusier’s own work. For example the sequence: > Esprit Nouveau Pavilion 1925 > Immeubles Villas > Villa Stein in Garches > Villa Shodan>Mills Owners, both in in Ahmedabad and by extension Unite Marseille. We will examine also some of his projects and their re-interpretation in contemporary research. For example: Strasbourg and the Governor Palace in Chandigarh> Rem Koolhaas’s Morocco Convention Center etc.

It was specific of Le Corbusier process, while he was slowly establishing his own language, to not be closed to external influences as well as internal ones in elaborating a particular project on the basis of elements provided by his own “inventions” (he uses to define himself not as a researcher but an “inventor” not so far from Picasso’s famous “I do not search, I find...”), to also explore the possibilities of “demonstration” of the validity of his language by selecting a large variety of programs, of conditions, in order to produce new spaces, new spatial organizations, new “typologies” based on, finally the square and Maison Domino.

Today it seems that most of contemporary architecture, in certain spheres where a real research exists, pretends to have abandoned any formal reference to its past. A new-realism of a kind takes place, based not on the appearance of things but on their structure like the one of plants, or micro-organizations, or
physical phenomena: like movement of fluids, etc. a sort of naturalist quite, “organic” referential apparently completely independent from what in architecture has allowed these developments (represented here by L-C) but also in art.

However, and contrary to what they usually say themselves, the most talented architects that we know today have all a solid knowledge of this presence of the recent past. It can be demonstrated with Koolhaas as well as many others. They very often entertain a certain level of “dialog” with specific works, ultimately with their discourse. Let’s argue that the “real” discourse of an architect is constituted by his/her projects, but also in a most extended way by his/her practice. It is where his/her intentions, culture, dreams come to reality, fixed, frozen. The objective of the seminar through the interrogation of projects – here using Le Corbusier as support of study – to attempt to discover this real discourse which is always constituted once the projects are really elaborated. Is this discourse and its consequences strictly limited to the problem of the “object” as it seems very often to restrict itself today...

Pre-reading: “Space, Knowkedge and Power” Interview of Michel Foucault by Paul Rabinow in “Foucault Reader” Paul Rabinow edition Pantheon Publisher ISBN 0-394-71340-0. Ten Canonical Buildings Peter Eisenman Rizzoli, Chapter on Strasbourg, and his article in Opposiitons (collected essays of different issues by different authors) “Maison Domino and the self –referential sign”

Prereq: Enrollment in Arch major or permission of instructor.

3 credit hours

ARCH 5290: Lookin’ Amazing

Livesey

Although in some quarters formal analysis is thought to be dead, it is alive and well and can be used both to understand and produce architecture. Recent publications such as Peter Eisenman’s Ten Canonical Buildings 1950-2000 purport to give “close reading of critical architectural ideas”. The trouble is that the book is filled with inaccuracies and therefore misreadings. He just is not “reading” close enough. So in this class we will give up reading, in favor of just “lookin’”. We will use “lookin’” to understand why things are the way they are and as a device for postulating particular forms and organizations. Students will learn to recognize analytical approaches that apply to any building and can be used for design strategies.

In each class there will be an analysis of at least two canonic buildings. The instructor will analyze six divergent buildings in the first three classes. In the remaining classes, using the instructor’s approach as a model, each student will be responsible for presenting and analyzing one building of his or her choice and making a rebuttal to two other buildings presented by the other students. Therefore, each building reviewed will have 3 presenters. However, all students will need to review the material (provided by the presenting student) and be prepared to discuss the qualities of all the building in class. The emphasis of the analysis will be on the projection of a system of operations that gives a possible explanation for the
forms of the building. The subtext of the class is to discover analytical systems that can be used as generators of architectural form in the students’ own work.

Prereq: Enrollment in Arch major or permission of instructor.

3 credit hours

ARCH 5290: The Digital Architectural Rendering as Symbolic Form: A research Seminar

Kipnis

In 1927, Erwin Panofsky published his landmark essay, “Perspective as Symbolic Form” in which he puts forward the argument that the system of pictorial perspective that had dominated Western Art history since the 15th century constituted an ideologically determined instrument of cultural construction rather than an objectively valid system for faithfully representing the structure of human vision, the position held by E. H. Gombrich and others. At the core of Panofsky’s argument was the claim that representation always occurred within and in the service of a cultural world view and, more importantly, that representation was a active participant in the evolution of and construction of new world views. In short, according to Panofsky’s argument, we see and shape our world only with our mind, never with our eye.

The seminar will begin with a thorough study of Panofsky’s text and related studies on representation as symbolic form in the writings of Robin Evans, Stan Allen and others. Then we will undertake to research the groundwork for considering the digital rendering in similar terms by examining the philosophical underpinnings of the cultural history of realism and hyperrealism in painting, film and photography; and the technological and application history of the digital rendering in architecture. Each student will have independent topics of research, and these will be directed toward the goal of the class to construct a timeline of key developments, archive seminal achievements, an assessment of the state of the art and a set of conjectures on the possible futures of the digital rendering in architecture.

Prereq: Enrollment in Arch major or permission of instructor.

3 credit hours

ARCH 5590.01: Topics in Building Technology

Duvernoy

This seminar is part of Italy Program coursework.

Prereq: Enrollment in Italy Program or permission of instructor.

1.5 credit hours
ARCH 5590.02: Topics in Building Technology

Bruscoli

This seminar is part of Italy Program coursework.

Prereq: Enrollment in Italy Program

1.5 credit hours

ARCH 5590: Information Territories: The Geography of Networks, Processes and Flows

Lewis

This seminar will investigate the topic of networks as a tactic for designing the contemporary urban landscape. The territory established by networks contradicts the traditional image of the city. Rather than rely on significant architectural objects or highly figured spaces, networks are characterized by flexible, indeterminate geographies governed by the transfer of information, services, mobile capital, transportation, and economic exchange. This seminar will investigate how these information infrastructures invigorate urbanization with instrumental and operational agency while “avoiding the twin cul-de-sacs of historicism and typology.”

Each student in the seminar will research the topic of information territories with three tools: design, writing, and research. Students will situate geographic concepts and theories of networks as defined by post-modern urbanists (Koolhaas, Moshe, Allen, Corner, Berger, et al.) through readings, short papers and class discussions. Simultaneously, and most significantly, students will transform the theoretical discourse of the seminar through an original research project that draws, maps and diagrams a selected network relevant to the Midwest. Using current strategies of representing information, students will experiment with representing information territories by focusing on maps over plans, the flow of matter over subjects, and the concept of environment over that of space-time.

Prereq: Enrollment in major within the Knowlton School of Architecture, or permission of instructor.

3 credit hours