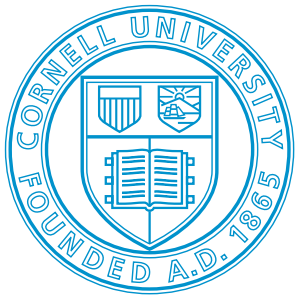
COLLEGE *of* ARCHITECTURE, ART & PLANNING

DEPARTMENT OF ARCHITECTURE

SPRING 2015
OPTION STUDIOS



Cornell University

ENJOY! AN APPETITE FOR ECOLOGY, INFRASTRUCTURE, AND EVERYDAY PRACTICES OF INHABITATION

Sabine Müller – SMAQ (Berlin), Visiting Critic
Michael Jefferson, Visiting Critic

The table is set. A great dinner is served. The meal is healthy, varied, colorful, and tasty. But…where does this excellent food come from? From the farmers' market? From the local organic supermarket? We can be certain of the distance it traveled from these locations to our table, but should we settle on this answer though vague and unsatisfying? Or should we open it up to further examination and, in so doing, examine the ecological implications of this simple and routine question?

The NY Foodshed. Similar to a watershed, a foodshed describes the socio-geographic space of food flows, from the area where it is produced, to the place where it is consumed, including: the land it grows on, the route it travels, the markets it passes through, and the tables it ends up on. The present foodshed of New York is an example of how practices of householding, that is, producing, accumulating, storing, cleaning, maintaining, and budgeting, have been appropriated from the single household, abstracted, and distributed throughout a worldwide network of corporate trade and subjected to (stock exchange listed) speculation while generating a highly abstract logistical urbanism outside of cities–physical, but unconsidered. While foodshed is a term now synonymous with the regionalization of food supply, our interest focuses on the back-stage systems and architectures of a foodshed's network of production, processing, transport, storage, retail, consumption, and waste. Could we, by bringing them to the front stage of design, get hold of human ecology's main problem - the externalization of costs into the future and into unseen spaces? Could we, by recognizing the physical components of supply lines as a modern form of networked householding, relate the food system back to space, form, and everyday practice?

IN SEARCH OF LOST TIME

FRANCISCO MANGADO*, Gensler Visiting Critic
SUZANNE LETTIERI, Visiting Critic

PRINCIPLES

We will focus on questions that serve as the foundation of architectural work. Thoughts on space and its relationship with the landscape will form the basic framework for the studio.

PLACE

We will work and travel to a semi-desert location, The Bardenas Reales of Navarra in Spain, a tough but beautiful landscape where earth and water fuse together each year to 'sculpt' a magical, almost moon-like reality. The studio theme and context will allow students to focus on given concepts rather than superfluous questions. We shall avoid situations where architecture becomes closer to 'seeming' than to really 'being.'

PROJECT ASSIGNMENT

The theme is a contemporary monastery for cloistered monks (beside an inn for retreat). The monastery is a very special architectural type, with clear functions and rich symbolic baggage that has developed over centuries. The primary challenge is to create space conducive to reflection, focusing on elements such as light, sequence and routes. These elements of architecture should be worked out intensely and independently of other architectural themes. The program is simple, consisting of modest but well-planned, comfortable cells where one can rest but also think and pray in solitude. A library conducive to study. A refectory in which to eat in silence. A church for the community to pray together. A field to cultivate plants in and engage in manual work. A cemetery for eternal rest. A cloister to walk. A small and modest hostel for outsiders wanting space for silence and searching for lost time.…

INTERIM URBANISM: THE HONG KONG KAI TAK AIRPORT SITE

David Eugin Moon, Visiting Critic

The notion of a "temporary" architecture or urbanism is relative, in that any city is a site of constant change.

While the architecture of the city is often designed towards some future permanent condition, there is a growing realization that idea of a completely permanent or static environment might not be entirely realistic, especially in light of an ever changing societal context that involves political, environmental, and technological considerations - among others. "Temporary architecture" has also been a flexible and broad-ranging term with these structures sometime ironically outlasting their "permanent" counterparts.

Kai Tak is the former airport of Hong Kong which was abandoned after 1998 when a new airport was constructed 19 miles west of the city. Located in the center of Hong Kong in Kowloon, the Kai Tak airport is an expansive site adjacent to the Kowloon Bay, Kowloon City (the site of the former Walled City), a newly constructed cruise terminal, and the surrounding mountains. In the past 16 years since its decommissioning, several plans have been proposed and failed for the site and the latest plan for a sports complex is scheduled for completion in 2020. In the larger political and social context, Hong Kong is a City-State undergoing dramatic changes in the next decade. After becoming a colony of the British Empire in the mid-nineteenth century, Hong Kong was handed over to China in 1997 under its "one country, two systems" policy and faces a difficult period of transition. The studio will travel to Hong Kong to observe and document the site and its contexts, and will include a field trip to the neighboring mainland to Shenzhen. Conversations with practitioners and other locals will also inform the investigation.

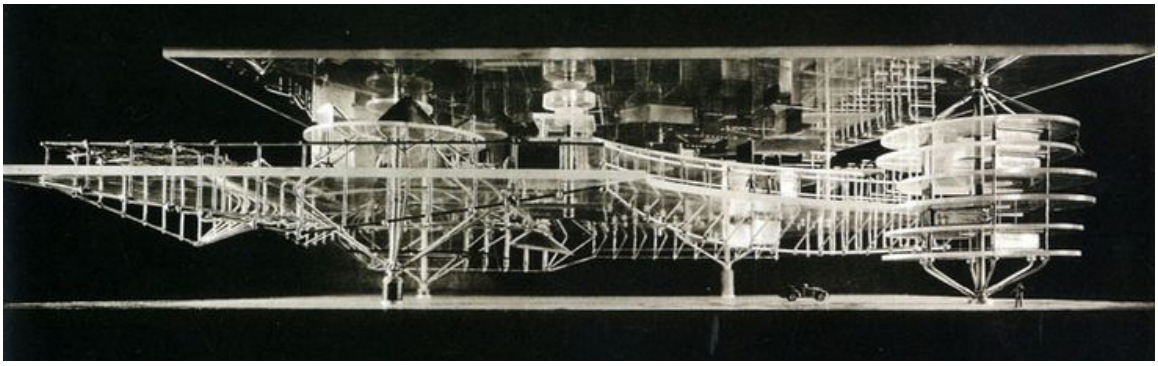
RAW NATURE / COOKED NATURE I

TAO DUFOUR, VISITING CRITIC
FACULTY OF ARCHITECTURE AND URBANISM, PONTIFÍCIA UNIVERSIDADE CATÓLICA DO RIO GRANDE DO SUL
PROF. PAULO HORN REGAL; PROF. ANA CÉ

Nature [phusis] *loves to hide*.
Heraclitus

Overture
This design studio aims to problematize the meaning of 'ecology', framing it as a civic, humanistic and natural scientific concept. The studio will focus on the urban and ecological context of Brazil, with an exemplary focus on the city of Porto Alegre, the capital of the southernmost state of Rio Grande do Sul. The studio will be conducted jointly with the Faculty of Architecture and Urbanism at the Pontifícia Universidade Católica do Rio Grande do Sul, and will involve a period of field research in the city of Porto Alegre, from March 7th to 14th. Students from Cornell will engage in fieldwork, workshops, seminars and a design charrette with their peers at FAU/PUCRS. Porto Alegre is situated at the northern delta of a tremendous coastal lagoon, Lagoa dos Patos, which will serve as the primary site of research for the studio. The programmatic basis of the studio will be the research institute, with the aim of critically addressing ecological themes, building on the anthropology of science.

John Zissovici, Associate Professor
Andrew Lucia, Visiting Critic
Wolfgang Tschapeller,* Visiting Critic



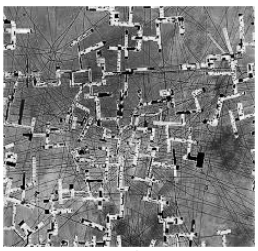
NEW BABYLON 2 (City S[t]imulator)

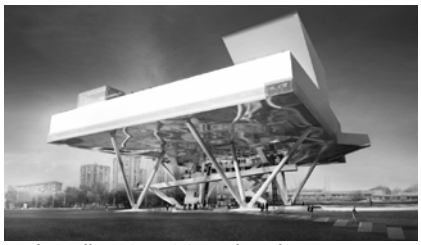
"I see New Babylon as a web, a network covering the whole world…a labyrinth inexhaustible in its variations." **Constant**

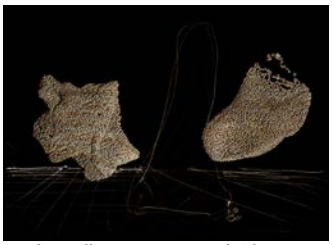
Constant's plans of New Babylon, superimposed on maps of various European cities, reinforced the scale of his aspirations. His detailed structural models of New Babylon's 'districts', spanned convincingly over vast parts of these cities. Yet, despite their structural daring, he always saw them more as 'props' for imagining alternative frameworks for urban experience to the already over commercialized and spectacle driven cities of late 1950s. Suspended between conceptual model and concrete proposal, New Babylon remains a productive visionary idea for investigating the premise of the city as a collective project dependent on the creative potential of mass participation. Only now, with the advent of ubiquitous networked communication and imaging devices (for now lacking any vision worthy of their possibilities) can its true potential be examined.

The studio will build on the Situationist notion of 'unitary urbanism' expressed in Constant's New Babylon, to re-imagine the discursive mediated space of the contemporary city (**New York**), as reshaped by the energy of mass participation. We will exploit innovations in visualization to s[t]imulate new forms of urban space and experience and test them in the popular imagination. The studio will make a site visit to New York, the test case city.

Wolfgang Tschapeller www.tschapeller.com is an Austrian architect and educator. He is a professor of architecture at the Academy of Fine Arts in Vienna and the head of the Institute of Art and Architecture. His winning competition entry for the Belgrade Center for the Promotion of Science, currently in design development phase, recalls New Babylon's tectonic aspirations. The project for the Incorporeal City captures its spirit and conceptual possibilities.


NEW BABYLON


Tschapeller, CFPOS, Belgrade


Tschapeller, Incorporeal City

* Wolfgang Tschapeller will make a few visits to Cornell over the course of the semester.

Twisted & Woven: sensible architectures

Jenny E. Sabin, Assistant Professor
Eric Ellingsen, Visiting Critic

Rationale
This studio will explore textile material systems and non-standard fibrous assemblages for the prototyping of natural disaster relief housing that in parallel work to define transformative, radically experimental and experiential, sensible design research practices in the context of crisis. We will address these topics through the program of disaster relief housing. Students will determine a site in the world through which architecture can respond to the complexities of the needs, not as situations lacking resources, but as places full of resourcefulness.

How might we rethink our conceptual approach towards sustainability in architecture, by re-approaching a new sensibility in architecture? Maybe sustainable is the wrong word. Maybe sensible is a better concept. Energy flows; material cycles. This is the foundation of ecology. What is the foundation of a sensible ecology? A sensible architecture?

How are our methods for measure related to the statics we generate? How do the terms by which we operate, like sustainability, structure the sets of possibilities that we can generate? Can our methods and processes of measure of energy efficiency be expanded to locate more sophisticated and precise nuances by weaving in poetic meter and musical measures in our architecture movements? What if in understanding a systematic ecology of design, resources were coupled with resourcefulness? Are there design research models and methods that may counteract an emphasis upon solutionism in favor of transformative practices that engage a dynamic reciprocity between form and environment, placing emphasis upon behavior over technology? More specifically, are there affordances within the environment that we may use as design drivers towards a transformative and sustainable sensible architecture?

This studio will explore sensible architectures that must make sense today. The studio will combine computational tools and methods and a critical materiality to address the ecological complexities and needs of today in the context of disaster relief. The generation of sensible architectures will include the transformation of existing built fabric into performative models that inspire both positive socio-cultural change and innovation in design, science and technology. A sensible architecture is focused on repracticing the entire conceptual foundation for the project, one that fundamentally examines our relationship with nature and nature's relationship with humans. Important to this shift, is a move away from purely technical solutions to environmental sustainability towards an understanding that our built and natural environments are equally becoming the contexts for thriving hybrid ecosystems and new environments of sensibility. This studio will introduce students to advanced computation and procedural, constraint based operations as a generative framework for architectural design. The studio will integrate computational design techniques, procedural operations and a critical phenomenology in order to speculate on various strategies for disaster relief housing.

TOPOGRAPHY AND THE CITY
A SCHOOL OF ARCHITECTURE IN LISBON

João Luís Carrilho da Graça, Gensler Visiting Critic*
Pedro Oliveira, Visiting Critic

The mere observation of an imagined bare topography, unveiled by the isolation of a plan's contour lines, allows us to construct an interval for contemplation. It allows us to conceive the territory as a skeletal initial supporting structure, the evidence of a city upon it, its construction as becoming; it allows us to think of the transfiguration of that same territory into city.

[…] [Afterwards, overlaying] the contour lines to a city plan, begins the recognition of the coincidences. The way the territory's noteworthy spots match the ones of the city: walls, convents, palaces, viewpoints, grids over the lowlands and the uplands, and mostly the limits' obviousness and its architectonic intensity. The comparison with several ancient city maps, evidencing intermediate development phases, clarifies and highlights what was formerly perceived. The analysis becomes a decoding process, "the radiograph invention", identification of rules. […]

The lines, geographically and topographically consecrated to access and crossing routes, have necessarily a more public nature and tend to be physically registered over the territory, defining the limits and the formal structure of anthropic space. They tend to construct a recognizable and lasting matrix that defines both rural space and the cities' shape.

It is a mesh; a distorted reticule that registers in irregular shapes the accommodation between the coursing and crossing needs and the geometry and nature of the crossed fields. In a two-dimensional register, both contour lines and path's web have irregular tracings — eventually with equation systems that could, theoretically, inter-relate them! Generally, the land registry subdivision records are geometrically much more simple. Even complex land subdivision operations depart from elemental geometric operations: subdivision in parts, use of orthogonal reticules, axis, alignments, etc.

The oft-cited Broadway example — a ridgeline in accordance with the island's smooth topography — with a naturally irregular tracing, that counteracts the Manhattan grid, is perhaps the most obvious example. Usually, what is built or decided in one stroke tends to be fairly simple!

The construction rules of any territory are as clear, one might almost say, as evident they become in a city like Lisbon, with such a clear and suggestive topography. There is an intense entanglement between the topography and the city it upholds, with brilliantly staged events. The most permanent fixture of a city is its geographical and territorial structure. But even this sometimes quakes!

- João Luis Carrilho da Graça in JA 206, May/June 2002, pp. 8-11

VIEQUES: From military occupation to affordable tourism.

Iñaqui Carnicero, Visiting Assistant Professor

MILITARY

In 2001, the United States Navy left western Vieques (Puerto Rico), which had been used as an ammunition depot. Now the United States Fish and Wildlife Service controls 3,100 acres (13 km2) of this land, about half of the formerly owned military property. Over the course of U.S. Navy occupancy, nearly 22 million pounds (10,000 tons) of military and industrial waste, such as oils, solvents, lubricants, lead paint, acid and 55 US gallon (200 L) drums, were deposited on the western portion of the island. On May 1, 2003 the Navy finished turning over all of its lands to the U.S. Department of the Interior. This included the Navy's entire eastern portion of the island which was mainly used as a dumping ground. Vieques was bombed an average of 180 days per year. In 1998, the last year before protests interrupted maneuvers, the Navy dropped 23,000 bombs on the island, the majority of which contained explosives. The eastern end of the island was used for live training exercises, ship-to-shore gunfire, air-to-ground bombing and US Marine amphibious landings starting from the 1940s onward.

ADAPTIVE REUSE

Although highly controversial, this military use of the island prevented any large developments. After the Navy left in 2003, the former bombing range on Vieques was declared a National Wildlife Refuge, ensuring that nearly 20,000 acres remain protected from commercial development. Like ecological succession, adaptive reuse deals with directional change, a gentle and unpredictable temporal shift in the whole basis of the building's structure and function: the succession of the built environment. Adaptive reuse "slows nutrient loss" while contributing to the diversity, complexity, and continuity of a particular place. Genuine places worthy of our affections are created through the process of adaptation. Adaptive reuse is the process of changing a building's function to accommodate the changing needs of its users. Adaptive reuse can also serve as point of departure for other related issues such as derelict infrastructure, industry, and landscapes.

TOURISM

The island of Vieques has remained undeveloped for tourism. Land speculation by foreign developers and fear of overdevelopment has caused some resentment among local residents. The studio will be looking at some of the army's traces in the island, studying and mapping some of the remaining ruins. With the intention of subverting their meaning we will investigate strategies to transform this military debris into opportunities that will inform designs that will develop in a more sustainable way new types of tourism in the island.

A studio in the Architecture School of San Juan de Puerto Rico will be working with the same problem. Some of the preliminary research work will be developed in groups been necessary for the teams to communicate online.

A fieldtrip to the island will take place during the second week of February.