

STUDIO COURSES

FOURTH YEAR

DESIGN IV: FALL SEMESTER

Professor Kevin Bone
Professor Anthony Vidler
Associate Professor Tulay Atak
Instructor Matthew Roman
Instructor Teddy Kofman

A New Datum: Landscape, Infrastructure, Architecture

When Louis Kahn received the commission to design the Monument to the Four Freedoms in September of 1973, the baseline he used for the architectural assemblage was 9” inches above the established mean high tide. By the time the project was constructed and opened to the public on October 24, 2012 the design had been adjusted to reflect the new world reality: the baseline had to be raised 15” above the old MHT. The new datum was already making itself felt. Days later, Hurricane Sandy made the fluctuations tacit.

As a response to the billion dollar losses in the aftermath of Hurricane Sandy, Rebuild by Design sponsored a competition to study alternative ideas for making New York City both more defensible against future damage and more resilient in the event the city sustains such losses again. One of the six winning entries was a project from the Danish firm BIG. The project proposes a fortified line (a thick edge) 10 miles long defined by the limits of NYC’s Hurricane Evacuation Zone 1 that would help protect Lower Manhattan from the catastrophic infrastructural and economic losses associated with storms like Sandy.

The fourth year design studio appropriated the line of the BIG project as a site. Each student was required to develop a portion of this line, articulate a program and propose architectural manifestations of this new threshold.

Phase 1: Operational Models
Phase 2: Collective Narrative
Phase 3: Architectural Manifestations

DESIGN IV: SPRING SEMESTER

Professor Diane Lewis
Professor Peter Schubert
Instructor Daniel Meridor
Visiting Assistant Professor Daniel Sherer

CUTOUTS 2015

The Matisse Cutout exhibition was at the Museum of Modern Art in January of 2015. Having been given the position of continuing the Cutouts course in 1982, a course that was initiated by John Hejduk in 1975, the presence of the Matisse Cutouts in New York was clearly an opportunity for a new exploration on the essence of this studio approach at the outset of this semester. The entire studio teaching team agreed that the provocative cutouts in the exhibition carry an architectural character that also confronts color, sculptural form, iconography and the challenge of penetrating form with the act of cutting and ripping painted paper elements on paper grounds or fields.

We wished to find out how the Cutouts inform the notational nuances of architectural language, to imbue a structure with the spirit, thought and hand of its individual author.

We also wanted to discuss the nature of a religious or sacred building in the terms of contemporary art and abstraction, and the tradition of figural and iconographic imagery imbedded in the plans and sections of the church over centuries, as well as other religions and pagan structures.

The knowledge of how sacred buildings are and were sited by the architect in many civilizations, and the challenge of the abstract aspect of architectural language and its ability to carry these intentions and decisions was necessary to the project.

All of the studio participants and faculty began with a trip to the Museum of Modern Art to see the Matisse Cutouts exhibition to begin the studio semester. The exhibition included the Chapel at Venice that Matisse designed from the inspiration of the Cutouts he created.

The first Cutouts Project of 1974 as given by John Hejduk was a list of the artists Matisse, Cezanne, Picasso, Braques, Gris, Leger, Ingres, and the word HOUSE. The exhibition revealed the potential of the new component of study now—the CHAPEL as the program to be the outcome of the CUTOUTS.

With the challenge of this new component, the chapel, the studio was structured in three phases:
Select a Matisse Cutout as inspiration.
Phase One: STILL LIFE/CUTOUT STUDY
Phase Two: RAISON D’ETRE FOR SITING A CHAPEL—SITE SELECTION AND SCALING
Phase Three: THE CUTOUTS OF THE CHAPEL FROM THE INSIDE OUT

FIFTH YEAR

THESIS: FALL AND SPRING SEMESTER

Professor David Turnbull
Assistant Professor Hayley Eber
Assistant Professor Pep Aviles
Instructor Teddy Kofman
Visiting Professor Elisabetta Terragni

The Cooper Union is a place where the Fundamentals of Architecture have been cherished for more than 150 years. A decade of work and careful curriculum design lead to a definitive account in the 1980s of ‘fundamentals’ in relation to the Education of an Architect, upper-case E, upper-case A. Both reified, almost sacred and with hind-sight, perhaps, rather ostentatious and more than a little bit ‘grand’. This account that was exhibited, published and discussed, crept consciously or unconsciously into almost every architecture school’s curriculum. Problems that had not really been problematic became the ‘problems’ that an enormous number of young architectural students discovered, addressed and resolved in some way in a project or two—typically somewhere in the middle of their architectural education. Everyone learnt something about architecture and for that we should be grateful.

There is nothing like a bit of plausible close scrutiny to confirm the status of the overlooked as looked over... allowing the already excessively visible to remain preeminent. While a few years ago many of us felt that The Cooper Union should look outward, be less self-conscious, and more public; the publicity that we have seen emerge in the past few weeks, cultivated over the past few years, is not exactly what we had in mind. This affects everyone. The School of Architecture is literally ‘interregnum’, in between, in many ways. But as is often the case in such periods, it is more vital, and more speculative than it has been for a while. Like inter-personal conflict, institutional struggle can produce somewhere, somehow, enough calm, quiet-time and reflexive, empathetic responsiveness that real growth is possible toward an emotional, philosophically cogent and ethical architectural maturity—redefining architectural practice. This is an extraordinary moment for the School. It is not a ‘tipping-point’, is not a symptom of ‘reinvention’, but, rather precisely, involves the careful, patient transformation of the fundamentals that we knew, know and value.

How do we know that this time will be memorable for more than its outwardly awkward signifiers? Well, we do not—but we can feel it, smell it and touch it. And, what we do know is that the work is good, often very good, the ‘problems’ that our students are addressing are real and often urgent. The ‘fundamentals’ are in play, purposefully, and architects are being educated.

THESIS PROPOSALS

The Esteros Plan of Manila. Restoring the esteros of Manila will recover the relation-ship between the city and its waterways by alleviating flooding and exploring their potential as an armature for shelter, dwelling, urban mobility and public open space.

In Flux: A Remedial Ecology. This thesis explores the idea that the human body can be sustained through a composition of functioning organisms. The proposal incorporates botanical knowledge into architecture and provides a space for rehabilitation for [those affected by] an ailment.

Theater of Inversions: the public puppet. Within the theater, the use of puppets or other performing objects can perform an inversion that redefines the relationship between actor and audience. A theater puppet will be used as an urban-scale performing object in New York City.

Two Tubes: A Ring around the Rockaways. By articulating interior leisure space, the proposed ring redefines the existing exterior leisure space of the Far Rockaways by shielding it from the damaging effects of hurricanes, protecting and redefining leisure space for New York City.

Barriers, Bollards and Buffers: Making Monumental of the ‘Mundane.’ This project takes the form of a set of installations, their permanence undefined, posited into the existing political strip of Whitehall in Westminster, London.

Learning from Googletown: Reinventing San Francisco’s technoburbs. This proposal integrates the tech campus back into suburbia, taking cues from where many of these companies originally started—the suburban garage.

The Renewal of Baths as Public Institutions for Urban Stress. Referencing the Roman thermae, this thesis seeks to develop urban bath typologies, which would allow a person to slow down from the demands of urban life and to distance himself or herself from the stress of the city.

Game Space Video Drawing. I am creating a game that is a piece of architecture. The object of the game is access. The space is accessed through the intersection between the house and the labyrinth.

The Identity of Fragmented Architecture. This thesis investigates the possibilities of an incomplete architecture for the construction of identity. The architecture has minimum enclosure, which allows maximum freedom.

Moving-landscapes. This proposal is for a building type that is located on moving landscapes (hot springs) but does not erase the marks that the hot springs leave on the surface.

Ice Age Bridge. This thesis is drawn from a prehistoric landscape, sculpted by ice. The city and the landscape appear to be at odds, but the city was born from the lake, the lake was born from the ice, and the ice sculpted the landscape.

Relationships and Adjacencies: A Space for a Ritual. This thesis is a performance of a dialogue between subject and objects through the design of a ritual. In this system, there are three characters: a pair of shoes, a bowl and an apple.

Bluerange. A “kaleidoscope” installation generates the arbitrary and symmetrical patterns with multiple fragmented reflections of the viewer’s body. The proposal focuses on how this “kaleidoscope” offers a tool to create camouflage for architecture, sharing attributes of a mirror: sameness, symmetry, repetition.

Reliquary/Aquiary/Water Temple. This thesis explores the phenomenology of biomorphic forms and colors through the lens of painting as a tool for generating architectural landscapes engaging water and light as temporal material.

Refugium: constructing walls to remove barriers—a city of refuge in Malmö. The thesis investigates issues of migration on a geo-political level as well as its direct impact on the individual person that seeks asylum.

A Playroom For Child Development. A room that constantly changes from day to day will engage a child’s spatial awareness. The room can be manipulated by children as they inhabit it. The architecture of the room will promote creativity, critical thinking, social skills and physical health.

It is architecture’s destiny to be weathered, dissolved and demolished. This thesis incorporates the complexity of forces of nature in design so that ever-changing qualities of decay can be anticipated and built into spatial and surface conditions of architecture as nature refinishes them every moment.

Industry and Identity: The Preservation of Flint, Michigan.

This project introduces a new mineral industry on the site of the now demolished Buick factory. Extracted brine from beneath the site is absorbed by the building and effloresced on its surface, creating a field of continuously growing architectures.

Model Plus Model Minus: Towards a Spherical Ground.

This thesis explores a scenario in which architecture’s representational ground is not the flat plane but the curved surface of the sphere.

Infrastructure for a meal: Grilled Maaji, Yokohama, Japan.

The four proposed pieces of infrastructure monumentalize the ritual of eating. The objective is to elicit recognition of the bay as a precious urban food source and to empower the people with knowledge and capability to control the entire chain of actions from ocean to mouth.

Racination: “to root” or “to re-root.” The refugee, as a (non) citizen of Beirut, occupies a position of cultural and political illegitimacy and requires a new presence within the city: an architectural racination. A series of water-collection towers define the beginnings of an architectural vision, which will act to re-define the refugees’ status in Beirut.

The Forever City. With a recording process based in light and shadow, the Forever City has been rewritten and removed from its context to develop a new spatial character. Ultimately, the records of the city can be rewritten into the place they were originally found to exist as intimate architectural moments of memory within the Forever City.

Connections. The Japanese tradition of timber joinery is an example of a comprehensive and visceral understanding of a material reinforcing a craft. To move toward perfection one needs to rely on the senses, a trust in the hand and an ability to slow down.

White Sands National Monument, New Mexico. This architecture seeks to provide opportunities for care and psychic healing at multiple scales through multiple methods, all of which ultimately seek to establish a symbiotic relationship between human, architecture and site ecology.

The Walking School: A Peripatetic Exploration of Cultural and Environmental Landscapes. The peripatetic school unites the student with the world on a number of scales. At its core is the fundamental necessity of the freedom to wander and explore as a way of learning.

Sustainable Rural Autarky. Through applied systems of technological automation in agriculture and renewable resources this thesis demonstrates an autarkic sustainable model that maintains human health, living standards and well being in the absence of available fossil fuels.

Returning to the Womb. A series of experiments with inflatable structures constructed from a thin translucent membrane documented the effects that this membrane had on the inhabitant’s perception of space. These relationships turn the inflatable into a prophylactic architecture, creating a sense of immunity and sterilization.

Fear, architecture. Architecture is used as an instrument to decipher and encipher the intrinsic properties of fear. The work processes psychological space into physical envelopment through four dimensions of fear—memory, perception, disposition and displacement.