

ARCHITECTURE AT COOPER

The Irwin S. Chanin
School of Architecture

The Cooper Union
for the Advancement
of Science and Art

4:09-10

The academic year 2009–2010 was a particularly significant year for The Cooper Union, and equally so for the School of Architecture. As the 150th year since the founding of the institution, it was also the 149th year of teaching architecture at Cooper. A timeline included in last year's edition of *Architecture At Cooper* was further developed and illustrated as the prologue for the first of three major exhibitions mounted by the school in the Houghton Gallery, "Architecture at Cooper 1859–2009." The exhibition chronicled the history of architecture—and specifically of the architecture of its buildings—at Cooper from 1859 to the present. The exhibition began with an original drawing fragment of the Foundation Building by Frederick Petersen and a piece of a rolled steel rail section that had been assembled to make one of the original beams of the building, and continued with blueprints of renovations and additions designed for the building in the 1890's by Leopold Eidlitz. These prints had been discovered by our Archive in the cellar of the Hewitt Building during the summer before its demolition in 2007. The "star" of the show was a series of blueprints of each floor of the Foundation Building from 1974, marked up in characteristic bright colors by John Hejduk with notes by the architect, for the client and himself, crowding the plans of each floor of his proposed renovation.

The second exhibition was dedicated to the teaching and art practice of our longest-serving professor, Tony Candido, and brought together his work from 1949 to the present—fifty years of painting, drawing, design, and teaching with a rare dedication to the discipline. Professor Candido's anticipation of the advantages of greening the city, through his celebrated design problem of the urban farm, was explored with many years of students, as was his belief in the need for high-density living units in cities newly formed for the rapidly expanding population of the globe.

The third exhibition, prepared for the NAAB re-accreditation site visit, brought together the work of all studios and courses over the last three years in order to demonstrate the abilities and understandings of our students with respect to the NAAB conditions of accreditation, in the context of a curriculum structured on a rigorous five year design sequence, informed by coursework in structures, building technologies and environmental technologies and a strong commitment to study in the humanities and social sciences. While we will not receive a formal report from the NAAB until July, the exit meeting with the visiting team indicated that they were unanimous in their admiration for the program and support of the school's direction.

The three exhibitions collectively served as an opportunity for the School of Architecture to reflect on its history and to clarify and articulate a curriculum for the education of architects into the twenty first century. In their preparation we were able to reflect on the extraordinary intersection of tradition, renewal, and innovation represented in the work of the school since its foundation.

From the Nine Square Problem, through Cubes, Topos, Blocks, Bridges, Connections, Communities, Balances, Walls, Houses, Joints, Skins, to Spheres, Cylinders, Pyramids and Cones, the First Year programs of the School of Architecture have, since 1965, developed the architectonic ground for the next four years of studio problems. In the Second Year, analyses—of Palladio, Borromini, Ledoux, Le Corbusier, Loos, and more contemporary works, together with a hundred more individual buildings, classical, modern, and contemporary—have explored the complexities of form, structure, and use, that constitute the architectural problem. In the Third Year, institutional programs of all scales, from museums, libraries, housing, homeless shelters, to urban farms, high lines, expressways and waterworks, have acted as matrices for the deeper understanding of assemblies, accommodations, contexts, and cultures. In the Fourth Year, urban interventions and comparative analyses of cities have expanded awareness of the scales and structures of civic architecture while filmic investigations of cities and topological studies of nature, have framed and narrated the life of inhabited environments. In the Fifth Year Thesis, a thousand individual propositions have researched and formed questions of habitat, from the individual house to the global effects of warming.

This year also saw the inauguration of our Master of Architecture, post-professional degree program, an intensive three-semester research and design experience for students from five and three year professional degree programs. With concentrations in theory and history, urbanism, and technology, the curriculum emphasizes an interdisciplinary and experimental approach to design problems of every scale, from the object to the environment.

In reflecting on this history and looking to the present, we were able to see how, based on the skills of drawing and modeling, on the knowledge of history, theory, structures, environmental and building technologies, humanities and social sciences, and their creative interpretation, multiple architectures have been invented and reinvented, as faculty and students have worked together to construct an ever-transforming but always rigorous pedagogy that, founded on its own rich tradition, meets the challenges of the present and anticipates those of the future.

We were brought more forcefully to reflect on this tradition, by the passing this year of two of its major inventors, Professors Richard Henderson and Raimund Abraham.

Richard, who taught at the school for over thirty years, was not only a wise and strong administrator but, more importantly, an innovator in the realm of architectural analysis and one who placed the analytical process at the center of Cooper's approach to design. At a time when the "postmodernists" were calling for a return to history in the iconographic and imitative sense, Richard insisted that analysis was a didactic, structural and abstract discipline, at once interpretative and projective. His Third Year Analysis Studio achieved iconic status as a launching ground for the architectonic invention for which Cooper became known.

I first met Raimund in 1967, at which moment he revealed to me that we had emigrated to the States together, when he noticed (as he recounted to me later) that in front of him in the Customs shed was a young Englishman with long hair unpacking the Corbusier *Oeuvre Complète* for inspection. When asked what books were in his bag by the same customs inspector who had realized that two architects were coming through, Raimund said in true contrariwise manner, "I have Proust." Raimund and I have been arguing about this non-difference ever since. Raimund was one of the most influential teachers at Cooper for over thirty years. In his teaching at all levels he insisted on an ethical allegiance to the true nature of architecture and the role of authentic form in society. His First Year Architectonics course was perhaps the best ever to succeed that of the Bauhaus version.

Both Richard and Raimund were iconoclastic and radical figures in our collective history. Perhaps, however, they should not be put so quickly into history—for theirs was a prospective vision, demonstrated by the last decade of work in the school, that pointed towards a future, not a past. For this, Cooper and the world will miss them greatly, as at the same time, we celebrate their powerful legacies to the fundamental discipline of architecture.



Anthony Vidler
Dean and Professor
The Irwin S. Chanin School of Architecture

LECTURES AND EVENTS

The Irwin S. Chanin School of Architecture/ The Architectural League of New York

The School of Architecture annually co-sponsors and hosts a number of events with the Architectural League of New York in The Great Hall. This ongoing relationship has fostered a continuously expanding forum for contemporary architectural dialogues at The Cooper Union.

Monday 10/19

Andrew Freear, Director, Rural Studio, Wiatt Professor, Auburn University Rural Studio
Current Work: Rural Studio

Wednesday 10/28

Chuck Hoberman, Founder, Hoberman Associates with Craig Schwitters, Regional Director, Buro Happold North America
Current Work: Adaptive Building Initiative

Monday 11/9

Billie Tsien and Tod Williams, Founding Partners, Tod Williams Billie Tsien *The Barnes Foundation Design Presentation*
Introduced by Calvin Tsao, Tsao & McKown; current President, the Architectural League of New York

Tod Williams and Billie Tsien presented their design for a new home for the Barnes Foundation's world-renowned art collection. Currently housed in the former residence and gallery of Dr. Albert Barnes, who established the foundation in 1922, the Barnes art collection will make its relocation from suburban Merion, Pennsylvania to the Benjamin Franklin Parkway in Center City, Philadelphia in 2012.

Tuesday 11/24

Andrew Whalley, Partner in Charge, Grimshaw, New York
Current Work: Grimshaw

Wednesday 12/2

3rd Annual Franzen Lecture on Architecture and the Environment
Werner Sobek, Founder, Werner Sobek Engineering and Design; Mies van der Rohe Professor, Illinois Institute of Technology; Director, Institute for Lightweight Structures and Conceptual Design (ILEK), University of Stuttgart. Introduced and moderated by Toshiko Mori, Principal Toshiko Mori Architect; Robert P. Hubbard Professor in the Practice of Architecture, Harvard University GSD

Wednesday 12/9

James Corner, Founder and Director, Field Operations; Chair and Professor, Department of Landscape Architecture, University of Pennsylvania School of Design
Current Work: Field Operations
Introduced by Kate Orff, Founding Principal, SCAPE
Discussion with Ken Smith, Founder, Ken Smith Landscape Architect; current Vice President, the Architectural League of New York

Tuesday 12/15

Bjarke Ingels, Founder, BIG/Bjarke Ingels Group
Current Work: BIG/Bjarke Ingels Group
Introduced by Amale Andraos, Principal, WORK Architecture Company

Thursday 2/18

Rafael Viñoly, Founding Principal and Design Leader, Rafael Viñoly Architects
Current Work: Rafael Viñoly Architects

Friday 2/26

Alejandro Zaera-Polo, Co-founder, Foreign Office Architects (FOA), London
Current Work: Alejandro Zaera-Polo

Friday 4/30

Louisa Hutton, Co-founder, Sauerbruch Hutton, Berlin
Current Work: Sauerbruch Hutton

Saturday 05/22

Medellin: Design Transformation

Matilda McQuaid, Deputy Curatorial Director, Cooper-Hewitt National Design Museum, Camilo Restrepo Ochoa, Architect, Universidad Pontificia Bolivariana, Frederico Restrepo, Civil Engineer, and Mauricio Valencia, Architect, Planning Director of Medellin
Moderated by Mark Robbins, Dean, Syracuse University School of Architecture

The Irwin S. Chanin School of Architecture/ Open House New York/ The Architect's Newspaper

Monday 10/5

Visual Acoustics: The Modernism of Julius Schulman, film premiere

Introduction by Eric Bricker, Director, *Visual Acoustics*

Visual Acoustics celebrates the life and career of Julius Shulman, whose images brought modern architecture to the American mainstream. Shulman, who passed away this year, captured the work of nearly every major modern and progressive architect since the 1930s including Frank Lloyd Wright, Richard Neutra, John Lautner, and Frank Gehry.

The Irwin S. Chanin School of Architecture/ The New York Landmarks Preservation Foundation/ AIA-NY Chapter

Wednesday 10/21

Context / Contrast: New Architecture in Historic Districts Inaugural Forum
Questions of Modernism and Appropriateness

Introduction: Commissioner Robert B. Tierney, The New York City Landmarks Preservation Commission
Moderator: Suzanne Stephens, Deputy Editor, Architectural Record
Panelists:
Hugh Hardy, FAIA, H3 Hardy Collaboration Architecture
Richard Meier, FAIA, Managing Partner, Richard Meier and Partners Architects, LLP
Peter Pennoyer, AIA, Principal, Peter Pennoyer Architects
Annabelle Selldorf, FAIA, Principal, Selldorf Architects

The Irwin S. Chanin School of Architecture/ Cultural Services of the French Embassy/ AIA-NY Chapter

Monday 11/16

Paris/New York: Two Metropolises in Flux/ The Metropolis as Urban and Social Space

Mireille Ferri, Vice President, Conseil Régional d'Ile de France
Pierre Mansat, Deputy Mayor in charge of the Paris Metropole Project, Mairie de Paris
Christian de Portzamparc, Architect, participant to the Grand Paris competition, President of the Association des Architectes pour le Grand Paris
Amanda Burden, Chair, NYC Planning Commission
Moderated by Jean-Louis Cohen, Professor, New York University Institute of Fine Arts

"Paris/New York: Two Metropolises in Flux" was part of the fall series "Architecture & Urban Policy: A French Season in New York" jointly organized by French Cultural Services, AIA New York, La Maison Française of New York University, AIANY Global Dialogues Committee, Columbia University GSAPP, The Cooper Union for the Advancement of Science and Art and the Department of Architecture and Design, the Museum of Modern Art.

The Irwin S. Chanin School of Architecture/ NYU Department of Comparative Literature/ NYU Tisch School of the Arts/ NYU Department of Media, Culture & Communication

Tuesday 2/9

William Kentridge, Artist
A Universal Archive... with Some Remarks on Black Holes

South African artist, William Kentridge, is known for his stop-motion films of charcoal drawings as well as for works in etching, collage, sculpture, and the performing arts. Kentridge's talk explored visual memory, the need for dis-remembering, studies in the speed of light, and other topics and themes at the edges of the artist's work as well as his work on the 2010 production of Dmitri Shostakovich's opera "The Nose" at the NYC Metropolitan Opera.

The Irwin S. Chanin School of Architecture/ Pecha Kucha

Friday 2/20

Fundraiser for Haiti: New York #9

Presenters included: Stan Allen, Jesse Reiser, Gregg Pasquarelli, Iwan Baan, Craig Dykers, Sam Jacob, Zachary Lieberman, Florian Idenburg & Jing Liu, Stefan Sagmeister, David Adjaye, Steven Holl, Paul Lewis, Michael Bell, Stella Betts & David Leven, Susannah Drake

The Irwin S. Chanin School of Architecture/ Faculty of Humanities and Social Sciences

Tuesday 3/9

Renata Stih, Artist, Professor, University of Applied Sciences, Beuth Hochschule, Berlin
Frieder Schnock, Ph.D., Artist, Art Historian, Curator, Critic
The City as Text: Case Studies and Transformations

The Irwin S. Chanin School of Architecture/ The Austrian Federal Ministry for Education, Arts and Culture/ The Austrian Cultural Forum

Thursday 5/27

Eric Owen Moss, Principal and Lead Designer, Eric Owen Moss Architects; Director, Southern California Institute of Architecture; Commissioner, Austrian Pavilion at the Architecture Exhibition, 2010 Venice Biennale
Trajan Over Nero: Vienna, Venice, Los Angeles

The Irwin S. Chanin School of Architecture/ The Cuban Cultural Center of New York/ Society of Cuban-American Architects and Engineers/ AIANY

Saturday 5/15

Cuban Architecture: A Historical Legacy.

The day long symposium was dedicated to the architect Mario Romanach, with a keynote address by Nicolas Quintana, and presentations by guest of honor Ricardo Porro Architect, Eduardo Luis Rodriguez, Belmont Freeman and others.

The Irwin S. Chanin School of Architecture Public Lectures and Events

Friday 3/12

Tony Candido, Professor, The Irwin S. Chanin School of Architecture
Did You Write that Head?

Friday 4/9

Nadim Karam, Founding Principal, Atelier Hapsitus, Beirut
The Fisherman and the Cloud

The 2010 Feltman Lecture Series

Tuesday 2/23

Alberto Pérez-Gómez, Bronfman Professor of Architectural History, McGill University
The Splendor of Architectural Shadows in a Nihilistic Age
Co-sponsored by the Architectural League of New York

Friday 3/26

Kyna Leski, Principal, 3SIXØ Architecture; Professor, Acting Department Head, Rhode Island School of Design
Bill Morrison, Filmmaker
Chris Rose, Designer
Moderated by David Gersten, Professor, The Irwin S. Chanin School of Architecture
Its All About Light

Monday 4/19

David Gersten, Professor, Irwin S. Chanin School of Architecture
David Shapiro, Poet, Professor, The Irwin S. Chanin School of Architecture
Hejduk, Hamlet and the Ghost Promise

The Feltman lectures were made possible by the Ellen and Sidney Feltman Fund established at The Cooper Union to advance the principles and benefits of lighting design through the exploration of the practical, philosophical and aesthetic attributes of light and illumination.

Saturday 10/3

Architecture Moves

The day long conference probed the intersections of architecture and the aesthetics of movement from the 19th to the 21st century, exploring rhythm and spatial relocation, displacement of vision, temporality and animation in space. Anthology Film Archives co-presented two films in 35mm by Heinz Emigholz as part of this conference: *Schindler's House* (2007) and *Goff in the Desert* (2002/03).

Introductions: Anthony Vidler, Dean, The Irwin S. Chanin School of Architecture
Conference Chair and Opening Remarks: Tamar Zinguer, Associate Professor, The Irwin S. Chanin School of Architecture

PANEL: MOVING BODIES

Spyros Papapetros, Assistant Professor, Princeton University School of Architecture
Semper in Motus: Slingshot Projectiles, Directional Ornaments, and the Allegorical Motives of Architecture

Zeynep Çelik Alexander, Mellon Postdoctoral Fellow at the Department of Art History and Archaeology at Columbia University

Disciplining Movement: Architecture and Bodily Knowledge circa 1900

Roy Kozlovsky, Assistant Professor, School of Architecture at Northeastern University
Rhythmic Self-Regulation: Motion and Emotion in Postwar Educational Spaces

Moderated by Guido Zuliani, Professor, The Irwin S. Chanin School of Architecture

PANEL: AMERICAN VESSELS

Adnan Morshed, Assistant Professor, School of Architecture and Planning, The Catholic University of America
From the Spirit of St. Louis to the Dymaxion House: Buckminster Fuller's Aesthetics of Ascension

Michael J. Golec, Associate Professor, Department of Art History, Theory & Criticism, The School of the Art Institute of Chicago

Maximum and Minimum Mobility: Tony Smith's New Jersey Turnpike and the Horizons of Typographic Modernity

Aron Vinegar, Associate Professor, Department of History of Art, Ohio State University
Muriel Cooper Moving Between Mediums

Moderated by Mabel O. Wilson, Associate Professor, Columbia University GSAPP

PANEL: TRANSFORMATIONS

Ken Tadashi Oshima, Associate Professor, Department of Architecture, University of Washington
Dynamic Dialogues within Spectacular Spaces: Postwar Japan to the Palladium

Jilly Traganou, Assistant Professor, Department of Art and Design Studies, Parsons The New School for Design
Migrant Homes

Moderated by Galia Solomonoff, Architect, Assistant Professor, Columbia University GSAPP

PANEL: MOV(IE) OR MOVING PICTURES

Heinz Emigholz, Filmmaker, Berlin
Two Projects by Frederick Kiesler

Moderated by Thomas Y. Levin, Associate Professor, German and Media Studies Princeton University

The Irwin S. Chanin School of Architecture/ Institute for Urban Design

Saturday 11/7

Arrested Development: Do Megaprojects have a Future?

The day long symposium brought together architects, developers, policymakers, and economists to discuss the state of megaprojects in light of the stalled economy.

Introductions:

Olympia Kazi, Executive Director, Institute for Urban Design
Anthony Vidler, Dean, The Irwin S. Chanin School of Architecture

PANEL: MEGAPROJECTS IN SUBURBS

Lawrence Levy, Executive Director, National Center for Suburban Studies at Hofstra University
David Manfredi, Principal, Elkus Manfredi Architects
Myron Orfield, Professor of Law and Executive Director, Institute on Race & Poverty, University of Minnesota
Moderator: June Williamson, Associate Professor, Spitzer School of Architecture, The City College of New York/CUNY

PANEL: MEGAPROJECTS AS NEW TOWNS

Chris Corr, Regional Chair, Planning, Design and Development, AECOM, Florida
Tom Jost, Director of Urban Planning, ARUP, New York
Emily Talen, Professor, School of Geographical Sciences and Urban Planning, School of Sustainability, Arizona State University
James von Klemperer, Principal, Kohn Pedersen Fox Architects
Moderator: Robert Fishman, Professor, School of Architecture and Planning, University of Michigan

PANEL: MEGAPROJECTS IN THE METROPOLIS

Keynote: Scott Stringer, Manhattan Borough President
Vishaan Chakrabarti, Marc Holliday Professor of Real Estate Development and Director, Real Estate Development Program, Columbia University GSAPP
Susan Fainstein, Professor, Department of Urban Planning and Design, Harvard University GSD
Jeff Madrick, Senior Fellow, Schwartz Center for Economic Policy Analysis, The New School
Thom Mayne, Founder, Morphosis Architects
Moderator: Peter Grant, The Wall Street Journal



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1 Architecture at Cooper 1859–2009 Installation

2 Architecture at Cooper 1859–2009 Detail

3 Team Room On View, Installation

4 The Great White Whale is Black Detail

5 Team Room On View, Installation

ARCHITECTURE AT COOPER 4: 09–10

EXHIBITIONS

Architecture at Cooper 1859–2009

23 October–4 December 2009

The Arthur A. Houghton Jr. Gallery

Peter Cooper's vision for The Cooper Union, outlined in his letter to the Trustees and presented with the Deed of Trust for the institution on April 14, 1859, and expanded in his opening address on November 2, established the framework for what has become a rich institutional history in a building "entirely devoted... to the advancement of Science and Art."

From the opening of the Foundation Building to that of the school's newest building at 41 Cooper Square, architecture has supported the unique pedagogy of art, architecture, and engineering at The Cooper Union for the Advancement of Science and Art. The education of architects, from the first drawing classes of 1860, to the five-year undergraduate professional degree program, and the new post-professional master's program, has been informed by and reflected in the careful design and re-design of the school's buildings.

This exhibition traced the reciprocal relations between architectural education and the architecture of The Cooper Union, examining the history of its successive building projects side by side with its evolving pedagogy. Throughout this history, the studios, classrooms, laboratories, and lecture rooms for the educational programs have been complemented by three other programmatic components established by Peter Cooper in his Deed of Trust—a reading room, galleries of art and scientific collections, and The Great Hall—all of which continue to inform the mission of The Cooper Union today.

Curated, designed, and installed by the School of Architecture Archive, the exhibition included recently re-discovered original drawings and blueprints for the Foundation Building, hand written letters specifying its innovative steel structure and newly created digital models as the building was originally built in 1859 and reconstructed and renovated through 1891. Blueprints for the 1974 renovation annotated by John Hejduk, architect for the project and the first Dean of the School, were exhibited publicly for the first time. Accompanying these documents was a comprehensive view of the educational programs, exhibitions, and publications developed at the school over its 150-year history.

The Cooper Union has undergone significant change approximately every 50 years since its founding. At each of these moments, a school with needs for new or modernized educational space has responded with the construction of a new building: the Abram S. Hewitt Memorial Building, completed in 1912, shortly after The Cooper Union's semi-centennial; the Engineering Building at 51 Astor Place,

completed in 1960 following the centennial celebrations; and the academic building at 41 Cooper Square, opened in conjunction with the 2009 sesquicentennial. These physical transformations have also supported key moments in the evolution of the architecture program, for example, the development of the accredited Bachelor of Architecture degree in 1964, the establishment of an autonomous School of Architecture in 1975, and the launch of a post professional graduate program in 2009.

The School of Architecture continues the great experiment begun by Peter Cooper in 1859. Its pedagogy, which has influenced the study and teaching of architecture worldwide, continues to evolve, as students and faculty explore the potential for architecture to engage the increasingly urgent demands of threatened environments and our changing world.

Tony Candido: The Great White Whale is Black

2 February–13 March 2010

The Arthur A. Houghton Jr. Gallery

Through a selection of work spanning over five decades, Irwin S. Chanin School of Architecture Professor and Painter/Architect Tony Candido presented his visionary idea of the interplay between humanity and the contemporary environment and what the future of architecture could be in "The Great White Whale Is Black." The exhibition focused on Candido's calligraphic brush and ink paintings and drawings, which have been an important part of his output since 1967. A bold expression of one man's life vision, the exhibition illustrated Candido's commitment to art and architecture, and included the following works selected by him:

Cable Cities—visionary paintings and drawings of broad sweeping structures which he views as part of the geography, and through which we can regain our landscape;

Asahikawa Heads—large calligraphic brush and ink heads, previously exhibited in 1998 at the International Design Forum (Japan), were on view for the first time in the U.S.;

Abstract Brush Strokes—for Candido, the brush stroke is the concrete formative element through which a reality far greater than the apparent is realized;

Double Images—paintings and drawings motivated by Candido's sense of what he sees as the duality in man's mind of nature and the abstract;

A selection of student designs for the Urban Farm, a project that Candido conceived and introduced at The Cooper Union in 1998, was also part of the exhibition.

Tony Candido received his Bachelor of Architecture from the Illinois Institute of Technology under the directorship of Mies van der Rohe and training in City Planning under the directorship of Ludwig Hilberseimer. He made the first design for Konrad Wachsmann's Air Force Hangar's longitudinal elevation under Wachsmann's supervision. He was an Architectural Designer with I.M. Pei from 1954–57 and amongst other projects, designed a single support 180-foot diameter steel and glass structure—a first. Candido also made a major contribution to the design of the U.S. Pavilion by Davis-Brody Architects for Expo '70 in Osaka, and went to Japan in 1969 to supervise its design and construction. In 1957, Candido decided to work independently in his painting studio, where he continues today.

Team Room On View:

The NAAB Re-accreditation Site Visit

15 April–22 April 2010

The Arthur A. Houghton Jr. Gallery

From 10 April until 14 April 2010, the School of Architecture hosted a Visiting Team from the National Architectural Accrediting Board as part of the re-accreditation of its professional degree program, which occurs every six years. The Houghton Gallery served as the site of the Team Room for the presentation of the entirety of the Bachelor of Architecture curriculum, including detailed pedagogical objectives, syllabi, and lecture notes provided by each member of the faculty, and student work for all courses and studios from fall 2006 until the current academic year. Over one hundred and twenty design projects from all five years of the design sequence were presented to the team, in original form (both drawings and models), as panels and as 11"x17" booklets. The installation exemplified the multiple opportunities for synthesis and integration between the design studio and lecture courses, and demonstrated with passion and clarity the depth, rigor and continued inventiveness of student work at the school.

European Castles from the Eleventh to the Sixteenth Centuries: A selection from the Lantern Slide Collection of The Cooper Union School of Architecture Archive

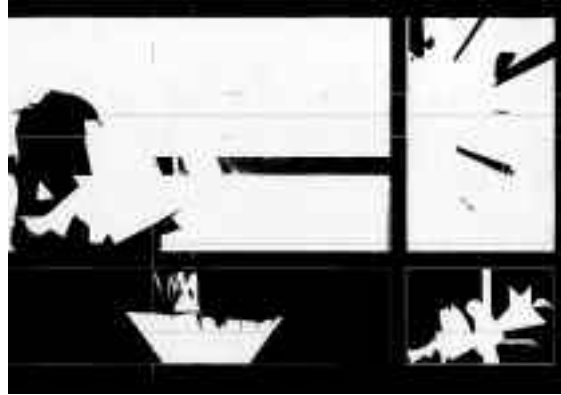
November 2009–February 2010

3rd Floor Hallway Gallery

The exhibition, curated by Barb Choit, School of Architecture Archive, was a re-presentation of a show originally installed by Cynthia Hartline in 1999. The show depicts a variety of Medieval and Renaissance castles from both Eastern and Western Europe. Images of these primarily heavy stone structures were selected from The Irwin S. Chanin Architecture Archive Lantern Slide Collection, a collection of 10,000 black and white glass slides.



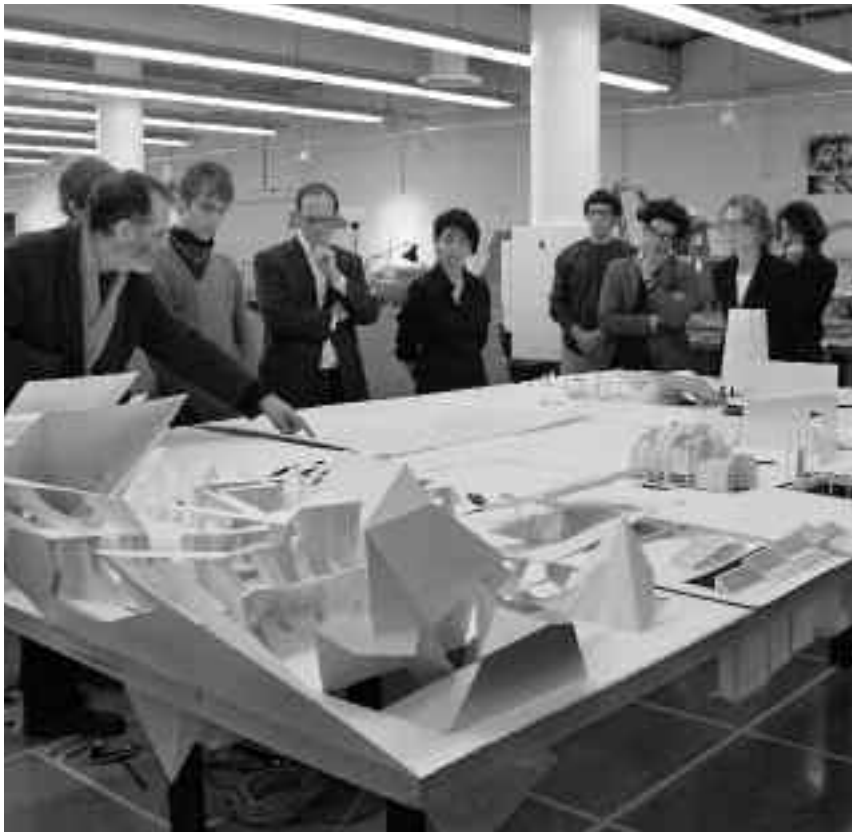
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- 1 Architectonics, Fall
- 2 Architectonics, Fall
- 3 Architectonics, Fall
- 4 Architectonics, Spring

- 5 Architectonics, Spring
- 6 Freehand Drawing, Fall
- 7 Design II, Spring
- 8 Descriptive Geometry, Spring
- 9 Design II, Fall

- 10 Design II, Spring
- 11 Design II, Spring
- 12 Design II, Fall
- 13 Design II, Spring

STUDIO COURSES

ARCHITECTONICS: FALL SEMESTER

Professor David Gersten
 Professor Aida Miron
 Professor Anthony Titus
 Professor Uri Wegman

This year, through a series of questions we created a situation, we built a 'place to draw.'

1. Working with the tools of drawing, construct a plan and a section of the tools of drawing at full scale.
2. Working with the tools of drawing, construct a plan and a section at full scale of the tools of drawing capturing their motion as they draw themselves.
- 3A. Construct a drawing at full scale that captures the particular choreography of the instruments of drawing and the body in motion as a spatial/temporal structure.
- 3B. Film the construction of (3A) from three station points: plan view, lateral view, and transverse view.
- 3C. Construct a singular image from still frames extracted from each of the three films of (3B).

A plan of a photograph, is a straight line?

Define a strategy, a theory of distance.

4. Construct three critical vertical sections and three critical horizontal sections cutting through the photomontage constructed for (3C) as an artifact.
- 5A. Working with the drawings from (4), construct an axonometric of the space of drawing contained within the photomontage.
- 5B. Print the original photomontage (3C) the size of your drawing surface.
- 6A. Mount the large photomontage on your drawing surface, set your drawing board to a fixed angle (horizontal, vertical or any angle between). Consider everything below the hinge to be a solid, consider the space of drawing to have the capacity to penetrate the drawing surface and cut voids.
- 6B. Working with the drawings from (4) and (5A), construct two critical vertical sections, two critical horizontal sections and one axonometric of the space of drawing in the particular condition of the: solid/void/drawing/table/site.

Clear a space, define a site

The representation is the social space

- 7A. Within the studio, clear a space that is 13.5'x18.5'; within this clearing construct a two dimensional frame 90"x150"; within the frame layout a grid of 30"x30".
- 7B. Working together, construct the following drawing: one plan of the first year area of the studio (30'x50' area) including the existing columns of the studio and each individual's (desk/site) projected spaces of drawing at the scale 3"=1'.

7C. Working with the drawings of (4) and (5A), construct one critical vertical section, and one axonometric of the space of drawing in the particular condition of the: solid/void/drawing/table/site at 3"=1'-0".

Raise the roof beams, construct a horizon

- 8A. Within the studio clearing, construct a frame to elevate the two-dimensional plan.
- 8B. Working together, construct the following drawings: eight vertical sections of the reconfigured first year area of the studio (30'x50' area) at 3/4 full scale. These drawings are to be constructed by the entire class in a self-organized manner.
- 9A. Read the elevated plan at 1/2"=1'. Read the sections at 1 1/2"=1'.
- 9B. Articulating a program: 'A Place to Draw'

Each individual then proposed an initial spatial and programmatic strategy for constructing 'a place to draw' within his/her site. This required imagination, articulation and definition of a particular mode of drawing, its spatial requirements, conditions and manifestations. Modes of drawing included all two-dimensional articulations of space. The formation of the community was organic. Through the many interventions a position emerged, an ethic, a material imagination of the social contract. As Charles Olson said of Herman Melville: "He was a beginner interested in beginnings..."

ARCHITECTONICS: SPRING SEMESTER

Professor Lebbeus Woods
 Professor Aida Miron
 Professor Anthony Titus
 Professor Uri Wegman

Le Corbusier's dictum sums up well the spirit and focus of this studio course:

Architecture is the masterly, correct, and magnificent play of volumes assembled under light.

"Masterly" refers to the architect's deep understanding of a passion for geometric volumes, a prerequisite for deploying them well in architecture. Architectonics should deal with the basic volumes—cube, cylinder, pyramid, and cone.

"Correct" refers to the discipline imposed by the volumes themselves, an understanding and appreciation of the precise rules governing their formation. It also refers to the appropriate uses of different volumes to different uses, both private and social.

"Magnificent" refers to the capacity of the volumes to inspire our emotions, imaginations, and idealism. Precise geometric volumes are supreme human inventions. They link us with the very sources of human creativity.

FREEHAND DRAWING

Professor Michael Webb
 Professor Jane Lea

To the students:

Birds fly. Fish swim. Architects draw. It's as simple as that. The drawing is the medium through which the design, existing in the architect's mind as an inchoate jumble of thoughts and scraps of idea, both borrowed and original (mostly borrowed), gets precipitated on to the two dimensional surface of a sheet of paper (here the word 'precipitated' is meant to be understood in its purely meteorological sense as: "atmospheric moisture condensed from water vapor by cooling and deposited as rain, dew, etc."). And, in the act of precipitation, the idea becomes tangible, coherent and, above all, communicable, both to others and to the drawer. Sit with an architect in a Starbucks and he or she will start sketching on a paper napkin their latest, but as yet unprecipitated, creation. You may believe it is solely for your benefit, but you would be only half right... the sketcher is trying out, testing... and asking whether the rain or the dew is worthy of the thought, or, more worryingly, whether the idea itself is worth anything at all.

It is that above-mentioned type of drawing, that magical transformation from the incorporeal to the corporeal, drawing's supreme act, that we would like to emphasize in this drawing course. At the outset you may well feel that the medium is in control of you; that you are almost frightened to make a line, that very first line! By the end you may sense a certain graphic self-confidence that defines mastery over the medium. Drawing then becomes sheer delight, a way of relaxing, even.

The drawing boards are gone from the architectural office today. The draftsmen who could spin their pencils (to keep the point sharp) while running them along the edge of a tee square on a sheet of tracing linen are no more. As you probably know, it is now all digital. Nevertheless it is vital for an aspiring architect to learn the art of drawing by using the hand... the coordination between the eye, the hand and the brain. Doing a drawing on the computer is always a joint operation; meaning that you are using your own skills in terms of producing the image... but you are also using those of the original programmers i.e. those who devised the program initially... unsung geni like Photoshop's Mark Knoll, Stephanie Schaeffer et. al., ...their names appear whenever you open up Photoshop. The result of all this is the ability to, say, make a perspective projection without the slightest understanding of what a perspective is.

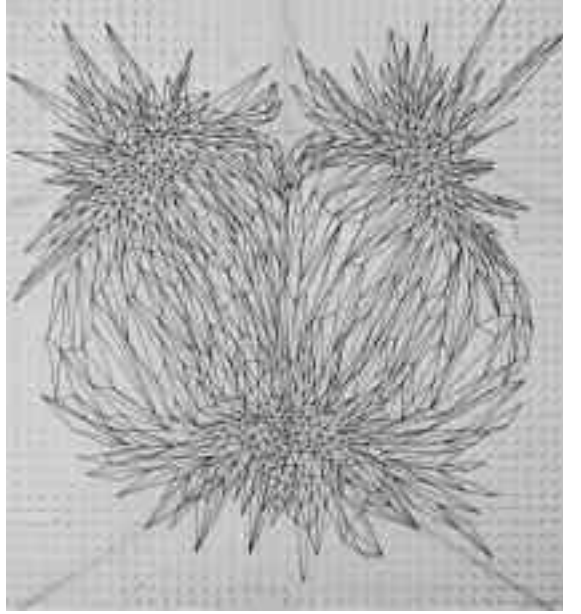
We want you to think of drawing, not only as a means of conveying an idea existing in your head or of an actual thing existing in space, but as a means of developing that idea or thing.



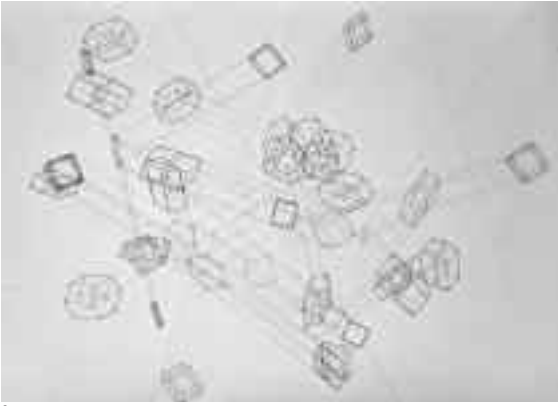
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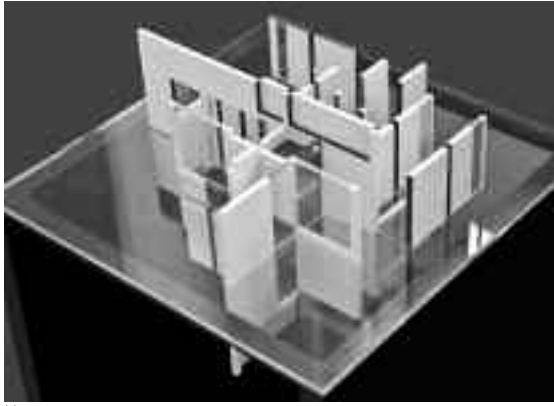
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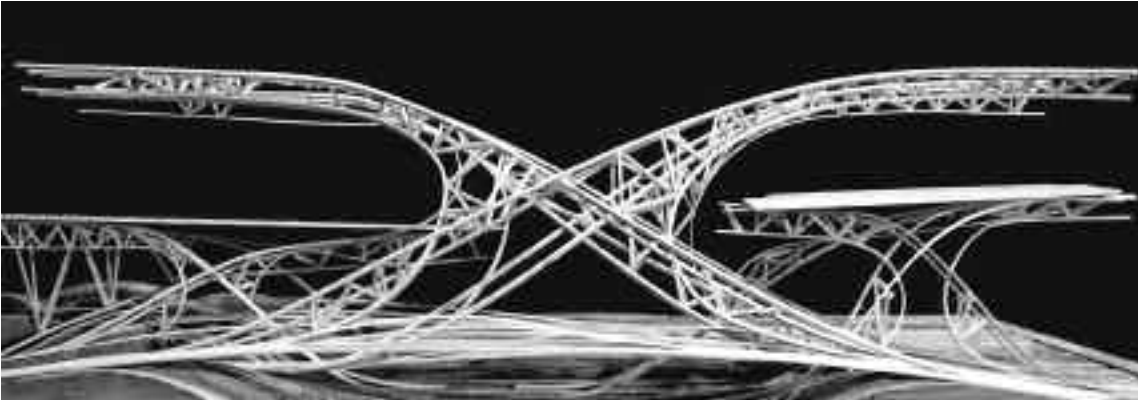
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DESCRIPTIVE GEOMETRY AND COMPUTER APPLICATIONS
Professor Michael Young

The plane known through its traces.

This year long course develops the student's knowledge and skill in architectural representation through a close examination of the geometric procedures that underlie representation. The students are encouraged to develop a critical and creative approach to understanding the relations between conceptions, perceptions, tools, and techniques.

In the fall semester of this course we explored the geometrical underpinnings of architectural representation. The course covered the Plane Geometries of Euclid, basic algorithmic procedures, Mongean Descriptive Geometry, Axonometrics, Perspective and Projective Geometry. Simultaneously, research was opened into the relations between manual drawing and digital modeling. The coursework was documented in a series of notebooks that the students generated through weekly drawing assignments. These notebooks organize the material of the course into a document that the students will be able to continually reference throughout their architectural studies.

The spring semester investigated the historical and theoretical issues at stake in these systems of geometry and representation. This proceeded in a series of three-week sessions. Each new theme was introduced through a lecture and a discussion focused on specific readings related to the topic at hand. The second class consisted of individual desk crits, with the third class as a pin-up review of the drawing experiment. The themes of these 5 sessions were: Plane Geometry, Interrelated Projections, Intersection & Surface Development, Axonometry, and Perspective Projection.

DESIGN II: FALL SEMESTER

Professor Michael Young
Professor Lydia Kallipoliti
Professor Pablo Lorenzo-Eiroa

The fall semester of the Design II studio addressed formal, programmatic, material, and energetic issues in relation to architectural tectonics.

The studio explored the relations between matter and force, geometry and sensation in relation to the dynamic ideas first put forward in 19th century physics. These theories and experiments fundamentally questioned the categories of energy and matter, wave and particle, continuity and discontinuity.

Scientific developments of the 19th century, like Nikola Tesla's generators and Michael Faraday's experiments with magnetism, were examined so as to conceptualize space

through energies—sound, light, and gravitational, electrical and magnetic fields. Subverting a traditional understanding of immaterial energies, the studio analyzed dynamic environments as emergent mediums. Environments are understood as twofold: the immediate spatial ecologies of bodies, architecture and territories, as well as projected spaces of dynamic force.

The studio began with four problems requiring creative solutions to sets of constraints, each one related to specific tectonic, programmatic and material conditions. Our emphasis was on the process itself as a project, leading to concrete, verifiable proposals. Each problem required an investigation of representational techniques in relation to a developing design concept.

The four problems developed from each other leading to a mid-term review. The second half of the semester introduced the program of a small study and research center dedicated to the work of Nikola Tesla located at the site of Tesla's former Wardenclyffe Tower on Long Island.

Starting in Colorado Springs in 1899, Nikola Tesla began experimenting with larger and larger Resonant Transformers. In 1901 Tesla began the construction of a "World Telegraphy Center" in Wardenclyffe, Long Island. The stated goal was wireless transmission of radio signals across the Atlantic. Tesla always referred to this as the "wireless transmission of information," with the ultimate goal being the wireless transmission of energy. Crucial for the development of the projects were the relationships established with the artifacts existing on the site, principally, the original laboratory building designed by Stanford White and the existing Tesla tower foundation.

DESIGN II: SPRING SEMESTER

Professor Guido Zuliani
Professor Pablo Lorenzo-Eiroa
Professor Yeon Wha Hong

The activity of the spring semester Design II studio was dedicated to the exploration and discussion of fundamental elements, structures and strategies of architectural composition and the conditions of their tectonic and spatial actualizations.

The studio assumed an inductive and anachronic approach, focusing on the formal analysis of fifteen seminal case studies of modern architecture. The architectural analysis of the fifteen projects, all of which were individual houses, was organized in three different but correlated phases. Throughout the entire semester the analytical work was supported and expanded by weekly presentations and class discussions on the formal and conceptual tropes emerging from the students' work.

The first phase of the exercise was dedicated to the acquisition of an accurate knowledge of the assigned case study through the re-drawing, in 1:50 or 1/4"=1' scale, of the project's basic documentation in plans, elevations, sections and sectional axonometric. This phase was then completed with the realization, in the same scale, of operable models, which intended to concretize a preliminary understanding of the overall organization of the architectural objects.

The second phase of the exercise focused on the formal analysis of the plan. Different sets of analytical paths were followed and geometrical, typological and transformational analyses were then applied and considered, individually or in their reciprocal relations, as the instruments for the comprehension of the unique syntactic and spatial quality of each single architecture within itself and in relation to the exterior space.

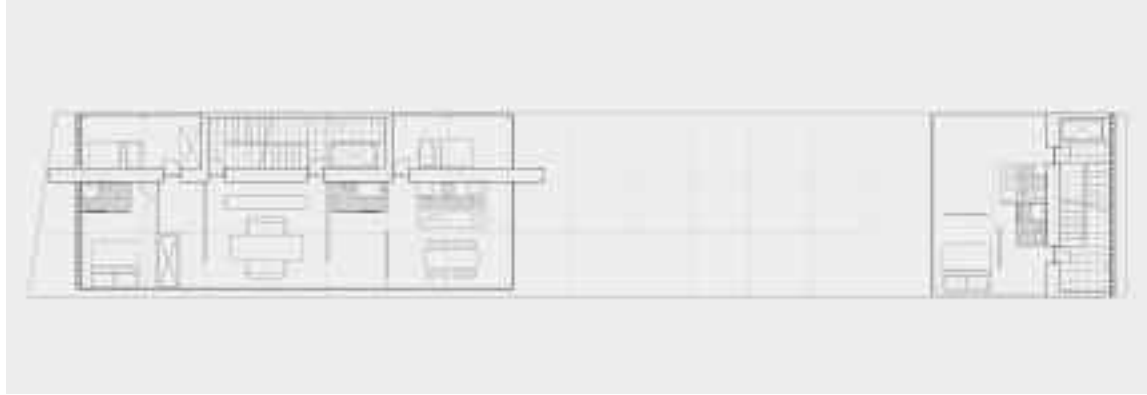
The third analytical phase consisted of the verification and development of the third dimension of the result of the plan analysis. The aim of this last phase, carried out by means of sectional drawings and models, was to further the results of the planimetric analysis toward the identification and concretization within the tectonic and spatial language of architecture, sets of syntactic units able to organize a collective architectural lexicon, a potential anthology of architectural aphorisms or epigrams.

Projects list:

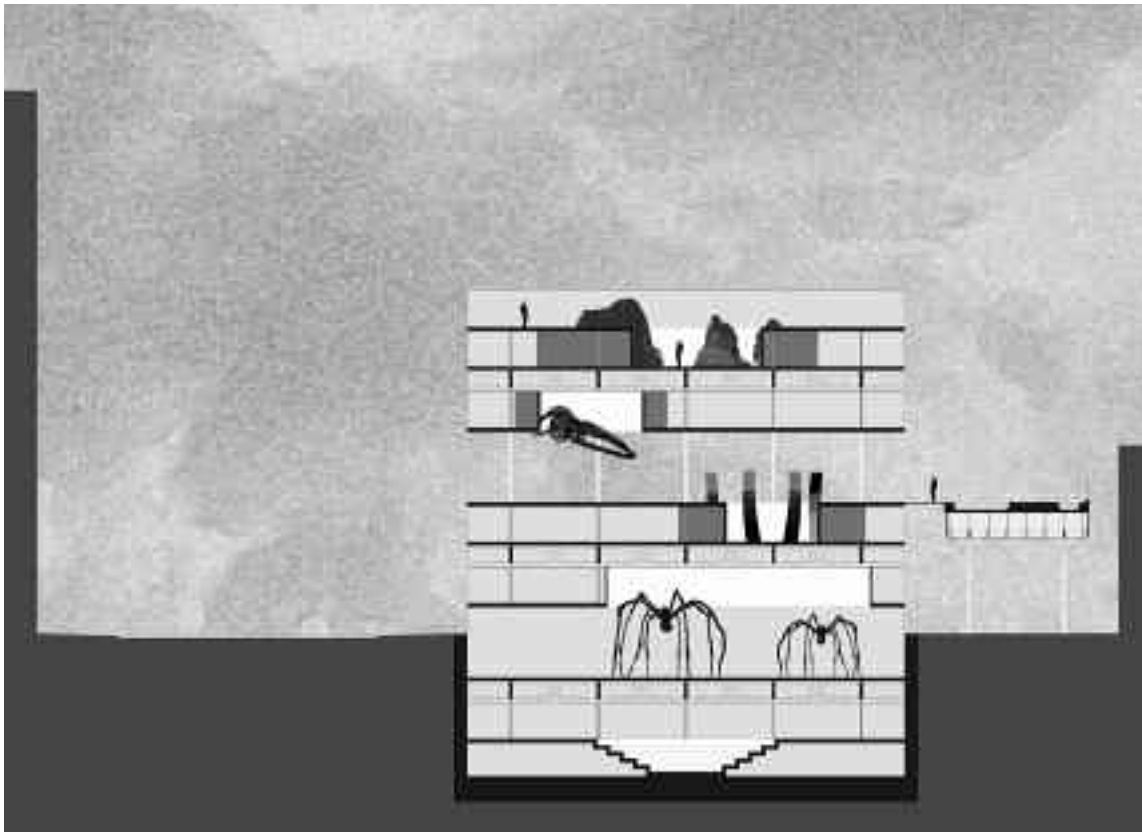
- 1) Villa Moissi, Venice—A. Loos (1923)
- 2) Maison Tzara, Paris—A. Loos (1926)
- 3) Villa for the XIII District, Wien—J. Frank (1926)
- 4) Villa Meyer, Neuilly-sur-Seine—Le Corbusier (1926)
- 5) Villa Curutchet, Mar del Plata—Le Corbusier (1949)
- 6) Gericke House, Berlin—L. Mies van der Rohe (1932)
- 7) Hubbe House, Magdeburg—L. Mies van der Rohe (1935)
- 8) Villa at the Lake Shore, V Triennale di Milano G. Terragni (1936)
- 9) Villa Bianca, Seveso—G. Terragni (1937)
- 10) Texas House 3—J. Hejduk (1954-1960)
- 11) Texas House 5—J. Hejduk (1960-1962)
- 12) House II, Hardwick-VT—P. Eisenman (1969)
- 13) House VI, Cornwall-CN—P. Eisenman (1972)
- 14) Villa Dall' Ava, Paris—R. Koolhaas (1991)
- 15) Maison à Bordeaux, Bordeaux—R. Koolhaas (2001)



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- 1 Design III, Spring
- 2 Design III, Spring
- 3 Design III, Fall

- 4 Building Technology, Fall
- 5 Design III, Fall
- 6 Design IV, Fall

- 7 Design IV, Fall
- 8 Design IV, Spring
- 9 Design IV, Spring

DESIGN III: FALL AND SPRING SEMESTERS

Professor Anthony Vidler
Professor Stella Betts
Professor Lyn Rice
Professor Laila Seewang

Professor Samuel Anderson
Professor Elizabeth O'Donnell
Professor Ashok Rajji
Professor Stephen Rustow

ARCHITECTURE IN DETAIL

During the span of the year, we studied architecture in detail. That is, architecture treated as a complete and synthetic design project, in depth and breadth, conceived as a material art. Our investigations ranged from detailed analyses of existing or projected buildings to the design of parts and wholes of buildings for a range of different purposes, domestic and public. At intervals during the semesters, and with the help of visiting professors to the studio, the projects focused on particular aspects of the architectural synthesis, emphasizing context, human desires and spatial arrangements, environmental issues and technological needs, structural logics, and material assemblies.

Architecture is the *art* of realizing in three dimensions, and in more or less durable materials, spaces for human habitation, in their appropriate ecological and sustainable form.

A successful architectural *idea*—drawn or modeled, abstract or detailed—already contains the potential for this realization, anticipating the way in which organic and inorganic material will manifest the idea, in general and in detail.

The art of architecture lies in the (apparently) effortless resolution of the complex demands of human occupation in natural and man-made environments, in order to produce spaces that poetically enhance the acts of life.

Drawing from Memory

In the first project, students were asked to draw at 1/8 in scale in axonometric projection, the house or apartment in which they lived as a child and remember best. If there was more than one, they selected the house of which they had the happiest (or alternatively, the unhappiest) memories. While the first project was drawn, a comparison was made with the modeled version of memory space developed by the L.A. artist Mike Kelley.

Mike Kelley's "Educational Complex" now in the collection of the Whitney Museum of Modern Art, was constructed by a process of (1) remembering from memory the spaces in which he grew up and was educated, and then (2) imposing on the first model the actual spaces according to real dimensions. The result was a small city, with holes and gaps,

telescoping and superimposition, a kind of three-dimensional "collage-city" (Rowe) or better an "analogous city" (Rossi).

Questions to ask and *answer in the drawing*:

What was the (urban, suburban, rural) context? What was the climate? Towards what view or views did the windows face? How was the habitat heated, cooled, ventilated? How did the circulation work from the entryway? What were the scales of the spaces in relation to the body? Who lived there? What were their favorite spaces?

Habitat Analysis

In the second project, students were asked to analyze already designed habitats according to a strict sequence of questions—five each. Working in pairs, each pair with one historic and one contemporary habitat, students developed five drawings for each project, ten drawings in all. The first drawing of each habitat articulated the first question of each, and so on. But the first question for each was the most important, and the two drawings (one historic, one contemporary) emphasized this accordingly. In this way, the class discussion of the analyses was organized either according to each habitat, each pair, or the series of drawings articulating a particular question.

The pairs of projects analyzed included:
DESERT HABITAT: Albert Frey, House II, Palm Springs, CA, 1963–64; Wendell Burnette, Burnette Studio Residence, Phoenix, AZ, 1995
INHABITED HABITAT: Rudolph Schindler, Schindler Chase House/Kings Road, West Hollywood, CA, 1922; MVRDV, Double House, Utrecht, Netherlands, 1997
CONSTRUCTED HABITAT: Frank Lloyd Wright, Fallingwater, Bear Run, PA, 1934, 1938, 1948; OMA, Maison à Bordeaux, Bordeaux, France, 1998
AMBIANT HABITAT: Le Corbusier, Villa Savoye, Poissy, France, 1928–29; UN Studio, Mobius House, Het Gooi, Netherlands, 1993–1998
INSIDE-OUT HABITAT: Alvar Aalto, Summer House, Muuratsalo, Finland, 1953; Ruye Nishizawa, Weekend House, outside Tokyo, Japan, 1998
FORMAL HABITAT: Rietveld Schroder, Rietveld Schroder House, Utrecht, 1924; Peter Eisenman, House VI, Cornwall, CT, 1975

Re-Design

Taking the precedents analyzed in Project 2 (Analysis), "Re-Design" the habitat in order to accommodate a family with three children. One parent is an artist, the other, an academic. From time to time the family will receive visits from relatives, some elderly. Each architect will be assigned a client from the studio team, and will interview the client as to needs, desires, and aspirations for the Re-Design habitat they have just purchased.

Working in model, after deciding on the general accommodation and environmental requirements of the Re-Design, confer with your client as needed. You may add to the original habitat, extend it, re-organize its interior, bring a "parasite" to it, inside it, or beside it, finally, construct another structure on the same site. All Re-Designed habitats should be brought up to contemporary environmental, sustainable, and accessible standards. An easy to understand mini-code book will be given to each architect.

Collective Habitat

Project IV concentrated on the construction of collective habitats in the form of a New York apartment building. The program: five floor-through apartments, each with accommodation for a family of two adults and two children, live-work space, minimum one-and-a-half baths; roof garden (green roof) with children's play space; small coffee-shop on first floor with separate entrance.

The object for this design problem was not to invent a new form of apartment living, but to work with, modify and transform, typical distributions of attested quality. Students adopted one, or aspects of more than one, from a series of precedents and worked with it as a "template" for their design.

Students selected one of six sites in lower Manhattan. Particular attention was given to the following: Code requirements for the area of the site—bulk, height, accessibility, egress, and room/window requirements; context of the site—street front and rear set-back requirements; circulation into and through the apartment; disposition of living spaces; light, air, and access to outdoor space; heat loss and gain through front and rear envelopes.

Chelsea Kunsthalle

Kunsthalle is, generally, in German speaking regions a term for a facility mounting temporary art exhibitions. Some are funded or supported by a local Kunstverein, an art association of local collectors and artists.

In this final project of the year, the program was for a small exhibition facility envisaged along the lines of the European "Kunsthalle." The planned exhibitions would range from works on paper to large-scale sculptural and architectural objects. The client was formed of a conglomerate of European institutions wanting a foothold in New York for the display of a wide range of global art and architecture, and seizing the opportunities offered by the recently re-built High Line for public access and visibility.

The program included: entry/lobby, shop/bookstore, 2 large galleries at 4500 sq. ft. and 2 small galleries at 1500 sq. ft., a collections library, educational classrooms, theater/auditorium, special event space, a project room for visiting artists, café, and staff areas/offices.



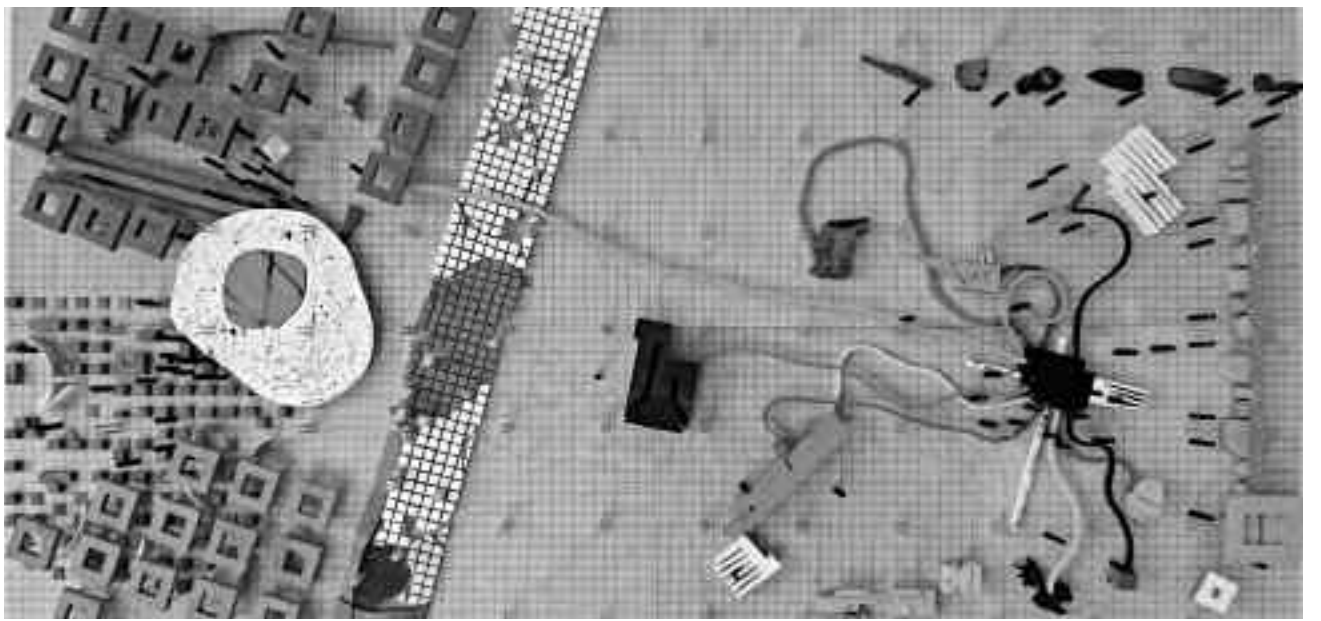
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DESIGN IV: FALL SEMESTER

Professor Diane Lewis
 Professor Peter Schubert
 Professor Mersiha Veledar

VUOTARE—“TO VOID”
 THE ARCHITECTURAL IMPACT OF THE DEFINED
 VOID IN THE URBAN FABRIC
 PROGRAM: THE CIVIC INSTITUTION
 AS INSTITUTIONALIZED VOID

Vuotare—a verb:
 to empty, to drain.
 Given:

Three linear stretches of Manhattan along three avenues:
 Fifth Avenue, Park Avenue, First Avenue.
 Each Avenue should be considered north to south,
 from 23rd street to 59th street,
 Consider the area that is one-and-a-half city blocks
 east and west of each avenue.

Find the Sanborn maps of your selected avenue from two
 different eras.

A. SELECT A LOT OF ANY SIZE AND CONSIDER IT A VOID.
 Study the impact of that void upon the surrounding urban
 fabric. Based on your observations, propose a massing and
 a program that “institutionalizes,” secures, the position of
 that void as memorable, important and energized in the
 Manhattan grid.

B. SELECT A LITERARY TEXT ON THE VOID

Each project will be delineated by a 22 inch square of urban
 fabric at 1/32nd inch=1 foot. The model should be constructed
 with all masses present so that it can be photographed before
 the implementation of the proposed void and with the void
 as the starting point for your redefinition of the surrounding
 masses and voids to implement your programmatic and
 structural intervention.

Plans and sections, drawn at the same scale as the model,
 as well as plans and sections at 1/8th inch=one foot.

A 6 foot square drawing of the street level entry condition,
 drawn freehand at 3”=one foot.

An “Urban address” plan, delineating the position of the
 void relative to the avenue from 23rd to 59th street or any
 other significant relationships in the Manhattan grid of
 masses and voids.

Any important sketches, views, or details.

FACTS, STRUCTURE-SELECTIVE CONSTRUCTION OF SITE
 CONDITIONS THROUGH TIME AND SPACE

Please remember that you may represent the site elements
 such as existing, proposed, and previously existing structures
 and artifacts, streets, geography, etc., according to your
 “reading” of the facts of the site. This will be discussed in
 studio to insure that you can implement different still life
 conditions of the urban fabric within the foundation of the
 structural base that you fabricate. The art of designing
 structure for Manhattan; a tectonic result autonomous from
 the pressure or evidence of real estate forces; resisting “the
 pressure of the lot line.”

Seagrams, Lever, Paley Park, 666 Fifth Avenue, Chase
 Plaza and a number of other architectural achievements
 have set the level for overcoming the restrictions of the real
 estate boundaries of the Manhattan lot. These structures
 use mass to enunciate a civic void as the characteristic
 element of the project.

These definitive prototypes were achieved with the application
 of the radiant city section and free plan at street level, and
 each provide a civic open space to accompany the principal
 programs. This challenge to design an inhabitable void
 insured by inhabitable mass requires an implementation of
 both tectonics and program. The objective is to learn how to
 achieve a mix of commercial, domestic, and civic interaction
 within the “given”—a reading of the potential of existing
 conditions and exact surroundings within the real-estate
 generated cacophony of the Manhattan grid.

DESIGN IV: SPRING SEMESTER

Professor Dennis Crompton
 Professor Urtzi Grau
 Professor Georg Windeck

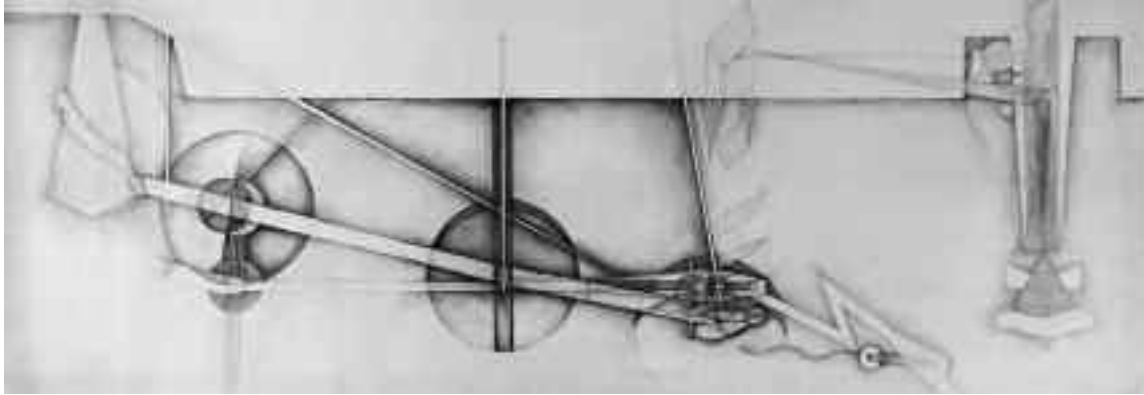
Excerpt: *It was 9pm on a cold winter’s evening. The sky was
 dark and stormy, full of snow. I approached the house with great
 excitement. It appeared to dematerialise, lit in indescribable
 colors, the light spread out and mixed with the night. As I walked
 along the path, it glowed one meter ahead and one meter
 behind, following me as I walked. The front door slid open,
 emitting a warm, friendly, welcoming light. My host appeared
 at the opening and invited me in. ...After dinner we wandered
 around the house, moving rooms, screens and other elements
 at will, making enclosures and layering space, changing colour,
 surface and texture on command. The house was warm and
 friendly and totally responsive. As I left, I reflected on the
 Robohouse. “A style for the year 2001” is irrelevant. Style has
 always been irrelevant. The Robohouse is of its time. The past
 is only the starting point for the future.*

Ron Herron wrote the above scenario to describe his entry for
 the 1985 Shinkenchiku ideas competition for “A House for the
 Year 2001,” which he called “Robohouse.”

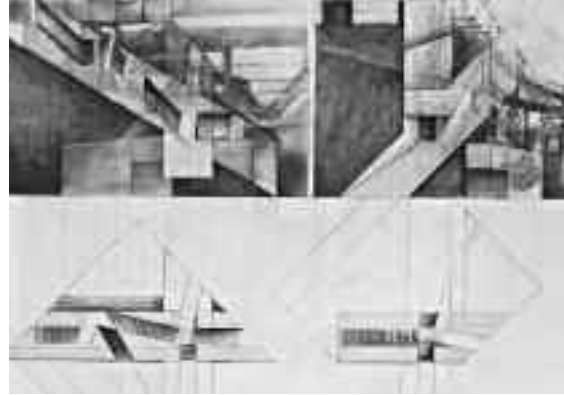
The Design IV spring semester explored the “Responsive
 Environment” at scales from domestic to urban through three
 projects. In the first project, students were to consider the
 domestic and social situation that was envisaged in the
 Ron Herron quotation, reinterpret it, and then extend it by
 suggesting a further four scenarios (not necessarily related)
 which described a variety of other activities or events which
 might occur within the same domestic scale environment.
 The concluding study of the dwelling and the research were
 brought together in a set of drawings, which demonstrated
 the realization of the intentions suggested in the students’
 original scenarios.

The second project explored the historic form that has been
 seen for many centuries where people gathered to engage in
 a celebration, exchange goods in a market or are entertained
 by the traveling fair. Examples of such events are: the country
 fair, fashion week, summer or winter fest, sporting event.
 Students were given the task of planning, designing and
 detailing installations for three such events in New York’s
 local facility, the Javits Center, while accounting for a
 re-staging at similar sites in other cities.

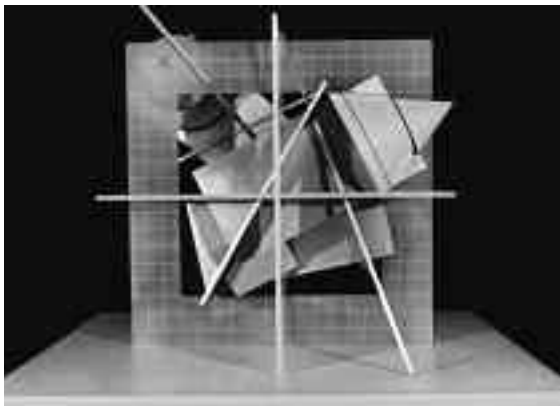
The final project addressed the City form as it has evolved
 over thousands of years with changing influences, which have
 produced the fortified city settlements of medieval Europe
 and the garden suburbia, which now envelops the urban soft-
 centres of the 21st century. We speculated on the relationship
 between the real, physical worlds and the parallel, virtual,
 electronic, worlds, which we now all daily inhabit. We
 explored those aspects of urban form, which are most closely
 related to architecture and the relationship of individuals and
 communities to their immediate, responsive environments.
 The focus of this study program had three critical
 components: the High Line, the West Side Hudson Yards,
 and the extension of the No. 7 Subway Line to 34th Street
 and Eleventh Avenue where all three of the elements will
 eventually meet. This co-incidence suggested that a new
 interchange node would be established opening up this area
 of Manhattan to intense multi-use development. Individual
 projects, inserted into this context were suggested. Their
 purpose was to strategically trigger future interventions.



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|---|---|--|
| 1 Design IV, <i>House for a Geologist and an Astronomer</i> , 1996–97 | 4 Architectonics, <i>End of Year Exhibition</i> , 1998 | 8 Design III, Analysis, Le Corbusier, Ronchamp Chapel, 1988 |
| 2 Architectonics, <i>The Cartesian House</i> , 1984–85 | 5 Architectonics, <i>House for Sergei Eisenstein</i> , 2002 | 9 Design III, Louis I. Kahn, City Tower Project, Philadelphia, 1996 |
| 3 Raimund Abraham at The Cooper Union, circa 1980 | 6 Richard Henderson at a desk crit, circa 1989–90 | 10 Design III, Analysis, Le Corbusier, Le Palais Du Gouverneur Chandigarh, 1975–76 |
| | 7 Design III, Analysis, Melnikov, USSR Pavilion, 1995 | |

RAIMUND ABRAHAM 1933–2010

...At first we are made to believe that this architect deals with earth and sky. He digs down into the earth and he builds up into the sky. At first, we are made to believe that this man understands the shadows of the underground and reflects the light of the opaque overcast atmosphere. At first, we are made to believe that three elements—man standing, man sitting, man lying—are the prime conditions. Then we realize that Raimund Abraham's moment is that moment when the uppermost surface of the earth contacts the undermost surface of the sky. It is the moment of anticipation, the moment just before contact; the moment of maximum tensions and of maximum repose; the moment filled with passion and with gentleness, as with the Winged Angel of da Vinci, just touching Earth from the flight of the sky. Leonardo's painting, *The Annunciation* is anticipation, love, creation, mystery, and so is Raimund Abraham's architecture.

—John Hejduk, *Raimund Abraham, Architect*

For me, architecture is not a profession, but a discipline, and a school of architecture is not a place to prepare students for professional enterprises, but a forum for intellectual discourse and resistance: resistance against teachers, ideologies, and the gurus of the newest fashions.

And whether or not there is a crisis in our schools, we cannot separate the crisis within the discipline of architecture from the crisis in architectural education.

On the other hand it is too easy to accept the generalization of critical conditions, maybe because there is no crisis in architecture or in the education of architects, but rather a crisis of architects, educators and students who have succumbed to the seduction of professionalism.

When Wittgenstein said: "A teacher may get good, even astounding, results from his pupils while he is teaching them and yet not be a good teacher; because it may be that while his pupils are under his direct influence, he raises them to a height which is not natural to them, without fostering their own capacities for work at this level, so that they immediately decline again, as soon as the teacher leaves the classroom," you may assume that I am one of those teachers.

Either we try to teach the students the necessity to challenge first the limits of their imagination, to envision the impossible and to think as far as their thoughts can carry them, or we deny them the only thing worthwhile teaching: the poetics of architecture.

—Raimund Abraham, *The Enigma of the Muses*

FATE

Idea and matter are the poles of architecture.
Their future differs.
For thought, the idea prevails.
For matter it turns into waste.

The idea is the manifestation of thought totally encased and protected by the individual power of its inventor but violated by the intention of implementation and consequently of its realization. The utterance of thought is silenced as soon as it is pronounced, while the silence of matter is violated by its own fate of decay.

Knowing that only what appears evident can be translated, the enigma of unknown fragments remains. Matter will only survive its own fate through the memory of desire: an adventure across the real and the imaginary, an adventure of work in pursuit of itself.

While you build the wall
you shall destroy the stones
while your eyes long for the window
you shall destroy the wall
while you form sheets of glass
you shall destroy the crystals
while you extrude the iron bar
you shall destroy the mountains of ore
while you reach for the sky
you shall destroy the earth.

THEORY

Theory is not only the supposition for the evolution of architectural thought, but the supposition for architecture itself.

Versus the archaic impulse for the protection against the forces of nature.

Versus the demand for utility.

Versus social servility.

Theory is the mechanism to search for the universal quality, the "ideal," as a condition of radical clarity in the anticipation and making of architecture.

This desire for the "ideal" envisions a program beyond utility, demanding a universal interpretation of architectural metaphors.

To draw architecture or to build architecture is ultimately the manifestation of the translatability of a poetic text of metaphors into architectural form.

But while the search for the ideal demands contemplation, critique, and experimentation, utility succumbs to the inescapable habit of routine. The conflict and confrontation between theory and practice forms the dialectical foundation for all attempts to think or to make architecture. The possibilities toward a vision of architecture are infinite.

It is the role of theory to question and confront the infinity of the imagination with the limits of the discipline of architecture.
Written architecture.
Drawn architecture.
Built architecture.
The illumination of enigmatic bodies.

ON DRAWING

A drawing for me is a model that oscillates between the idea and the physical or built reality of architecture. It is not a step towards this reality, and in this respect it is autonomous. However, for me there must be latent some anticipation of the physical reality and its commemoration of the idea. In this sense, an architectural drawing can never be rendered. On the contrary, it has to be constructed so that it reveals the idea of the syntactic form through the medium of lines, in much the same way it has to anticipate the sensuality of the material through the layering of color.

EXPRESSION

What is the expression of a face?
Is it the surface? Is it the underside of the skin? Is it the skin itself? Is it the flesh under the skin? The bones?
Or is it all that, which is the fulcrum of all the spaces in between.
Space/Time/Body are enigmatic and inexplicable, like the Architecture that is based upon them.

If I could sharpen my pencil with my words, I would remain silent.

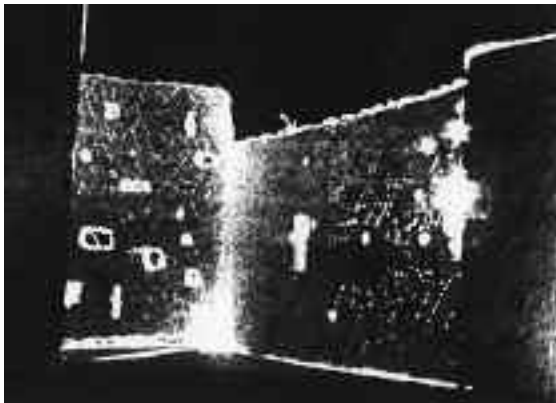
—Raimund Abraham, selections from
In Anticipation of Architecture: Fragmentary Notes



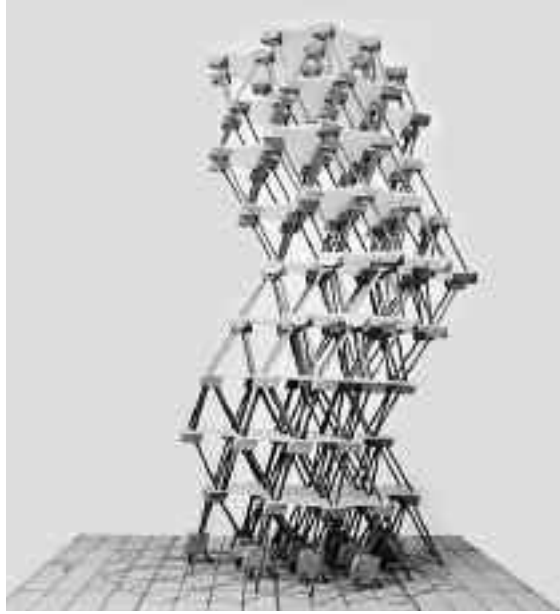
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RICHARD HENDERSON 1928-2010

Richard Henderson, Professor and Associate Dean Emeritus, who was a member of the faculty of the School of Architecture from 1967-2000. Professor Henderson was an architect of great invention and precision became the first Associate Dean of the School of Architecture in 1982, serving the school with great dedication and grace until his retirement in 2000. He was a gentle and masterful teacher of sublime intelligence who loved, and knew, Architecture. He taught Town Planning for many years, but his most significant contribution to the pedagogy of the school was his "Analysis" studio project for the third year, which he developed over 20 years of teaching. The entirety of the written brief for the Analysis project was a "List" of works and architects, from which each student would choose a project as his/her source of study for a full semester. From this straightforward list, with Professor Henderson's extraordinary knowledge and patient teaching, original and inventive projects emerged. Following is a selection of analysis projects across many years.

ANALYSIS

In a complete and successful work there are hidden masses of implications, a veritable world which reveals itself to those whom it may concern—which means: to those who deserve it.

Le Corbusier, *A New World of Space*, 1948 Reynal & Hitchcock, New York.

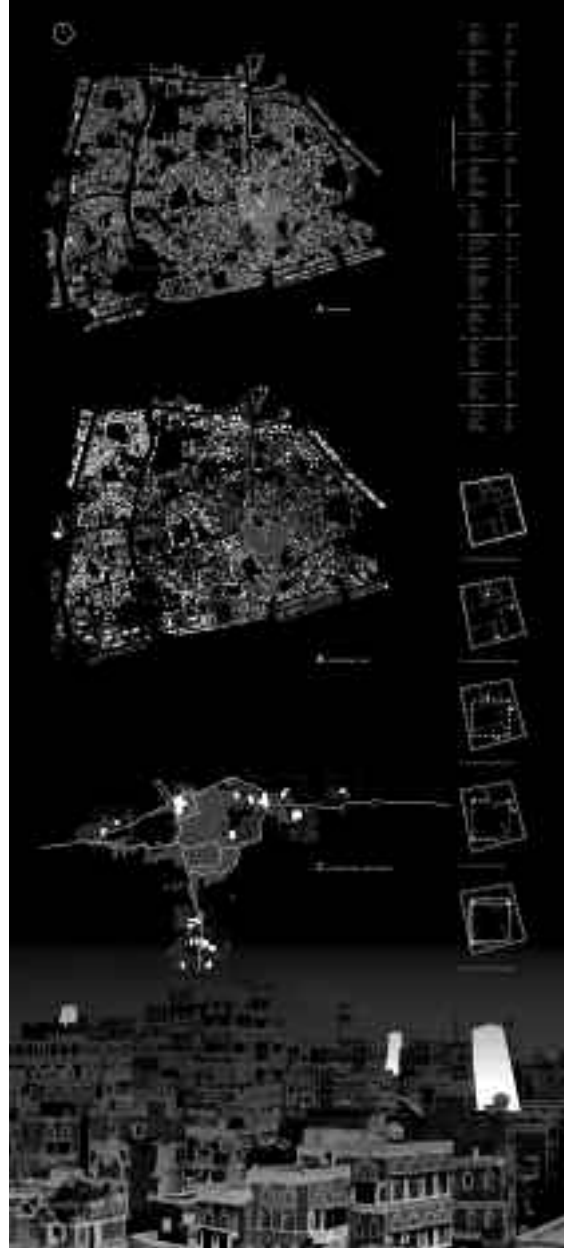
Presented to the student simply as a LIST of renowned works of Architecture for investigation, analytical studies occupy only a tangential relationship to conventions of critical historical analysis and archaeological examination. Customary research, initial dissections and the devising of inventive methodologies are, of course, essential preparations for the true creative intent of these projects. To seek only to undo the profound amalgam of a masterwork is to invite with surety its imminent death. Neither the definitive exposition of fact nor the meticulous rendering of description can hope to evoke the mysterious life embodied in enduring Architecture. And it is precisely this evocation, this "sense" of inexplicable insight, presented visually, which is the ultimate purpose of these deep probings. The Analysis is didactically a beginning, an instrument of search, a seed for exploration, and a natural ground for discovery.

Works included in this volume are fragments of more extensive productions. Hopefully these fragments convey with authority the innovative spirit and comprehensive involvement of their makers.

—Richard Henderson, *Education of an Architect, vol.II*

- A. **Aalto**, Church in Vuoksenniska, 1958
Town Hall, Saynatsalo, 1952
Baker Dormitory at M.I.T., Cambridge, 1948
Otaniemi Technical University, Otaniemi, 1949
- L.B. **Alberti**, Basilica Sant'Andrea, Mantua, 1462
Alhambra, Granada, Spain, c. 1350
Baths of Caracalla, Rome, c. 215
- P. **Behrens**, AEG Turbine Assembly Building, Berlin, 1910
- D. **Bramante**, Cloister at Santa Maria della Pace, Rome, 1504
Tempietto, Rome, 1502
- Borromini**, San Carlo alle Quattro Fontane, Rome
- Boulee**, Metropolitan Church
- Brinkman & van de Vlugt**, Van Nelle Tobacco Faculty
- F. **Brunelleschi**, Pazzi Chapel
- D. **Burnham** and J. **Root**, Monadnock Building, Chicago, 1893
- Carcassonne, France
- P. **Chareaux**, Maison de Verre, Paris, 1932
- Chartres Cathedral
- Coliseum, Rome
- J. **Duiker**, De Handesbad Cineac, 1934
- Durham Cathedral, c. 1093
- El **Lissitsky**, Proun Space, c. 1924
- F. **Dutert**, Galerie des Machines, Paris, 1889
- T. **Garnier**, Cite Industrielle
- Hadrian's Villa at Tivoli
- Hagia Sophia, Istanbul, Turkey
- V. **Horte**, Maison du Peuple, 1897
- Ictinus, Temple of Apollo Epicurus at Bassae
- Imperial Palace, Kyoto, Siero den
- Izumo Shrine, Japan
- L. **Kahn**, Salk Institute of Biological Studies, 1959
Philip Exeter Academy Library
National Assembly Hall, Dacca, Bangladesh
Richards Research Building, University of Pennsylvania
- Katsura Imperial Palace, Japan
- H. **Labrouste**, Bibliotheque Nationale, 1850
- Le Corbusier**, Villa Savoye, Poissy, 1929
Heidi Weber Pavilion, Zurich
Pavillon de L'Esprit Nouveau, Paris, 1924
Villas La Roche-Jenneret, Paris, 1923
Assembly Building, Chandigarh, 1963
Villa Stein, Garches, 1927
Maison Sarabhai, 1956
Monastery of La Tourette, Evieux, 1960
Millowners Association Building, Ahmedabad, India
Carpenter Center, Cambridge, 1960
Cit  de Refuge, Paris
Notre Dame du Haut, Ronchamp, 1955
Unite d'Habitation, Marseilles, 1952
- C. N. **Ledoux**, City of Chauv
- R. **Maillart**, Brindges and Other Structures
- J. H. **Mansart** (office of), Dome of the Invalides, Paris

- B. **Maybeck**, Christian Science Church, Berkeley, CA
- K. **Melnikov**, Soviet Pavilion, Paris, 1925
- E. **Mendelson**, Einstein Tower, Potsdam
- McKim Mead & White**, Pennsylvania Station, New York
- Mies van der Rohe**, Farnsworth House
Barcelona Pavilion, 1929,
Illinois Institute of Technology, Chicago, 1941
National Gallery, Berlin
860 Lake Shore Drive
Glass Skyscraper
- Michelangelo**, Medici Chapel
- Mnesikles**, Erectheum, Acropolis, Athens
- Mont Saint Michele
- O. **Niemeyer**, Casa das Canoas, 1953
Palace of Minos, Knossos, Crete
- Palladio**, Villa Capra, La Rotunda
Il Redentore, Venice
- Pantheon
- J. **Paxton**, Crystal Palace, London, 1851
- A. **Perret**, Concrete Structures
- H. H. **Richardson**, Ames Gate Lodge, MA, 1880-81
- G. **Rietveld**, Schroeder House, Utrecht, 1924
- G. **Romano**, Palazzo del Te, Mantua, 1534
- A. **Rossi**, Venice Theatre
- Sacred Precinct at Olympia, Peloponnese, Greece
- R. **Schindler**, Lovell Beach House, CA
- K. F. **Schinkel**, Altes Museum, Berlin
- Sir J. **Soane**, House at #13 Lincoln's Inn Fields, 1813
- J. G. **Soufflot**, Pantheon, Paris
- San Vitale, Ravenna
- Ste. Chapelle, Paris
- L. **Sullivan**, Wainwright Building, St. Louis, MO
- V. **Tatlin**, Monument to the Third International
Teotihuacan, Mexico, 0-400 c.e.
- G. **Terrangi**, Casa del Fascio, Como, 1936
- Train Sheds of the late 19th and Early 20th centuries
- van Doesburg** and **van Eesteren**, House, Project, 1923
- G. **Vignola**, Villa Farnese, Caprarola, 1560
- Vesnin Brothers**, "The Man Who Was Thursday" stage set
Villa Lante Gardens
- O. **Wagner**, Post Office Savings Bank
Weissenhofseidlung, Stuttgart, 1927
- L. **Wittgenstein**, Residence of, 1929
- F. L. **Wright**, Robie House, Chicago, 1906
Larkin Building, Buffalo, 1903
S. C. Johnson Adm. Building, Racine, 1936/1944
St. Mark's Towers Project, New York, c. 1927
Rose Pauson House, Scottsdale, 1939
Millard House, Pasadena, 1923
Avery Coonley House, Riverside, 1907
Winslow House, River Forest, IL, 1894
Guggenheim Museum



1 Thesis, Eyes that See

2 Thesis, The Jabalia Refugee Camp, Gaza Strip

3 Thesis, Radical Plasticity

4 Thesis, The Comedy of Errors

5 Thesis, Fall

6 Thesis, Fall

7 Thesis, Dark Earth

8 Thesis, Spring

THESIS: FALL AND SPRING SEMESTERS

Professor David Turnbull
Professor Hayley Eber
Professor Urtzi Grau
Professor Lydia Kallipoliti

The Thesis year is structured as a full academic year of architectural research. We believe that architectural intelligence is a gift and that design research is a special form of research... that is uniquely concerned with synthesizing a vast range of issues and complex and often incongruent impulses. In semester 1 the students identify critical issues that may or may not have architectural consequences. The issues are explored and we help each student develop a critical position in relation to those issues.

There is a bias, pedagogically, toward issues that:

- are current
- engage complex environmental or technological developments—good or bad
- have an impact on the way that the students might think about Architecture and how they might grow as architects, in the present and in the future.

The Thesis project is structured so that the student's capacity to construct an argument is of paramount importance. Developing an 'argument' has always been dependent on literacy and verbal dexterity, but, we insist on the necessity of 'empathy' as a complementary motive, sympathetic inter-subjectivity as a principle... i.e.; being able and willing to stand in somebody else's shoes...

3-4 'micro-seminars' distributed throughout the first semester given by post-graduate researchers from leading Universities in the New York area are used to show the students how research is conducted and what the documents containing that research have looked like in the past (20th century) and might look like in the near future.

The Cooper Union curriculum established architectonics and formal organization as foundations in architectural education many years ago. Thesis at The Cooper Union expands these foundational disciplinary principles to include contemporary ecological and technological perspectives, and relational thinking that privileges Architecture's role in the construction of social networks and communicational patterning. THESIS is regarded as 'individual' work, but our pedagogy depends upon collaborative group formation as research topics become clear. Inevitable thematic similarities appear—geo-political, humanitarian, psychological, ecological, technological and artistic. These thematic consistencies allow us to discuss the work in progress with loosely formed groups that can learn from each other.

Research by one student can inspire parallel or complimentary research of another, and even redraw the field of research in the self organizing thematic group. We encourage shared research and the idea that research is drawn from 'the commons' and returns there for the benefit of everyone inside and outside the studio.

One of the most compelling implications of an open approach to research in Architecture is the resurgence of the local—this is partly generational, but also symptomatic of global concerns. Research into local conditions in sites that are literally all over the world means that the Thesis Class as a group are perpetually confronting questions of tradition, 'difference,' social and architectural particularity. They also have to confront the impact of economic globalization, political instability and planetary environmental disturbance—as a class they are compelled to think about what Architects can, should or should not do and what, in a disciplinary sense, Architecture's role has been and could be. The 'client' is always present as an 'avatar'—thesis projects tend to establish the client as an invisible interlocutor, as a constituency that is being addressed or as a set of objectives that must be satisfied.

The fundamental assumption that guides ALL the thesis research, teaching and design is the possibility of a future in which architects and designers with their unique ability and sensitivity demonstrate through their thoughts and actions, responsible leadership in society, careful stewardship of the environment, and public accountability. THESIS starts here.

2009–2010 Thesis Proposals (a partial list):

Feral Architectures. fe-ral1 [feer-uhl, fer-]—adjective
1. existing in a natural state, as animals or plants; not domesticated or cultivated; wild; 2. having reverted to the wild state, as from domestication; 3. of or characteristic of wild animals, ferocious, brutal.

Feral architecture is born domesticated and then transmogrifies to a wild state, inverting the practice of development into a process of *de-velopment*. It is an architecture that re-colonizes the built environment. Feral architecture rises and falls with the sun, grows, decomposes, heats, cools, reclaims territory, pollinates, defecates, consumes, hunts, survives, and dies. As opposed to a taxonomy, a classification that presents itself as fact, a Borges-ian view of the world that absolves itself from classification is promoted. Thus, the intervention is a conjecture for a possible cohabitation and cooperation of plants, animals, and humans. The relationship between each organism is not domestic, (which is hierarchical in itself) it is

sympiotic—a relationship that is co-habitational. The conjecture is merely the initiation of a new habitat. *The Garden of Earthly Delights* comes to New York City.

CONCILIATOR: Tower/Prague. My thesis began with a study of the dynamics of space and event—the square and protest. Following the cataloging of a history, which culminates during the Cold War, the square was understood as an ideological altar—the relationship between architecture and revolution is defined within the language of myth and identity. The shift in the scale of protests redefined the "square" within a dissipated network of exchange and communications. The project seeks to redistribute densities of gathering, establishing greater porosity of event. With the tower, architecture is engaged as an urban agitator.

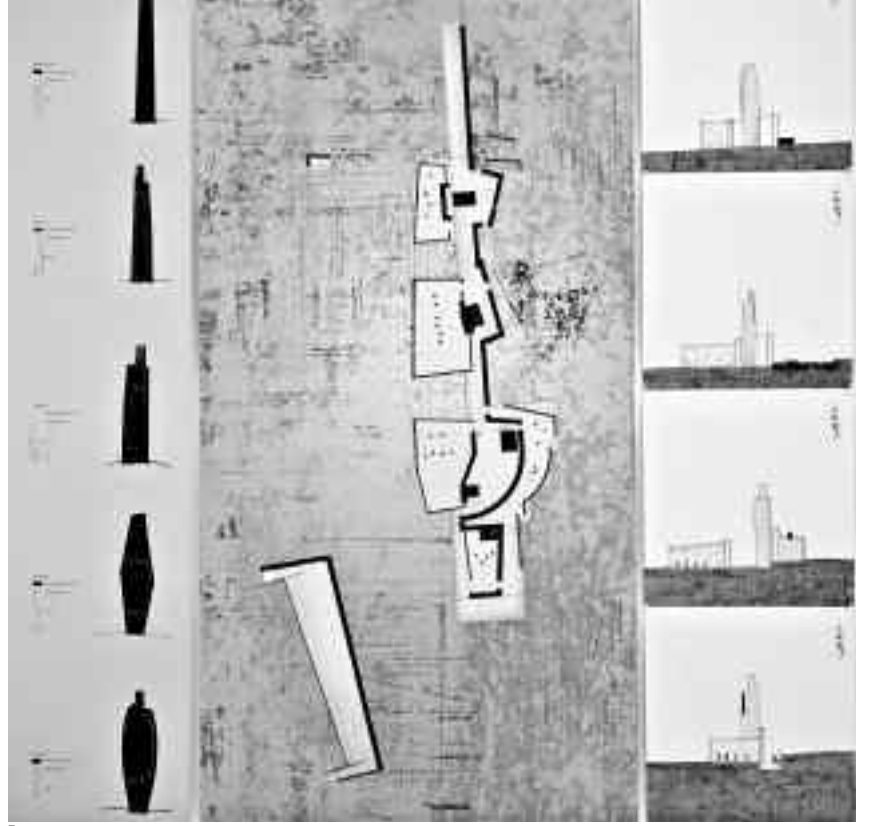
PROS-THESIS. We are born naked with a lack of sufficient armor. A fetus loses his natural supplementation that was once the mother's womb with his immediate birth. Therefore men created tools and machines to fulfill that need, which are no more than extensions of our limbs. Architecture as well must embody the life and movement of body in the same way. The project is about recovery for disaster survivors. The pneumatic structure of the cell is erected with the breath of its inhabitant. The design bears a resemblance to human body.

An extraordinary array of everyday organizational devices that are strictly utilitarian within themselves reveal an almost infinite number of transactions. This project challenges the most common, *undesigned* spaces of the city—the streets. With the NYC DOT Street Design Manual and standard set of construction documents taken as the grounds for intervention, the proposition is to *untame* the possibility of fundamental street parameters by instituting details with large-scale capacities. This set of invented parameters enables choice and variation throughout the streets of New York.

Informally Sustained: Taking [Lessons] From The Poor. Informal settlements need not be a stigmatization of the poor. The rethinking of informal settlements will be key to sustainability. Materials are part of an urban ecosystem. Buildings must be built to last or built out of existing waste in order to recover and maintain stability. What is proposed is that the architect becomes the vehicle for a community-driven process. To paraphrase a bygone resident: We have hands, and we are willing; let us help ourselves.



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ARCHITECTURE AT COOPER 4: 09-10

chimera: architecture of the urban grey zone. The urban grey zone is a site that embodies a spatial flip embedded in the city, a transition from the urban into the ex-urban. Relative to the project, the Chimera has been generative in terms of a spatial narrative as well as programmatic specificity. The Chimera is the FLIP embodied. She is transition. The grey zones of New York City are linked to the circulation system of train lines and highways, the resultant of vectors of motion clotting, thickening and slowing. Sunnyside Yards, Queens is a micro-site within this network, a clot that has been sunken and eradicated. The program is *regeneration*, dually informing the clocks, switches and maintenance programs necessary to keep the yards functioning and healthy as well as the public program of halfway house for the rehabilitation of urban citizens. These waiting rooms are spaces of suspended time, motion and place, an in-between and simultaneously an autonomous entity: an architectural Chimera.

Polis Fabrik—The City of Light—Form of Life. The modes by which the work of man and its organization engage, affects and transforms the human artifact. The essence of this question is found in the processes and programming of the factory. As a locus the factory explicitly forms a set of intersecting spheres including the political, the social, the ecological, the economic, and the spatial. At this moment in time, changes in modes of production and the consequences of industrial processes necessitate the re-thinking of the factory and its position within the human artifact.

Kaleidoscopic View of an Hourglass. "When two mirrors look at each other, Satan plays his favorite game and opens the perspective to infinity."—Walter Benjamin, 1929

Through the development of a perceptual bridge, an exchange between Venice and New York is proposed—a psychological geography. The notion of the site and inhabitation is challenged through superimposition and synchronicity and it asks where the obelisks of Egypt now cast their shadow. Marco? Polo

A place for childhood in The Jabalia Refugee Camp, Gaza Strip: Thoughts about Playing and Reality as a space for hope. This thesis is an attempt to channel hope through the investigation of the ground as an architectural material, to provide space for childhood and imagination. Where there is no traffic and there are no buildings, there is a network of spaces spread across the camp. The spaces are defined through a set of programmatic insertions and minimal formal acts, allowing the outdoors experience and activities to coexist as an opposition to the camp concrete-shelter structures. New pathways are defined in relation to the camp's organic development, and water channels will run at the side of the pathways as a narrative of continuity, providing utilization of rainwater for play.

Vertical Montage. Broadway's path through the grid and the travelers' movement along it is inherently cinematic. A momentary sense of disorientation is experienced as Broadway disrupts the grid, where the path transforms into a sequence of anomalies in the structure of the plan. The morphology of these moments of intersection are experienced as a montage sequence. A transposition of the intersection and the sequence from the plan of the city into the section of the city, from the horizontal grid to the vertical, creates morphologies of moments of intersections occupied by the variable functions of "hotel."

Sanctifying the Encounter. Essentially urban: defining architecture as equal parts buildings and people. The superimposition of two symbiotic systems allows for an oft-overlooked element of architecture—events, activities, and encounters—in public places. By way of subtle alterations to the urban landscape and the placement of moveable elements, which will change according to an anticipated event to take place therein, an architecture is generated that is subordinate to the invisible system already there. It is ambiguously programmed—simultaneously an ambulatory, theater, lunch spot, marketplace, sculpture, and urban playground.

Non-Stop: A Journey Through the Land of Uncertainty, Possibly. We journey around the world to register the energizing fields that exceed the limits of building: ecologies of trade, communication, atmospheres, and human life, all bound by time. With its instruments, guides, and tales, the thesis provides tools for traveling towards still obscure connections, concealed environments, or unforeseeable events. We seek to imagine a brave new relevance for the architectural encounter, one grounded in sharing, change and exchange. This is the only the beginning of our creative effort! We must go on seeking it!

satellite : consciousness of ground. "To fly in space is to see the reality of Earth, alone." A satellite feeds Earth. Looking forward, looking back—it relays information about the unknown to Earth in order to increase humanity's understanding of itself. Inhabiting the lunar surface is to transform a natural satellite into a satellite in active service of mankind. Opening up the moon as a site produces self-reflective and time-sensitive space. I propose to construct the apex of a lunar journey—the destination and the traverse. Destination on the lunar surfaces is about passage through space, reference within time, movement—it is a self-consciousness of ground.

Anticipating Shadow. Addressing the rapid encroachment of the Sahara Desert upon the natural green belt of the Sahel, the Great Green Wall is an epic effort to plant a wall of trees spanning 7000 km in length and 11 km in width. Surpassing all political borders, the divisional dynamics of the wall is intended to impact nature. Questioning the sustainability of the proposed scheme, this thesis offers an alternate strategy to converse with the desert by redefining the wall as a porous, discontinuous, liminal zone that anticipates its site. The proposed architecture is a topological substrate produced by a field of framework that will catalyze transformations in the temporal landscape. The anticipation of the movement of travelers and the movement of dunes is formalized through the use of material geometry that engages tectonically with the sun and wind shadows, thus creating moments of stasis for oases dispersed throughout the desert.

Addis Atlantis. Addis Ababa, capital of Ethiopia, will expand through the curious co-existence and contraposition between the expanse of agricultural land and the density of a metropolis. For the city covered in waterways, a system of small-scale catchments strung on the streams is to serve as an elastic waterlung: suddenly filled, slowly released, it structures delay to harness annual flooding. Crossing and interlocking, the line of the dam and the line of the stream form its point of culmination. Each catchment, inhabitable, becomes simultaneously the origin point of gravity-fed irrigation to farmland extending out, and the point of condensation to the city funneling in and across.

The Comedy of Errors: Site Specific Theater and the Design of Meaningful Public Space. Theater and architecture can redefine public space. Using William Shakespeare's play *The Comedy of Errors* as a jumping point I've developed a constellation of urban relics that work both as site specific theater sets and useful tools for the creation of meaningful public space.

Re-calling the Lakou. [The *lakou* refers to a typology of communal space historically defined in Haitian slave culture by freedom of cultural expression and exchange of ideas.] The thesis proposes the typology of the *lakou* be infused with programs yielding three requirements of functioning in society. When impregnated with the programs of water collection and distribution, the latrine and the market, the *lakou* becomes a microcosm of the city center. Each microcosm will reflect the scale of its respective *lakou* and become a core to the existing surrounding structures. Where there are no existing structures, the *lakou* will become the core to which new homes can adjoin, creating new communities.



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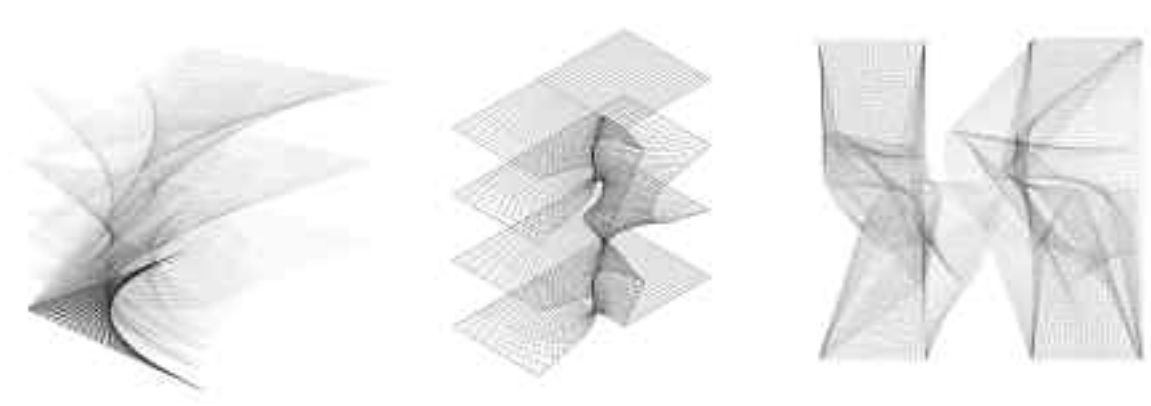
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- 1 Thesis, Conciliator: tower/prague
- 2 Advanced Geometry and Digital Fabrication
- 3 Advanced Drawing

- 4 Feltman Seminar
- 5 Computer Graphics, Image Processing and Vision
- 6 Advanced Drawing

- 7 Graduate Studio, Fall
- 8 Graduate Studio, Spring
- 9 Graduate Studio, Fall
- 10 Graduate Studio, Fall

Dark Earth. Fire is both a destructive and constructive phenomenon. The act of burning permanently transforms an artifact, as it perishes and renews, degrades and then repairs. Amidst decay and destruction, architecture can use fire to construct. The forested areas throughout Greece have seen wildfires annually since 1995. My project introduces kilns to protect the unburned landscape. This reintroduces control with a ‘cool fire’ (a controlled burning) by activating a system of forest maintenance: collecting excess fuel, drying and cooling it, and then planting the charcoal to fertilize the soil. This system allows for a transformation rather than complete destruction. The kilns then become “fire centers,” from which a ceramics studio will grow.

Architectural Almanac. Through reading two architectural dichotomous typologies, a park and a housing project, different moments of programmatic events are isolated in time and space. These events are tied together by the physical impact of a calendar year, and are treated as shifting fields of programmatic specificity. An urban park of inserted infrastructural landscapes confronts and distinguishes the natural landscape from itself by providing different readings and functions throughout seasonal changes as well as support for diverse temporary events. The architectural components (path, wall, column, plane) reveal tectonic relationships between elements of naturally existing conditions and the built landscape by sectional juxtaposition between soil, water, light, trees and air. Nature (hills, water, a bamboo forest) is programmed between the values of viewing and producing; hills become amphitheaters, water freezes to solid ground and bamboo forest becomes temporary structures. By questioning the proximities of landscape qualities, urban programs, temporality and stability based on the calendar year, and by using the public park as a development methodology, the parameters for a new courtyard housing type for the city is defined.

Radical Plasticity. A discreetly propagated network of symbiotic nodes will be inserted throughout the historic city of Sana’a, Yemen. Individual points represent a programmatic aspect of the typical embassy model, and as such demarcate a mutual boundary between two distinct identities. The immediate necessity of cultural preservation and bilateral dialogue requires sensitivity towards both sociological and tectonic standards of the region, while simultaneously maintaining the requirements of a functioning consulate.

EYES THAT SEE. The thesis imagines new forms of UN engagement with the world in the creation of alternative assembly spaces. The thesis is structured as a fictional summit on architecture and a consequent resolution, which leads to the establishment of a number of committees that create architecture based on a request form that anyone can

fill out. Upon receipt of the completed request, a piece of assembly architecture will be shipped. It will be as if the assembly rooms of the UN Headquarters are disseminated across the world in a global warm-fare, wanted and immediate in their participatory activities and dissensus.

The Gaze of Gagarin. The gaze is a fundamental organ of space and, in particular, the gaze of the cosmonaut, after his descent to earth, is the gaze of the one who is estranged from the marvelous sensations of nature. He only recognizes the infinite psychosis born of the terrestrial basis of humanity, a meaningless and blind perambulation of the surface of the earth. Yet because this psychosis of space is inescapable, he is left to survive in sublimity in the silent contemplation of the sky.

University without Edges: Spaces for the Suspect Public. This summer the streets of Tehran erupted into protests, and flows of bodies and information formed a provocation to architecture. They demanded that architecture address the adversarial dynamics of public space for a society between authoritarianism and democracy. Spatial complexity, porosity, and unpredictability amplify and enable political diversity. Tehran University, once enclosed, becomes the testing ground and laboratory for the public spaces of a suspect public.

SELECTED STUDIO ELECTIVES

ADVANCED DRAWING SEMINAR

Professor Sue Ferguson Gussow

Each year students reinvent the Advanced Drawing Seminar as they develop an ongoing series of drawings based on themes of their own choosing. At this level of drawing education, each student’s task was to create drawings that incorporate themes grown in the crucible of imagination, thought and experience. In working toward that goal, the basic concepts of drawing, previously attained in a rigorous freehand program, are essential. Beyond that, in the process of exploring media and means to achieve that end, technique is simultaneously honed. In fall 2009 the range and subtlety of grey scale was a predominant concern. Red appeared symbolically and decoratively—ranging from blood red in a folio that explored cuts of meat to a series in which explosive bursts of color tracked the windings of a python.

The twenty students’ range of skills, vocabulary and fluency in the language of drawing developed as each grew into a personal imprimatur. Among their projects were: the urban sky-scape framed by the girders of Brooklyn’s gargantuan Smith and 9th Street station; the murmurings of a Muslim woman, her mouth moving in prayer; the scattershot configuration of pigeons in their endless feast; the filmic tracking of ice cubes as they melt.

THE FELTMAN SEMINAR

Professor David Gersten

IT’S ALL ABOUT LIGHT

Light is fundamental to all forms of life, so much so that its role and impact tests the limits of human comprehension. From the far reaches of the cosmos, to our evolution as a species, to the history of civilization, to our present tense perceptual and cognitive experience, one could say: it’s all about light. One need only pause briefly and focus on our optical field of vision to recognize just how rapidly we are absorbing light, taking multiple views, layering and assembling a coherent whole of the space we are in. Much of this deep cognitive process is structured by our evolution as a species; our eyes are next to each other because we have been looking at the horizon for millions of years... our binocular optics has a significant impact on our present experience. This is where the light in this room meets and joins together with the light of the dawn of civilization.

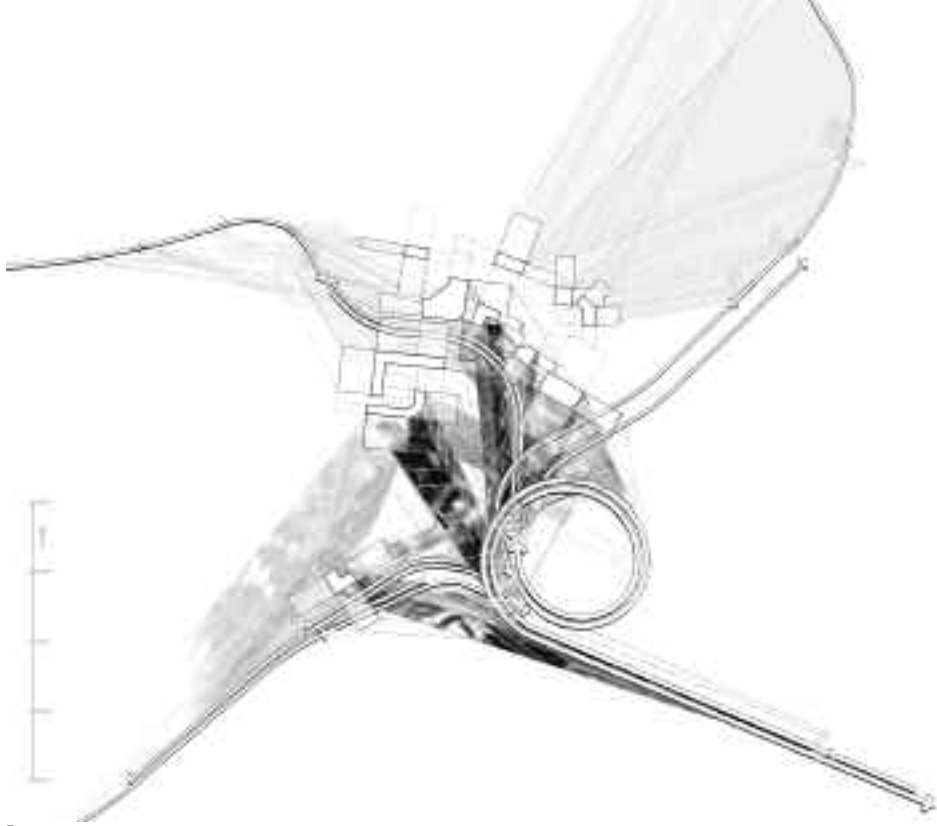
The seminar engaged a spectrum of disciplines in asking questions of light, including: architecture, astronomy, biology, cognitive science, economics, film, painting, physics, photography, poetry and theater. In addition to a series of guest speakers from a range of disciplines the seminar directly engaged light through a series of experiments and studio-based light works.

COMPUTER GRAPHICS, IMAGE PROCESSING AND VISION

Professor Pablo Lorenzo-Eiroa

This course revisited the contemporary potential for an architecture autonomy through the reconsideration of canonical structures to find a strategy to redefine post-structuralism as a continuity of structuralism. The reconsideration of latent ideas of structure and displacement on Wittkower’s reading of Palladian Villas diagrams, Rowe’s Palladio-Le Corbusier diagram, Hejduk’s Texas Houses and Eisenman’s Houses in relation to contemporary post-structuralist canons, provided an axis of reference to revise a more critical role of deconstruction avoiding its current iconographic visual tergiversation.

As a laboratory, we experimented with a vectorial nine square grid structure and dealt with surface as a “ground” through analog and digital computer assisted architectural constructions and transformations. This content-oriented workshop’s intention was meant to critically construct an architecture autonomy within the virtual informational space of the computer, through specific software strategies. The exercise was presented with an animated digital simulation that reworked time-based sequential diagrams that indexed and edited its constitutional process.



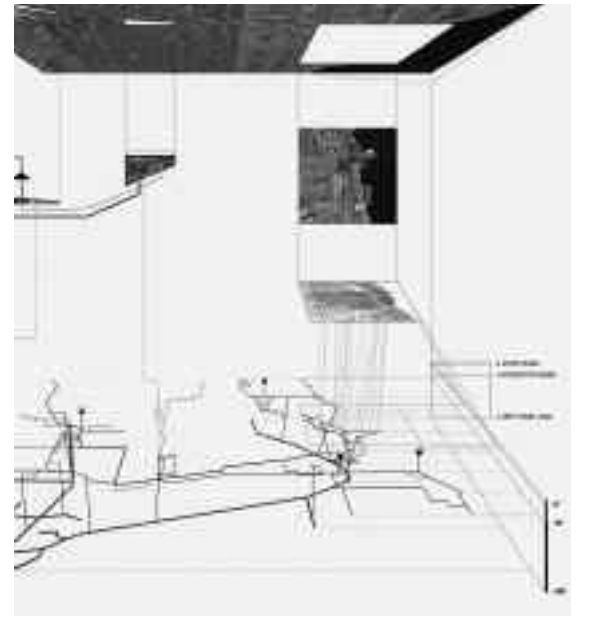
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ARCHITECTURE AT COOPER 4: 09-10

GRADUATE RESEARCH DESIGN STUDIOS I AND II

Fall and Spring (to midterm)
Professor Diana Agrest
Professor Masha Panteleyeva

The Master of Architecture II design studio focused on projects dealing with critical issues in architecture now. The exercises while given for the whole class afforded opportunities for individual students to focus on their area of interest, be it Urban Studies; History, Theory, and Criticism; or Technologies. Emphasis was placed on the design process and productive readings were developed emphasizing drawing as a tool for critical thinking as an intrinsic part of the process.

Exercise I

MAXIMUM WITH MINIMUM

Select a site with extreme geophysical and extreme weather conditions, day/night and/or seasonal. The site must be at an edge between land and water including a body of water (sea or river) and land (rock, above or below). Use the elements of nature to create a habitable settlement, which must be met by use of the natural elements: air, sun, fire, water, soil, flora, etc. A production activity in this settlement must also relate to the natural conditions.

Exercise II

INCURSIONS INTO URBAN DISCOURSE

Chicago

Shanghai

READINGS: Select one of the two given cities, and produce readings from an URBANISTIC, TECHNOLOGICAL or THEORETICAL/HISTORICAL viewpoint through drawings. The readings are to be developed through personally elaborated maps, graphics, diagrams, drawings at various scales and aerial photographs.

GRADUATE THESIS

Spring 2010 (following the mid term), Summer 2010
Professor Diana Agrest and faculty

The thesis projects focus on issues related to the particular areas of concentration as established in the Master of Architecture II program: Urban Studies; History, Theory, and Criticism of Architecture; Technologies. The theses are developed in studio through research and readings in conjunction with the Pro Seminar, and through drawings developing critical readings of the individually selected thesis subjects. The second half of the spring semester is dedicated to this end and to formulating the direction for the development and completion of the thesis project during the summer term, which will be presented at the beginning of the subsequent fall term.

Thesis proposals:

Consolidating the Informal. The apocalyptic Mexico City of the 1980s never reached the 36 million souls predicted for the new millennium. Instead it sparked a new social awareness giving birth to popular urban militancy and political change. The megacity of today has a population of 20 million, 60% of it is sustained by the informal economy and is living in self-made 'colonias.' As population growth levels off, the time has come to formalize this transitional city.

The urban consolidation process undertaken in the Basin of Mexico in the 2nd century (Teotihuacan) becomes the case study for this thesis. The world's largest 'megaslum' (Neza-Chalco-Itza) becomes the site for experimentation.

Socio-magnetic Urban Fields. This thesis is based on an attempt to read the city through its 'fields of possibilities.' Similar to the ambience discoveries of Situationist drifters, one can detect these fields and subsequently seek new urban combinations through identification of their physical and/or invisible connections. The goal is to encourage informal activity focusing on the superimposition of the place of interpersonal exchange and the realms that are established via virtual communities that operations such as facebook make possible. It aims to formalize a proposal for an open-sourced city of micro-derives and social playgrounds in everyday life.

LOST AND FOUND. What does the state of "being lost" mean for the individual, and do we subjectively lose ourselves to consequently partake in the pleasure of finding our way?

These are the questions that this thesis aims to explore while establishing possible disruptions of the familiar and alternative modes of reorientation within pedestrian territories of New York City.

(IN)VISIBLE BOUNDARIES. In 1975, a civil riot was diffused in Detroit. The newly elected mayor thwarted the escalation of violence that began as a racially motivated disturbance by repeatedly walking along the site's main avenue. His perpetual movement along this invisible racial boundary erased it for a few nights, reducing the tension and violence by a walk.

Riots physically challenge boundaries within the city. Carnivals challenge boundaries between people. Both are distinct temporary instances that change the extents within the city. My Thesis will explore and question whether there is any architecture or a spatial configuration (whether temporal or not) that can carry within it the same potentials.

THE CITY AS PROJECTION OF DESIRE. An alternative city is constructed in the midst of, yet invisible to, the dominant city under the regime of puritan cultural practices. An interiorized

and erotic formulation that challenges the more orthodox constructions of the city, the gay nightclub—where spectator and spectacle become one—is assumed to provoke a social safety valve for turning transgressive forces loose.

Looking at two scales, the urban and the interior space of these sites of nocturnal entertainment, and uncovering acts of confinement and decentralization, this thesis aims to bring the question of desire and sex back to the city and urban discourse.

Flue Symptoms. The investigation for this thesis begins with the dual assertion that air conditions architecture and architecture conditions air. From Vitruvius to Le Corbusier, air quality has maintained its place within architectural discourse through the recognition of its direct impact on human health, affecting the architectural discourse and its manifestations. Despite exhaustive efforts to architecturally enhance the quality and flow of air we consume, its complementary flow and exhaust, remains, for the most part, an afterthought. This thesis acknowledges air as it relates to the body, and explores its place as an agent for architectural and urban configuration.

The Natural in Architecture: Revisiting New York City. Architecture developed through time in a conflictive opposition between subject and object, between nature and culture, adapting and transforming while incorporating nature into its discourse.

At this point, this opposition has weakened since the boundaries between the natural and the artificial have become blurred. Nature has been tamed by society and replaced by culture in an interplay between the natural forces and those of control.

This thesis will explore how natural and artificial conditions interact in the configuration of the urban fabric, and examine the potential of an alternative mode of reifying the relationship between nature/culture in the architectural discourse.

ADVANCED GEOMETRY AND DIGITAL FABRICATION

Professor Michael Young

Taking our cue from the moiré effect, this course sought to explore the "interference" between the material, the sensory, and the geometric in architectural design and fabrication. Although the emphasis was placed on digital modeling and notations, this course opened a dialog between the working methods of a digital environment, and the physical, visceral, sensory relations we have with our material environment. The course set out to understand contemporary digital techniques by investigating the theories and history of geometry in relation to architectural construction, computation, and representation.

STUDENT LECTURES AND EVENTS

The School of Architecture Student Lecture Series

Thursday 10/22

Stephen Rustow, Principal, SRA Consultancy; Professor, The Irwin S. Chanin School of Architecture
Re: [re]reading, [re]writing

Thursday 10/29

Marco de Michelis, Professor, Department of Art History and Archaeology, Columbia University
American Bauhaus, Josef Albers and Moholy-Nagy in the US

Thursday 11/5

Shirin Neshat, Artist
Women without Men

Thursday 11/12

Anthony McCall, Artist
Recent Work

Thursday 12/3

Jonas Mekas, Filmmaker, Director, Anthology Film Archive
About Seriousness

Thursday 2/25

Dore Ashton, Author and Critic, Professor of Art History, The Cooper Union Faculty of Humanities and Social Sciences; Senior Critic in Painting/Printmaking, Yale University School of Art
Ran Oron, Professor of Architecture, Pratt Institute; Principal, Roart
A Conversation

Thursday 3/25

Ben Nicholson, Professor, Architecture, Interior Architecture and Designed Objects, The School of the Art Institute of Chicago
New Harmony: Rural America on Steroids

Thursday 4/1

Marc Tsurumaki, Principal, LTL Architects
Restricted Play

Thursday 4/8

Cynthia Davidson, Editor, Log Magazine; Director, Anyone Corporation
Image and Content

Spring 2009 Faculty Talks/ Sponsored by the School of Architecture Student Council

Tuesday 2/2

Sam Anderson, Professor, Building Technology; Principal, Samuel Anderson Architects
My path To, Through, and After Cooper

Tuesday 2/23

Ashok Raiji, Professor, Environmental Technologies; Principal, Arup
Meixi Lake Eco-city

Tuesday 3/23

Stella Betts, Professor, Design III; Partner, LEVENBETTS Architects
Recent Work

Tuesday 4/20

Anthony Vidler, Dean
Bird Watching, or the Spatial Precision of the Eye

Tuesday 4/27

Steven Hillyer, Director, School of Architecture Archive, The Cooper Union, Partner, Arkanjel Productions
In Development

GUEST SPEAKERS IN SCHEDULED CLASSES

ADVANCED TOPICS

Professor Georg Windeck

Thursday 2/19

Daniel Schuetz, Architect
Contemporary Trends in Masonry Construction

Thursday 3/12

Robert Silman, Founding Principal, Silman Associates, P.C.
Construction and Restoration of the Guggenheim Museum

Thursday 3/26

Will Laufs, Vice President of Specialty Structures, Thornton Tomassetti Consulting Engineers
Digital Fabrication Tools and Load-Bearing Glass Structures

Thursday 4/9

Brian Turner, (AR '06)
Contemporary Construction Practice in Japan and its Relation to Traditional Carpentry

ADVANCED TOPICS

Professor Stephen Rustow

Thursday 10/1

Anthony Vidler, Dean,
Patrick Geddes and Corbusier

Thursday 10/8

Barry Bergdoll, Chief Curator, Department of Architecture and Design, MoMA
Curatorial Preparation and Installation of the MoMA Bauhaus Show

ADVANCED TOPICS

Professor Tamar Zinguer

Thursday 10/29

Larry List, Curator
The Art and Architecture of Chess

ADVANCED CONCEPTS

Professor Kevin Bone

Monday 9/21

Albert F. Appleton, Professor, Graduate Program in Urban Affairs and Planning, Hunter College
Ecological Basis of the Earth and Humans

Monday 10/5

Appleton: *The Environmental History of Urban Civilization from Conservation to Environmentalism to Sustainability*

Monday 10/19

Appleton: *Sustainability and the Drive for More*

Monday 10/26

Appleton: *Sustainability and Economics*

Monday 11/2

Appleton: *Sustainability and Infrastructure*

Monday 11/9

Appleton: *The Path to Sustainability*

ADVANCED CONCEPTS

Professor Joan Waltemath

Friday 4/23

Andrew Tripp, Ph.D. Candidate, University of Pennsylvania School of Design
Membering and Re-Membering the Qualitative Body: Topography, Figuration, and the Judgment of Sense

HISTORY OF ARCHITECTURE II

Professor Guido Zuliani

Wednesday 11/11

Patricio Del Real, Ph.D. Candidate, Architecture History and Theory, Columbia University

Wednesday 12/2

Chanchal Dadlani, Ph.D, Lecturer and Mellon Postdoctoral Fellow, Department of Art History and Archaeology, Columbia University

Wednesday 12/9

Daniel Sherer, Architectural Historian and Theorist

HISTORY OF ARCHITECTURE II

Professor Tamar Zinguer

Friday 1/29

Anthony Vidler, Dean,
Learning from Ledoux

Friday 2/26

Steven Nelson, Associate Professor of African and African American Art History, UCLA
Tradition and Modernity in Central Africa

Friday 3/12, Wednesday 5/12

Vikram Prakash, AIA, Partner, Verge Architecture; Professor, Department of Architecture, University of Washington

Friday 4/9

Chanchal Dadlani, Ph.D, Lecturer and Mellon Postdoctoral Fellow, Department of Art History and Archaeology, Columbia University
From Pondicherry to the British Raj: Cross-Cultural Exchange in Modern India

Friday 4/23

Nancy Steinhardt, Professor of East Asian Art and Curator of Chinese Art, University of Pennsylvania
Chinese Architecture 1644–1949

TOWN PLANNING

Professor David Grahame Shane

Tuesday 11/3

Brian McGrath, Partner, urban-interface

Tuesday 3/30

Hue Teh, Ph.D. Candidate and Researcher, International Institute of Environmental Studies, University College, London University
Water and World Cities

Tuesday 4/6

Toby Cumberbatch, Associate Professor, Electrical Engineering, The Albert Nerken School of Engineering of The Cooper Union
African Cities and Mud Vernacular Buildings

BUILDING TECHNOLOGY

Professor Samuel Anderson

Wednesday 2/10

Aleksey Lukyanov, Partner, Situ Studios

Wednesday 3/3

Brian Turner, (AR '06)

Wednesday 3/31

Paul Alter, AIA, Principal, Lee H. Skolnick Architecture and Design Partnership

PROFESSIONAL PRACTICE

Professor Michael Samuelian

Tuesday 2/9

Martin Smith, AIA, NCARB, LEED GA, National Council of Architectural Registration Boards; Robert Lopez, RA, New York State Board of Architecture, NYS Education Department
Licensure and Your Career: NCARB and NYS Board of Architecture

Tuesday 2/16

Joan Krevlin, FAIA, Partner, Julie Nelson, AIA, Partner, BKSK Architects
Office Visit

Tuesday 3/9

Gene Kohn, FAIA, Principal, Kohn Pedersen Fox Associates
Office Visit

Tuesday 4/6

Francine Monaco, Principal, D'Aquino Monaco
Office Visit

FELTMAN SEMINAR

Professor David Gersten

Monday 1/25

Jim Abbott, Physicist, Professor Adjunct, Mechanical Engineering, The Albert Nerken School of Engineering of The Cooper Union
A Very Special Wave

Monday 2/1

David Shapiro, Poet, Professor Adjunct, The Irwin S. Chanin School of Architecture
The Root of Beauty is Audacity: For Pasternak and John Hejduk

Monday 2/8

Anthony Caradonna, Associate Professor, Pratt Institute
sidereal templum

Monday 3/1

Antonio Furguele, Visiting Assistant Professor, Pratt Institute
Light Grammar and Le Corbusier

Monday 3/8

Anthony Titus, Painter, Assistant Professor Adjunct, The Irwin S. Chanin School of Architecture
Shine On You Crazy Diamond

Monday 4/5

Homa Shojaie, Painter, Adjunct Assistant Professor, Illinois Institute of Technology College of Architecture
'in light' has 'for remo guidieri'

Monday 5/3

Remo Guidieri, Professor of Anthropology and Aesthetics, Nanterre University, Paris
The Subterraneans

SPECIAL LECTURES

Scrim of Hair: Four Comments on Savage Geometry

Remo Guidieri, Professor of Anthropology and Aesthetics, Nanterre University, Paris; Co-Founder, *Res: Journal of Anthropology and Aesthetics*

Friday 10/9

Flowers

Tuesday 10/13

Riddles

Friday 10/16

Tiefe (depth)

Tuesday 10/20

Broken circle

Eco Redux: Design Remedies for a Dying Planet

10 April–5 May 2010

3rd Floor Hallway Gallery

The exhibition, curated and designed by Lydia Kallipoliti with the assistance of Amie Shao, Lydia Xynogala and Alicia Imperiale, assembles an unexplored genealogy of ecological material experiments that underground architectural groups conducted in the 1960s and 1970s. The project documents a disciplinary transformation and an experimental mindset in the finale of the 1960s, reporting the displacement of 'building' as the main product of architectural design. All imaginable provisional structures and small-scale strategies—pneumatics from used parachutes, hand-made domes from discarded materials, electronic-lawn carpets, pills, capsules and self-sufficient systems, garbage houses, foam shelters—became part of a new equation that reflected the sociopolitical concerns of the time and the collective fantasizing about how new technologies can become remedial tools to save the planet.

"Eco Redux" was initially exhibited at Columbia University, and traveled to the Byzantine Museum of Art in Athens, Greece, The Irwin S. Chanin School of Architecture, and is forthcoming at the Design Hub of Barcelona. The exhibition is accompanied by a website (www.ecoredux.com), an educational open-source tool that amasses a substantial database of ecological material experiments and their ramifications in architectural design.

The Cooper Union Institute for Sustainable Design

Professor Kevin Bone, a member of the resident faculty of The Irwin S. Chanin School of Architecture since 1983, was appointed Director of The Cooper Union Institute for Sustainable Design in fall 2009. The CUI SD was created in 2008 as a resource for education, research and public understanding of the principles and methods of sustainability in all design disciplines. Central to the mission of the Institute is the development of innovative pedagogies in architecture, art and engineering that will be models for the transformation of learning and practice for a sustainable future.

From the Director's Statement:

What future engineers and architects design for our world and how they improve the systems on which we rely have the potential to significantly reduce the negative impacts of our current practices. Not only can we imagine that we might "do less harm;" we are on the threshold of a new generation of thinking in which our buildings, cities and systems actually contribute to healing and improving the environment. Our faculty, administration and students are all committed to evolving programs for engineering, architecture and art and doing so through inspired educational initiatives that explore the nature of what we now call sustainable design.

STUDENT HONORS

The Inaugural William Cooper Mack Thesis Fellowship Awards

The William Cooper Mack Thesis Fellowship program was established in 2008 by John and Harriet Mack at The Irwin S. Chanin School of Architecture in memory of William Cooper Mack, class of 2006.

The thesis year affords each student in the School of Architecture the freedom to shape, in every sense, a project that stands as a culmination of the design sequence. A William Cooper Mack Thesis Award is intended to support primary research and inquiry in the development of significant and original thesis projects.

Spring 2010 William Cooper Mack Fellowship Awards:

Yael Hamieri—for research in Gaza Strip

Angelique Pierre—for research in Port-au-Prince, Haiti

Ahmad Zareh—for research in Tehran, Iran

2010 Benjamin Menschel Fellows

Jeremy Jacinth (AR '13) and Sam Holleran (A '11):

During the final weeks of the semester, with the school open 24 hours, students take refuge under desks or on the floors of classrooms seeking an hour of uncomfortable, un-refreshing sleep. Our project will address this problem by providing a space to gather, rest and recharge.

Daphne Binder (AR '11) and Salome Balderrama (AR '11):

The ecology of the Dead Sea is being irreversibly changed by over-pumping the Jordan River, the sea's headspring, and the impending construction of a canal joining it to the Red Sea. We will circumnavigate, survey and document the region and the significant sites of human presence to investigate the relationships between human civilization and the environment.

2010 German Academic Exchange Service (DAAD)

Elizabeth Feder (AR '10)

The Lotus Foundation Prize in Arts and Sciences

Katherine Borowczac (AR '10)

Graduate Study

This year graduating students and recent graduates were offered admission to the following graduate programs: Columbia University GSAPP; Yale School of Architecture; Princeton University School of Architecture; Harvard GSD; The Architectural Association (London); MIT School of Architecture and Planning; UCLA; University of Washington College of Built Environments.



1



4



7



2



5



8



3



6



9

- 1 Thesis, Final
- 2 Design IV, Spring
- 3 Masters of Architecture II, Spring

- 4 Architectonics, Spring
- 5 Descriptive Geometry and Computer Applications
- 6 Design III, Spring

- 7 Design III, Spring
- 8 Design II, Spring
- 9 Design III, Spring

ARCHITECTURE AT COOPER 4: 09-10

FACULTY AND STAFF ACTIVITIES 2009-2010

Professor **Diana Agrest** FAIA and her firm Agrest and Gandelonas Architects, LLP completed the John and Mary Pappajohn Sculpture Park in Des Moines, Iowa. The collection includes sculptures by Louise Bourgeois, Richard Serra, Mark Di Suvero, Tony Smith, Deborah Butterfield, Martin Puryear, and William de Kooning. She was a juror for the "Ramses Square International Competition," organized by the City of Cairo in conjunction with the IUA, for the renewal of a major site in central Cairo. She participated in the conferences: *Metropoles en Mirroir II*, Paris-New York, organized by the Institut de Sciences del Homme and The Ecole des Hautes Etudes en Science Social, Paris. She completed an addition, renovations and landscape design of a private residence in LA and was awarded grants from the New York State Council for the Arts and the Graham Foundation for the completion of her film, *The Making of an Avant-garde, IAUS 1967-1984*.

Visiting Professor **Samuel Anderson** presented lectures during the past year for the Mid-Atlantic Association of Museums and the Association for Preservation Technology. He was enlisted by the Andrew W. Mellon Foundation to advise the State Hermitage Museum in St. Petersburg, Russia with regard to expanding their conservation department. His firm is designing projects for Buffalo State College and the Guggenheim Museum, and is executing studies for the Guggenheim and the Penn Museum of Archaeology and Anthropology. Ongoing work includes an expansion/renovation of the Allen Art Museum at Oberlin College and residential projects in Manhattan and upstate. His work has been featured in the *New York Times* and *American Builders' Quarterly*.

Professor **Kevin Bone** was appointed Director of The Cooper Union Institute for Sustainable Design established in 2008. As director, Bone has developed an ambitious agenda of education and public activities for the Institute, including a proposal for a clearinghouse on sustainable building practices (prepared for the New York City Economic Development Corp.), a lecture series and grant submissions, including a proposal to the Graham Foundation to support the development of the exhibition "Environmental Design Considerations in Early Modern Architecture." Bone/Levine Architects was the recipient of the Chicago Athenaeum Award and completed the renovation of the Penn Mutual Tower in Philadelphia. They are currently working on plans for the renovation of the historic City Hall in Newark, New Jersey and studies for the Newark Center for Sustainable Design and Urban Planning. Professor Bone presented lectures including at Pratt Institute, The Yale Club and The University Club.

Professor **Anthony Candido** exhibited a selection of works from his visionary Cable Cities, abstract brush strokes, double images and Asahikawa Heads, in the exhibition "The Great White Whale is Black" in The Cooper Union's Arthur A. Houghton Jr. Gallery this spring. A review in the *Architect's Newspaper* blog by Nancy Goldring states: "Interestingly, the elusive sense of scale inherent in such abstractions is countered in the exquisite little sketches, which show a single seated or perambulating figure in the artist's more overtly architectural drawings." In March, he presented the lecture "Did You Write that Head?" at The Cooper Union. He is designing and making the costumes for The Nancy Meehan Dance Company performance in June at St. Mark's Church, and continues to paint and draw in his studio.

Collections Assistant in the School of Architecture Archive **Barb Choit**, has exhibited at China Art Objects (Los Angeles, CA), Or Gallery (Vancouver, Canada), OHWOW (Miami, FL), and Asia Song Society (New York). She was included in a two-person exhibition at Blanket Contemporary Art (Vancouver, Canada). Her solo exhibition "Nagel Fades" at Rachel Uffner Gallery (New York) was reviewed in *The New York Times* and *Art in America*. Upcoming group shows include, "Solid-State" at Bureau (New York) and "You May Feel Something" at the Contact Photography Festival (Toronto, Canada). She is currently working on a live web-streaming project, timeandtemp, which will be launched this summer.

Irwin S. Chanin Distinguished Professor **Dennis Crompton** was the curator and designer for presentations of the "Archigram Exhibition European Tour" in Berlin, Germany; Krakow, Poland; and Valladolid, Spain. He spoke at the International Conference on Structures and Architecture in Guimarães, Portugal, and he was a participant on behalf of the Archigram Group at the 29th Bienal de São Paulo, Brazil. Professor Crompton has also completed the first stage of research and cataloguing of the Archigram Archives at the University of Westminster, London, through a research grant from the Arts and Humanities Research Council.

Assistant Professor Adjunct **Hayley Eber** and her firm EFGH, has recently completed a 6000 sq. ft. interior build-out for Cinereach, a film production company in Manhattan. EFGH collaborated with Diller Scofidio + Renfro on a 2 million sq. ft. urban design competition in Abu Dhabi, which claimed first prize. Her studio also designed and built a temporary stage, Hedgehog, for Virgin Mobile's concert at the Merriweather Post Pavilion, in Columbia, MD. Their project G.O.A.L., a proposal for a community building in South Africa, was exhibited at the Hong Kong/Shenzen Bienalle and was included in the catalogue. EFGH presented their work at the opening of the NAU pop-up store in Soho, and are currently working on the re-branding and re-design of a restaurant chain in New York and DC. They are designing a house in Mattituck, Long Island. Their project Dogmatic was featured in a new book by Gestalten and in *Frame Magazine*.

Instructor Adjunct **Urtzi Grau**, principal, Fake Industries Architectural Agonism, received The Architectural League Prize for Young Architects and Designers. He published articles in *Young Architects 11*, *Foresight* (Princeton Architectural Press, 2010), *Panel Layout for Competition* (Damdi Publishing Co., Seoul, 2010), *Evolvo* and *UHF E.R.R.A.* Grau lectured at the Architectural League of New York and at Princeton University School of Architecture. His current work includes: a master plan for the old mining village of Aldea Moret, Caceres, Spain; "OE House," Barcelona, Spain; "House XXX," San Miguel de Allende, Mexico; "Ay Caramelles," a video installation in Caramelles Square, Barcelona; "Clip Stamp Fold," at Design HUB Barcelona and the Colegio de Arquitectos of Murcia, Spain; as well as the exhibition "Crisis," at the Architectural League of New York.

Professor **David Gersten** held the Spring 2010 Feltman Chair in Lighting and is a visiting professor at the Rhode Island School of Design. He spoke at a conference on John Hejduk at the Círculo de Bellas Artes, Madrid, and he presented the lecture "Embodied Knowledge Navigating Disciplinary Geographies," at RISD for the Making Science Visible conference. Gersten chaired the panel discussion "Light is Calling" at The Cooper Union. "Hejduk, Hamlet and the Ghost Promise," will be published by Círculo de Bellas Artes; the book *Hunting Life: A Forever House* (Editions Firmin-Didot, Paris), will go into printing production summer 2010; and the essay "Globe Double: Mimetic Capital: Technology," is included in the book *Ineffable: Architecture Computation and the In-expressible*, edited by Bradley Horn and published by Oscar Irera Ojeda.

FACULTY AND STAFF ACTIVITIES 2009–2010 continued

Professor Emerita **Sue Ferguson Gussow** conducted Drawing On..., a workshop featured in the All-Cooper Reunion held in October. The 2009–2010 academic year marked the fortieth year of Gussow's service at The Cooper Union. Key moments from her four decades were noted in the Houghton Gallery exhibit, "Architecture at Cooper 1859–2009." Her books, *Trees and Draw Poker* (The Cooper Union, 1985 and 1997 respectively) and *Architects Draw* (Princeton Architectural Press, 2008), as well as her Houghton Gallery retrospective of 1997 were included in the exhibition. At the Urban Visionaries benefit auction a pastel, *Katy I*, went to Board Chairman, Mark Epstein. Two paintings, *Fani and Stephen/ and II*, were acquired by the Budic/Mullins collection. Her drawing, *Cellist*, is presently on view at the Guild Hall Museum, East Hampton, New York.

Director of The Irwin S. Chanin School of Architecture Archive **Steven Hillyer**, curated three major exhibitions for The Irwin S. Chanin School of Architecture during the 2009–2010 academic year. He is also currently developing his next feature film, *High As the Sky*, which he co-wrote and will produce. The project received Fiscal Sponsorship from the New York Foundation for the Arts in 2008. As with his previous film, *The Event*, Olympia Dukakis is attached to play a major role. Hillyer is also developing a stage play, *Mend*, which he co-authored. The project received a grant from Great Performances in 2009. A table reading of *Mend* is being planned and will be performed before an invited audience in spring 2010.

Special Projects Assistant in the School of Architecture Archive **Sara Jones**, worked on the exhibitions for Architecture at Cooper: 1859–2009, "The Great White Whale is Black," and the NAAB Accreditation review at The Cooper Union. She has exhibited her own paintings in various exhibitions over the last year, including a site-specific installation in "Decadence and Decay: The Mansion Project" at the Paul Robeson Galleries at Rutgers University. She also teaches drawing and painting at Pratt Institute and is looking forward to a June artist residency at the Vermont Studio Center.

Assistant Professor Adjunct **Lydia Kallipoliti** curated and designed the exhibition "EcoRedux: Design Remedies for a Dying Planet." She developed the research of EcoRedux to an online non-profit educational resource. The website was awarded an honor at the 14th International Webby Awards. Kallipoliti is the editor of the November 2010 issue of Architectural Design magazine (AD). Her renovation at 580 Park Avenue received a mention from *Domes* magazine and was exhibited at the Domicatec Metropolitan Expo in Athens. She has two papers in forthcoming publications: "Dry Rot: The Chemical Origins of British Preservation" in *Future Anterior*, and "Feedback Houses" in the *Cornell Journal of Architecture*. Other publications include, "Spam City" in *Vima*, and "Plastic Soup and the Recycled City" in *Dislocations: Difference and Urban Space*. Kallipoliti also lectured at the Gallatin School of NYU and the Annual Meeting of the Society of Architectural Historians in Chicago.

Professor **Diane Lewis** Architect presented the Camera project at AIA Steelcase. Her studio has designed a penthouse for the art critics and scholars Lisa Liebmann and Brooks Adams on Central Park West, which is currently in construction. The project "Field Theory—House" at Bridgehampton L.I. has been approved for construction. She has developed the principals for a forthcoming exhibition of urban visions for an area of New York civic institutions, who have sponsored grant applications for this "Architecture of the city studies and forum" that she will direct. A writing desk prototype is under development for fabrication in Italy. Her lecture for the symposium "Return to Nature; The Sublime Plan Mies" at Harvard is being developed as an essay for the forthcoming Routledge publication. A travel grant from the Italian Cultural Institute allowed her to travel the ancient roman roads of Puglia for the forthcoming *Gate to Appia—The Masseria of Puglia*, Rizzoli International. A book of her Fourth Year Studio work at The Cooper Union (from 2001–present) is in progress for publication. She first blogged, "Hejduk IBA Project The House by the architect who consented to participate" that was posted on Lebbeus Woods' website.

Assistant Professor Adjunct **Pablo Lorenzo-Eiroa** is the Conference Chair for the upcoming ACADIA 2010 Conference. He lectured at the School of The Art Institute of Chicago; at an international conference at the University of Buenos Aires; and at the Central Society for Architects in Argentina. His recently published book: *Instalaciones: Sobre el trabajo de Peter Eisenman*, was featured in the international media. His essay "Towards a New Autonomy: Enfolding Contemporary Canons" was published in *Expertise, Media Specificity and Interdisciplinary*. He developed research for an article based on Revista Summa to be released in *Clip, Fold, Stamp*, by Beatriz Colomina, to be published this year by Actar. His office, EIROA ARCH/DLO is currently designing a bicycle station with the New York City Department of Transportation; a media based interactive installation in New York; an interior renovation; and the design for a series of houses that enfold topological displacements.

Assistant to the Deans **Emmy Mikelson**, exhibited work in the group show, "The Exquisite Corpse" at the Paul Robeson Galleries at Rutgers University, and in two group shows at the Louis Zufflacht Studios, NY Studio Gallery, NYC. She was the curator for the exhibition, "The Tiller Effect" also at NY Studio Gallery. Her work was featured in the exhibition and auction "In/Out: GLAAD's top 100 Artists," held at the Metropolitan Pavilion, NYC.

Professor and Associate Dean **Elizabeth O'Donnell** represented the School of Architecture at the inaugural session of The Dubai Forum, "Architecture for Sustainable Societies." As rapporteur, she presented the concluding remarks for the day-long conference that engaged 47 academics and professionals from 17 countries, and addressed topics including the urbanization of poverty and the importance of local and regional traditions in developing sustainable design and building practices. Her remarks were widely covered in the regional press. With the School of Architecture Archive she coordinated all preparations for the school's NAAB reaccreditation site visit that was held in April. She is on the advisory board of a web start-up, continues to serve as a consultant in practice and is editor for the school's newsletter.

Visiting Associate Professor **Lyn Rice**, principal, Lyn Rice Architects (LRA), received a 2009 International Architecture Award (Chicago Athenaeum/European Centre), a 2009 National AIA Honor Award, and a 2009 National Excellence Award (Society for College & University Planning) for the Sheila C. Johnson Design Center. LRA also received a 2010 AIA New York Merit Award for The New School Welcome Center in New York. Rice was appointed to Board of the Directors for the Architectural League of New York, chaired the Baltimore AIA Design Awards jury, became LEED certified, and lectured at the Center for Architecture, and The Urban Center in New York, The University of Texas, San Antonio, and CUNY. Rice's work was featured in exhibitions at the Center for Architecture, the O-Gallery in Beijing, E-Halle in Basel, and Galleria SESV in Florence, and in publications including *New International Architecture 2009, 1000x: Landscape Architecture, Architectural Record*, and *Details in Architecture: Creative Detailing by Leading Architects*.

Professor **Stephen Rustow** chaired a session at the conference of the Mid-Atlantic Association of Museums, and was invited to deliver two lectures at the University of Illinois, Chicago in the department of Art History's Museum Seminar. These followed a presentation at The Cooper Union of a critical reappraisal of the Grand Louvre project, 20 years after its opening. An expanded version of the text is to be published as part of a new 3-volume *Histoire du Palais et du Musée du Louvre*. His firm, SRA/Museoplan, developed prototypes for a modular exhibition system to be used throughout the galleries of the new Museum for African Art, New York. The firm continues to serve as consultants to the museum on gallery planning and other technical issues, and is designing the installation of several of its inaugural exhibitions. The firm is also developing a prototype for a moveable art wall with integral vitrine.

Visiting Associate Professor **Michael Samuelian**, has worked over the past year on obtaining the entitlements and public approvals for the rezoning of the MTA's Western Rail Yard for The Related Companies. The rezoning enables the creation of a new neighborhood for the west side of Manhattan with over 3,500 apartments, a two million square foot office tower, a K-8 public school and over six acres of new public parks and open space. He continues to manage the development of the Mckim, Mead and White Farley Post Office into Moynihan Station, which received an \$83 million stimulus grant from the federal government and will begin construction this year. He was promoted to a vice president at The Related Companies.

Professor **Ysrael Seinuk** received an Award of Merit—2009 from the New York Concrete Industry Board, and the 2010 ACEC National Honor Award for Excellence in Engineering Design of Structural Systems for the 014 Tower, Dubai.

Professor Adjunct **David Grahame Shane** continued to teach Urban Design at Columbia University and to lecture in Europe and Asia. He finished his book *Urban Design Since 1945: A Global Perspective*, to be published by Wiley-Academic in the fall 2010. Together with Professor Brian McGrath of the New School he edited the Urban Theory volume of the forthcoming Sage publication on *Contemporary Architectural Theory* (2011).

Professor **David Turnbull** presented the lectures "No Ideas" at the James Stirling, Architect Symposium at Yale University, and "The Camping Stool and the Cosmic City" at a conference on Iannis Xenakis, organized by NYU and The Drawing Center. He wrote "No Plan" for SUPERFRONT's "Unplanned" exhibit in Los Angeles, and "Atopia with Love," a manifesto, for The MAK, in LA and Vienna, as his contribution to the Urban Future Initiative and the UFM Project. ECO-CIVILITY, a project developed in collaboration with Helen Mayer Harrison & Newton Harrison from Santa Cruz, CA, was reformatted for "Vertical Gardens" at EXIT ART, New York, and at AIA-SF in San Francisco in 2010. He is currently working on a new project for Haiti, a deployable vertical axis wind turbine and a rainwater harvester with an integral water treatment unit, funded by The National Science Foundation (NSF), and continues to develop PITCH_AFRICA and PITCH_USA, generously funded by The Annenberg Foundation.

Instructor Adjunct **Mersiha Veledar**, recently gave a lecture at the Royal Danish Academy of Fine Arts, School of Architecture in Copenhagen and served there as a guest professor in the "Architecture, City and Building" Department, with Professor Anne Romme (AR '05). She has worked on numerous international projects this year as a Design Architect at Skidmore, Owings & Merrill, LLP under the direction of Roger Duffy, Design Partner, and Scott Duncan, Design Director, and is currently working on the first major building to be built in a new city planned in Santa City, India. Additionally, she was nominated to curate the SOM evening lecture series for 2010.

Professor and Dean **Anthony Vidler** received the AIA New York State Educator Award in 2009. He is currently the Guest Curator for the forthcoming exhibition and publication James Frazer Stirling (1924–1992): Architect and Teacher, co-organized by the Yale Center for British Art and The Canadian Centre for Architecture. He participated in the Dean's Roundtable as part of the annual exhibition "Arch Schools 2009: Visions of the Future," at the New York Center for Architecture. He presented the following lectures: "Lost in Vienna: Where in the World is Little Hans?" for the conference Interiority/Exteriority: Rethinking Emotions at the Whitney Humanities Center, Yale University; "Whatever Happened to Ecology? John McHale, Reyner Banham and the Quest for an 'Other Architecture,'" University of Pennsylvania School of Design; and "The Last Architect: James Stirling Playing (Seriously) with Tradition," Rice University School of Architecture, Houston, TX. Dean Vidler's book, *James Frazer Stirling: Notes from the Archive*, is forthcoming from Yale University Press, and *La Deformazione Dello Spazio* (Warped Space) was translated into Italian and reviewed in the March 2010 issue of *Domus*. He also contributed essays to the publications *One Book, The Whole Universe: Plato's Timaeus Today*; *Speed Limits*; and *Ruins of Modernity: Politics, History, and Culture*.

Assistant Professor Adjunct **Joan Waltemath** exhibited her work at South New Hampshire University, The Philoctetes Center for the Multidisciplinary Study of the Imagination in New York, Centre for Contemporary Art in Grenoble, France, 210 Gallery in Brooklyn, and at the Brattleboro Museum & Art Center in Vermont. She was a Visiting Artist at the Cleveland Art Institute, Ohio, a panelist for artcritical.com at the National Academy of Design, and was in residency at Gastatelier, Insel Hombroich, Germany. Waltemath is the Editor at Large for the Brooklyn Rail, where she also published several articles. Her catalogue essays include, "Alan Uglow's Kinesis" in *Alan Uglow*, Museum Haus Esters, Krefeld, Germany, 2010.

Professor Adjunct **Michael Webb's** "Sin Palace" project, dating from 1962, was included in an exhibition at the Architectural Association School of Architecture (AA), London, entitled "First Works: Emerging Architectural Experimentation of the 1960s and 1970s." Webb gave a lecture describing his recent work at Syracuse University, NY and at Stony Brook University, NY. He also lectured at Columbia University in the "Lunchtime Series." Webb's drawings formed part of the Archigram Traveling Exhibition, currently at Valladolid, Spain, and he participated in the London launch of the Archigram website perforce from New York via Skype.

Associate Professor Adjunct **Georg Windeck** is now a LEED accredited professional for sustainable design. He received a Menschel Grant for faculty development in support of his collaborative research on the artistic implications of construction technology in 20th Century architecture. He has also been invited to lecture in the Faculty for Humanities and Social Sciences at The Cooper Union, at Columbia University's Advanced Structures for Architects program, and at the College of Architecture at the ITT in Chicago. He has been working on the renovation of a commercial loft in a Soho cast-iron building, and on the preservation of a metabolistic 1970's daycare center in Berlin.

Assistant Professor **Michael Young's** firm Young & Ayata, was featured in an article about emerging New York architecture practices in *Pin-Up* Magazine. The practice also exhibited their work at Pratt University, broke ground on their first project, a residence in Westchester County, and launched their website www.young-ayata.com.

Associate Professor **Tamar Zinguer** organized the academic conference Architecture Moves, held October 1–3, 2009 at The Cooper Union. Invited architects, theorists and historians probed the intersection of Architecture and the Aesthetics of Movement, from the 19th to the 21st Century and explored a variety of themes: the expressive, experiential and perceptual aspects that the movement in space has engendered, as well as rhythm and spatial relocation, displacement of vision, temporality and animation in architecture.

Professor **Guido Zuliani**, principal of AZstudio, in association with EisenmanArchitects in New York and Interplan2 in Naples, completed the architectural master plan for the industrial area of the Pirelli-Sofer, at the center of the redevelopment of the water front of the city of Pozzuoli. The project included the schematic design of a service and retail center of approximately 500,000 square feet, an urban park and a building dedicated to the Sailing Academy. AZstudio, in association with ObraArchitects in New York, was awarded a third prize in the international competition for experimental housing in Mestre (Venezia) organized by the administration of Venice and the company Immobiliare Veneziana. His essay "Evidencia de Cosas Nunca Vistas," an assessment of the work of the architect Peter Eisenman, was included in the volume *Instalaciones: Sobre el Trabajo de Peter Eisenman*, published in Argentina by Professor Pablo Lorenzo-Eiroa. He is currently developing a manuscript on the architecture of the XVth and XVIth centuries, and on a monograph on the oeuvre of the architect John Hejduk.