YEAR IN REVIEW

The 2013-2014 academic year has been an extraordinarily significant one for The Cooper Union and for the School of Architecture as well, with the faculty, students and staff of the school fully engaging both challenges and opportunities presented at every level of our historic institution. The year began in July with the announcement by our Board of Trustees to establish a “Working Group” to undertake a good faith effort to seek an alternative to undergraduate tuition that would sustain the institution’s long-term financial viability and strengthen its academic excellence. With the same ambitions and goals, the School of Architecture launched two new summer studios; one for students to investigate advanced digital technologies in architectural research, design and representation, and a second for those students who were seeking their first encounter with the discipline. Both studios extended the School of Architecture’s unique vision and pedagogy to new students, both national and international, with characteristic passion and intensity.

Also that summer, for only the second time in forty years, following Dean Anthony Vidler’s decision to return to full-time teaching after serving as dean of the school for twelve years, a committee was elected by the faculty to conduct an international search for a new dean. Chaired by Professor Diana Agrest, the committee began its work in August with an open call for nominations to all faculty, students and alumni of the school as well as leaders of schools of architecture and many distinguished friends in practice throughout North America and beyond. The process has been international in scope and yet particular to our school; as of this writing, the search is still active.

During the fall semester, the Working Group, comprised of 18 members of The Cooper Union community, including Professor Diane Lewis, as well as a fourth year student and an alumnus of the school, met frequently and worked tirelessly to develop a comprehensive set of recommendations for the Board of Trustees that ranged from spending reductions, to administrative and faculty restructuring, to repurposing space. Other efforts were also started in response to the institution’s financial crisis: Professor Sue Giussow taught a four-week drawing master class to support both the Annual Fund and the School of Architecture; students launched a website to raise money for a “one year fund” to offset the potential tuition bills of the freshman class entering in fall 2014.

Throughout all the public debate and committee work and advocacy, the extreme dedication by faculty and students alike to investigate the discipline of architecture, to interrogate its essential principles while expanding its potential field, remained sharply focused, redoubling efforts in both the studio and classroom. From the first year’s investigation of the “architectonics of free speech” and the “foundations of architecture” to the thesis projects that addressed the social impacts of climate change, secrecy, spectacle and surveillance, mobile housing, historic/industrial preservation and many other issues through projects located in New York; El Choco, Columbia; L’Aquila, Italy, the arctic and other places around the globe, the work in the studio reflected a deep commitment to a close reading of place and the pressing issues of contemporary life through the making of an architecture both provocative and beautiful, at scales from the most intimate to the most broadly conceived.

We are very proud of our many alumni who have been recognized with awards and prizes. We are especially gratified by this year’s Pritzker Architecture Prize, one of the most important and distinguished in the profession, awarded to Shigeru Ban (AR ’84), whose dream since high school in Japan had been to study architecture at The Cooper Union with Dean John Hejduk. His exquisitely beautiful designs, humanitarian efforts and optimistic spirit are an inspiration to architects around the world.

Our faculty, who have always been one of the great strengths of the school, have been recognized with awards, publications, invitations to lecture and the making of a film, including: a special award from the Buckminster Fuller Challenge; publications in the Journal of the Society of Architectural Historians, the Architect’s Newspaper and Architectural Review; and lectures at the Society of Architectural Historians Conference, the American Collegiate Schools of Architecture Conference, Yale University, Ohio State University, the New Museum and the Center for Architecture, among many others. Lessons from Architecture 1925–1970, from the exhibition of the same name held at The Cooper Union in 2013 was published by the Monacelli Press, the film The Making of an Avant Garde: The Institute for Architecture and Urban Studies, 1967–1984 has been screened internationally, and the book Open City, presenting twelve years of work by the fourth year architectural urbanism studio is nearing publication. The School of Architecture Archive assisted in many of these projects and presented an exhibition of the collages of Bernard Hoesli and designed and produced the book The Great White Whale is Black on the work of Professor Tony Candido.

We marked the passing of Lebbeus Woods, a brilliant teacher, radical artist, visionary architect, and writer of clarity and precision with a two-day symposium that featured thirty speakers and drew an audience of over six hundred. His loss created a void here at the school that continues to be felt; but his presence remains, in the work of the students who learned from and with him, and in his voice of resistance that continues to resonate and inspire in the halls and studios of the school today.

It has been a tremendous honor for me to serve as Acting Dean during this time of historic change and I am deeply grateful for the wisdom, tireless support and help I received throughout the year from the staff and faculty of the school. At the close of this year, as we work together to prepare for this End of Year Show, I am grateful to our students as well, for their boundless optimism, fearless exploration, extraordinary work ethic, their commitment to community and to the school, their engaged citizenship and for our shared love for making architecture.
Architectonics: Fall Semester
Aida Miron

Instructor Aida Miron
Instructor Wes Roven

Architecture and Crisis: Free Speech Levitating The Great Hall

It is clear that our Cooper Union faces a grave crisis. At its core, the question facing us is, what holds up The Cooper Union? This is no easy question but we believe we can gain insight into it by looking to the foundation of the institution—free speech. The Foundation Building is literally held up by free speech. The seeds of this foundation were planted by Peter Cooper and Abraham Lincoln, and from these seeds grew a magnificent principle and the founding principle of this school—free education.

This year in Architectonics, the first year studio, we addressed the current crisis head on. We took The Great Hall of The Cooper Union as our site and together the entire first year studio built a large model of The Great Hall. We then gave the students a list of 160 speeches given in The Great Hall over the last 150 years. Each student chose a speech, studied it, the person who gave it and the time it was given.

Working with these histories, they drew out the spatial structure of the speeches, the ideologies, captures, releases and found the structure of the speech. The architectonics of free speech. Through the precision of our language, our drawing, our making, we fulfill the promise of architecture and its social contract.

Architecture by definition is a social political act, it finds its ethical dimension in its capacity to articulate and manifest a spatial social contract.

Each year for the last five years, in the first year studio at The Cooper Union we have assigned each class a group work, a project that they all have to construct together. Thirty people, one work. These moments are filled with lessons, perhaps the most important lessons of the whole studio: the singular and the many, the social contract and its links to construction care, craft and community. This year we asked the class to build a 10’ x 15’, 1200lb model of The Great Hall, well crafted and in ten days.

We had a long and detailed conversation about the meaning of communication, of language of comprehension and action. The key to the whole endeavor is that everyone must recognize that the first thing they have to build is NOT The Great Hall, but the communicative tissue between them, the organization and the choreography. With this comes a social contract; the primary structure being crafted is the community itself and its communicative exchange.

ARCHITECTONICS: SPRING SEMESTER
Associate Professor Morsha Veledar
Instructor Saiva Romanos

Foundations of Architecture
Elements: A Scalar Play In Marks, Elements, Objects And Constructions

First year sets the course for an elementary understanding of the Foundations of Architecture. This studio teaches the underlying principles of tectonics within a body of autonomous figures of various typological elements such as columns, walls, windows, doors, skylights and stairs. The individual “kit of elements” framework creates an array of new inventive figures and possibilities in structural, formal, composite and programmatic con-figurations, becoming a generating lexicon of design.

The studio coursework is set by the exploration and experimentation within the “kit of elements and parts” progression in scale and learning how to draw and design to scale, at multiple scales.

Scale can __________ Scale is a fundamental principle of architecture and one of the most crucial challenges every young architect should begin to examine and understand through basic observations in proportions, measures, constructions, assemblies and most importantly, arche-typical conditions in space. These become key studies in creating new inventive typologies in form and structure.

Phase I
FULL SCALE DETAILS [1:1]: Windows, Doors, Skylights, Columns, Floors, Walls, Stairs

Phase II
INHABITATION SCALE: OBJECTS, ASSEMBLIES [1/2” = 1’-0”, 1/4” = 1’-0”, and 1/8” = 1’-0”]

Phase III
0.0 [SCALE-LESS] FIELDS

Phase IV
FRAGMENTS TRANS-FORMED

Each scalar phase of the studio invents a sequence of ‘parts and figures’ as an Architectural Alphabet among each individual project which embody the original element condition in all of the aforementioned scales, including full scale details, inhabitation scale objects, fields and architectural fragments through a sequence of tectonic operations such as shear, cut, bundle, cantilever, among a few. In conclusion, this array of autonomous architectural components re-introduces how each project and its prescriptive element have trans-formed during the semester in the conceptual categories and active engagement within the larger dialogue on the Fundamental Elements of Architecture.
THIRD YEAR

DESIGN III: FALL SEMESTER
Professor Stephen Rostow
Assistant Professor David Allin
Associate Professor Mersha Veledar
Professor Samuel Anderson
Visiting Professor Ashok Raji

The Third Year Studio introduces building typologies of a greater complexity than those treated in the first two years and develops both analytical and design skills around a comprehensive consideration of site, program, structure, mechanical systems and building envelope. The selection of an institutional building type for the year's work provokes an engagement with complex programmatic considerations and a rich history of formal precedents; it also positions the entire studio in a critical relationship with social patterns of use and representation. This year the Third Year Studio sequence was again divided into two separate but related semesters, each combining analysis and design, both working with the same institutional program: the library.

Most of our modern institutions, and virtually all of our institutional building typologies, are products of the Enlightenment. Schools, museums, libraries, hospitals, courthouses and prisons were all fundamentally (re)defined towards the end of the 18th century and a great experimentation ensued in which new building types were designed to examine the space of reading. The weeks that followed focused on the analysis of a group of historical and contemporary libraries in terms of site, massing, materiality and formal language, working from the ‘outside in’ to understand how specific libraries resolve the complex question of their place in urban and public space. The reference buildings ranged from Labrouste’s Bibliothèque St. Geneviève through 20th century buildings by Asplund, Aalto, Kahn and Scharoun to contemporary examples by Ito, DMA and Kalkas. The semester finished with a design exercise wherein each student was asked to extrapolate a set of principles from the analysis and to synthesize a proposal incorporating a critique of the original reference and thus staking out a larger position with respect to the library as a contemporary building type.

DESIGN III: SPRING SEMESTER
Assistant Professor Michael Young
Assistant Professor David Allin
Assistant Professor Rosalyn Sheeh
Visiting Professor Ashok Raji
Professor Samuel Anderson

The spring semester of Design III continued the previous semester’s analysis projects focused around the typology of the library. The studio extended these ideas in the development of a new design project that integrated the analytical findings into a resolved architectural proposal. This semester developed and articulated the resolution of constructive, structural, environmental, and lighting ideas integrated into conceptual and aesthetic arguments. The extended faculty of the Building Tech, Structures, and ETV courses were an integral part of this design studio.

Program, Site, Material and Tectonic are crucial elements in the development of architectural form and the means by which they structure human environments and relationships. Program is both the reality of functional use, and the scenarios of imagined narratives. An architectural Site consists of an urban context or a condition of landscape and the cultural understandings that influence the reception of a built form. Program, Site, Material and Tectonic are crucial elements in the development of a new design project that integrated the analytical findings into a resolved architectural proposal. This semester developed and articulated the resolution of constructive, structural, environmental, and lighting ideas integrated into conceptual and aesthetic arguments. The extended faculty of the Building Tech, Structures, and ETV courses were an integral part of this design studio.

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The studio focused on an area at the edge of the Harlem River in Kingsbridge Heights. Sitting on a steep topographical drop, the area is fractured by the multiple lanes of the William Francis Deegan Expressway, four sets of active and inactive railroad tracks and industrial brownfields. The site chosen for study was located on the upper half of the Harlem River—a body of water that has been radically transformed through the industrial era. Historically it was only a small stream course consisting of mostly tidal flats and wetlands. The selected site had very specific geophysical, cultural and historical attributes that impacted the proposed architectural actions.

The studio addressed a twofold program connecting the Heights with the water, while accommodating, defining and programming a Harlem River center for urban agrarian culture. Both programmatic segments are interwoven with each other, proposing the inhabitation of that transition between the water and the city. The program involved the integration of productive landscape, agriculture, energy, infrastructure, transportation, and all other appropriate ideas of urban life. The center for urban agrarian culture imagined urban agriculture in this specific context, as a new evolving model of human settlement. Projects sought to determine the activities that could take place on site in their own terms and develop programmatic scenarios of occupation and connection.

FOURTH YEAR

DESIGN IV: FALL SEMESTER
Professor Kevin Bone
Associate Professor Tulay Atak
Instructor Teddy Kolman
Instructor Sophia Krimizi
Professor Sean Scully

URBAN TERRITORIES: Landscape, Infrastructure, Architecture

The fall 2013 Fourth Year Studio introduced students to urban design by investigating the possibility of integrating architecture, landscape, ecology and infrastructure. Based on the premise that the emerging urban condition transcends the limitations of traditional definitions of these disciplines, the studio sought for design propositions that offer strategies for integration. Establishing constructive forms of exchange between analytical research and design, the studio pursued an exploration and re-imaging of a site that included an archetype of modern urbanism, transitional zones occupied by arterial transit routes, abandoned industrial corridors and places that defy definition. These territories, common to many aging post-industrial cities, remain under-utilized and resist becoming part of the city fabric.

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FIFTH YEAR

THESIS: FALL AND SPRING SEMESTER
Professor David Turnbull
Assistant Professor Hayley Eber
Assistant Professor Pep Aviles
Assistant Professor Cristina Goberna
Instructor Teddy Kolman

May 2013. The Architecture School lobby was painted black, it was empty. We kept it that way. Standing in silence before moving to the Foundation Building’s first floor colonnade to talk about the school and about the work of the students, it was a review that was not quite a review, more of a rite of passage. A long table held carefully selected objects, drawings, books, projectors, maps and a square piece of turf bisected by a white painted line, two inches wide—two sides, home and away, them and us—positions taken. A simple confrontation. The end of an extraordinary year with remarkable students making exceptional work…. Former CIA employee and NSA contractor Edward Snowden flew to Hong Kong and the first documents released by Snowden to Guardian journalist Glenn Greenwald and filmmaker Laura Poitras, uncovering the existence of numerous global surveillance programs, were published. In Syria the death toll approached 100,000. Our students graduated. The End of Year Show opened. It was bright, full of life and hope, a testament to the creativity and vitality of the thesis class. But the school had changed and would change more significantly during the summer and throughout the fall.

September 2013. The Thesis class entered this new Cooper Union, which appeared to be the same but was not. Charged with setting a goal for themselves and defining their own path through the year, they started with a short project called Messages & Messengers, an alibi perhaps, certainly a trick that would provoke a question, a thesis. In a world where uncertainty, anxiety, paranoia, fear, distrust and disbelief have almost comprehensively replaced any sense of comfort and security, with no firmness, too much commodity and only the most emaciated expression of delight, it comes as no surprise that the work this year tracks at least two paths, that might appear to be irreconcilable, but maybe are not: retreat and amelioration.

May 2014. Turning back the clock to a time of sense and sensibilities that were shared or looking forward to a new reality that is patched up, backed up and re-booted so that it will work better, more or less. Inevitably a third way is also apparent this year, an escape from the complication that comes with going backwards or forwards, as you never know quite what or who you might meet on the journey. This involves inventing some kind of parallel world, where like a bitcoin miner, the student architect plays complex games in an alternate reality to make things that actually have value in our reality. All three paths and the decision about the path to be taken raise questions about the autonomy, semi-autonomy or quasi-autonomy of our discipline. As ever, the ghosts whisper in the early hours and the best work reminds us that however confusing the world has become, inside and outside, however cacophonous the ambient noise, a still, clear voice can be heard that belongs to nobody but can be shared by everyone. Architecture.

Thresholds. This thesis seeks to interrogate the limits of Venice and explore a new domesticity for Venetians in the city that is notoriously home to floods of tourists.

Terrain Vague. Rather than continuing the rhetoric of urban expansion by proposing another master plan, this project takes the form of a retreat.

Redacted. This project explores the conditions in which secrets are kept and exposed.

The city center of L’Aquila. This thesis proposes a network of non-intrusive weaving supports that reorganizes the urban fabric and social structure of L’Aquila providing new public access and public spaces.

Architecture that Sees: Boston Marathon, April 2013. This thesis explores how architecture can challenge the role of the spectator, runners, police, and make the spectators the spectacles in today’s metropolitan events.

Rivers of Gold: El Choco, Colombia. The aim of this proposal is to develop a new typology within these mining territories that will present an intermediate scale of mining, defining the size of the tools used as well as the impact the process creates.

Urban Transience: Transitional Habitation in the Era of Globalization. This thesis generates a type of transitional habitation that will have a substructure (architecture) placed into a megastructure (urban infrastructure).

Roosevelt Island: Site Exhaustion—Towards (A)Historical Poetics of Program. In an attempt to collapse the expansive notion of historical proximities this thesis constructs a continuous tectonic material that recuperates them from obsolescence.

The Unicorn Remystified. Adopting the subject of WCW’s modern epic Paterson as its site, this thesis resolves to redeem the sordid city by rediscovering the symbolic unicorn of the place.

Navigating the Techno-Arctic. This project intends to confront the postindustrial transformation of natural landscapes through the implementation of networked and overlapping technological systems of organization.
City in Flux: Mobility as the Catalyst for the Revitalization of Shrinking Cities. This thesis addresses two American problems, the mobile home and the shrinking city, by reinventing one to revitalize the other.

Fermentation Architecture. Fermentation architecture is a way of understanding and managing the landscape for productive purposes without altering the existing conditions.

Free Trade Zone in Transit. This project deals with the internal workings of the Panama Canal as well as the growth in container vessels, as a way to create a new urbanism.

Fragmentary Refinery. The redevelopment of Brooklyn’s Domino Sugar Factory provides an opportunity to question and propose a new vision of historical preservation.

Building in Time. The situation is a 40-acre site along the riverfront in Deptford, London. This thesis puts forward the design for two interventions for public institutions rooted in the histories of the site.

Albatross. The atmosphere, a location that has escaped the hold of archetypal architecture, offers a new world of possibilities that involves the transition from the traditional method and systems of constructing earthbound structures.

Cauterized Terrain. Within the remote mountain town of Crown King, Arizona, this project proposes a new city form, which will coexist with the forest’s natural fire regime.

Carnivalsque Infrastructure: A New Urban Approach to the Caribbean City. This project provokes a transformation of colonial urban form in Caribbean cities through the invention of new urban types that facilitate the festival as it moves from island to island.

Soundings Museum: A Natural History of Endangered Noise. The Michigan Building, a derelict renaissance revivalist theatre turned parking garage, is reimagined into a space of performance celebrating the phenomena of synthetic music.

Beyond The Visible Terrain. The Persistence of Memory in Desert(ed) New Mexico. This thesis takes Socorro County as a laboratory to retrace and recuperate significant events from oblivion.
FILMIC READINGS OF THE CITY

The city, analogous to film, is a continuous, fluid open sequence of spaces and objects perceived through time. Time, Movement and Narrative are the essential parameters. These very specific parameters of film open up a different dimension to think about the city. Reading the city through film allows access into the complexity, the expansive force and sequential organization of fragments in time that characterizes the city.

INCURSIONS INTO URBAN DISCOURSE

This studio focuses on Urban Form through the exploration of the many different forces that intersect in generating its particular configurations. Time and Movement has been the focus of the studio as an essential concept in the understanding the urban condition and the urban realm. Various interpretations of this concept are developed by each student as they unfold and reveal urban conditions that while apparent and part of everyday life are not recognized until the readings of the city through drawings as a critical tool reveals what while obvious is not seen.

Time has been considered from a scientific, historical and cultural point of view. Three cities have been the locus of this exploration: Los Angeles, Rio de Janeiro, and Moscow as they present and represent the physical, cultural, technological and ecological effects on and conditions of the contemporary city.

ARCHITECTURE OF NATURE / NATURE OF ARCHITECTURE

This studio focuses on the question of Nature, from the philosophical and scientific discourses that have explained it throughout history in its transformations to the present condition. A different dimension of time and scale is the object of this exploration in which those questions take a preeminent position both in the type of natural sites that are selected and the subsequent process of reading and transformation. The scale is vast in most cases; these are places that took billions or millions of years to develop and thousands for transformations to be perceptible until the most recent past where processes of transformation have accelerated. Time in this case, is not historical but it is rather of a cosmic dimension that relates to the Universe. It not only becomes essential in every transformative proposal but also places them outside the traditional boundaries of architecture, urbanism or landscape. The subject of Nature in its many complex modes of articulation with Architecture—economic, political, ideological, scientific and technological—is critically reexamined in this studio.

THE CRITICAL MOMENT

The thesis projects culminate the graduates’ year-long exhaustive research, using texts, photography, drawing, technology, science and history to develop innovative programs, all of which feature configurations and narratives that bring forth potential solutions that may not be, at first, obvious to the viewer.

THESIS PROPOSALS FOR 2012 INCLUDED

- Fluctuating City: A Topography of Population Activity in Manhattan
- Mediated Visualization and the Transformations if the Optical Apparatus: Hubble Telescope Growth in Anoxic Conditions: Black Mangrove System