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IDWRK 08 09: SELECTED STUDENT WORK FROM THE
USC SCHOOL OF ARCHITECTURE

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This issue of IDWRK is
dedicated to the memory of

DOLORES BLUROCK

A great friend to the students
and publications of

The USC School of Architecture

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IDWRK 08 09

Everything in these times is either crisis or stimulus. So it is with architecture, and so it is with architectural education. Inherent to crisis is fear of the unknown, and since education is a venture into the unknown, the current crisis itself is stimulus to education, or that taken at USC. This opens the real meaning of crisis as fear and chance at once.

Chances come with this inaugural issue of IDWRK (idea work), a collection of works from workshops and studios, that offer the best situation to address some fundamental uncertainties we are confronting today: if architecture, at the core of traditional knowledge and morality, will reinstate once the crisis passes; if our way of building will remain when the next cycle of prosperity emerges; if the way we pass on skills and ideas will be effective when young minds come back with much more doubts.

IDWRK resembles a bundle of plants (differing from the editors calling it a “taster’s menu”) grown out of garden after summer: chaos from worm’s view, order from bird’s eye; one sees aromatic grass, while others see annoying weeds; shrubs and trees, colorful or stark, spare or spectacular, fruity or thorny, ornamental or poisonous—altogether creating an experimental bio-diversity, constituting 160 pages, 700 students, 90 faculty, and 20 staff behind over 90 design studios, both graduate and

undergraduate level, yielding more than 10,000 submitted student images through Fall 2008 and Spring 2009.

This edition of IDWRK is hopefully the first of an annual publication that documents and displays the work being explored throughout the USC School of Architecture, which will be for certain, altered, crafted, and even wiped through seasons, producing nutrients either in the form of flowers or “green waste” or “green stimulus.”

Through the generous support of our William Blurock Family Endowment for Publication, many faculty and staff have participated in this endless effort, that of gardening, and this bundle is their gift to all of us.

Enjoy!

Qingyun Ma, Dean
Della & Harry MacDonald Chair

ON EDITING

When faced with the task of editing the design studio work across the school of architecture from the last year, we perhaps did not know what an immense task this would be. The sheer numbers are impressive, over the 2008–2009 academic year there were over ninety different design studios resulting in over one-thousand student projects. This year a new system was developed for the archiving of student work throughout the school—the Digital Drop Box. This allowed the school to organize and document student work more comprehensively and efficiently than ever before. Students uploaded their studio work at the end of each semester monitored by design studio faculty. By the end of the academic year the Digital Drop Box contained over 10,000 digital files including; drawings, model photographs, renderings, diagrams and miscellaneous images!

No one publication can comprehensively represent all the excellent work done in the school over the academic year, but we hope that this serves as a “taster’s menu” of sorts that both exemplifies the best work from the school while representing the pedagogical diversity of the curriculum, instructors, and students. There are many, many, other excellent projects that of course are not included in this publication given the restraints of page count and the desire to show the breadth of the curriculum from both the graduate and undergraduate programs. We would like to

thank all of the faculty and staff who assisted us in recommending student work, helping obtain images where needed, and providing their course descriptions. Special thanks to our webmaster, Gennaro Avolio-Toly, for managing the Digital Drop Box and helping us categorize the data. Thanks also go to David Whitcraft and Erin Hauber who were responsible for the graphic design, as well as Michael Chung and Paul Tang for their initial work to get this publication started.

We hope this publication serves as a beginning template for what becomes an annual publication at the school. We expect it will evolve and improve year to year as with all work in the school as it is reassessed, re-examined, and reworked.

Selwyn Ting, Assistant Professor
Undergraduate Editor IDWRK 08 09

John Enright, Assistant Professor
Graduate Editor IDWRK 08 09



YOU WILL SEE THIS TEXT ON THE PAGE. THE NUMBERS IDENTIFY STUDENT WORK AND CORRESPOND TO THE IMAGE PLACEMENT ILLUSTRATED HERE.

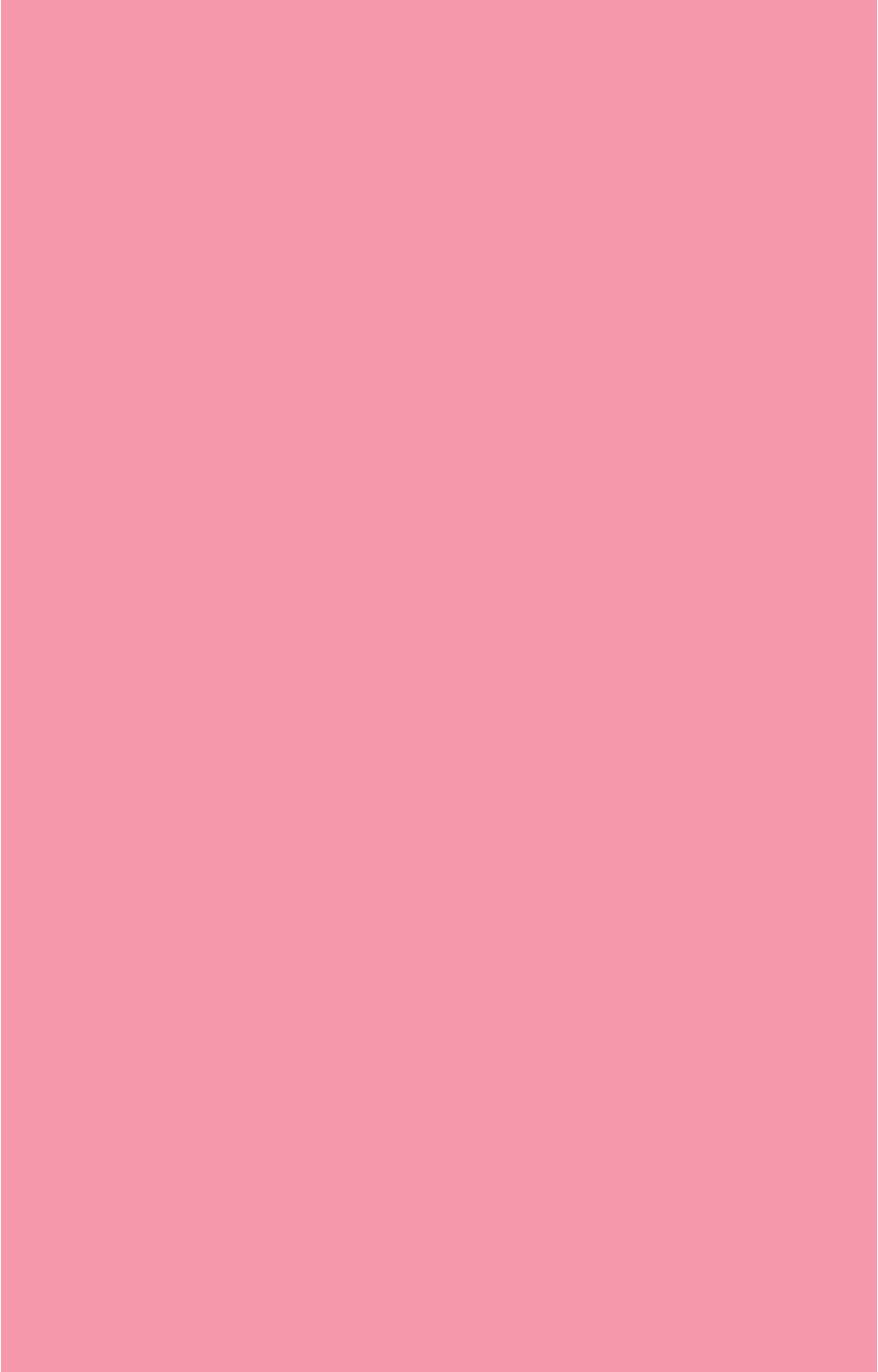
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UNDERGRADUATE STUDENT WORK: 2008–2009

The 2008–2009 academic year is the first for two milestones at the School of Architecture: the initiation of the position of chairs for each level of our academic programs, and, after a long hiatus, publication of a yearbook of student work. There is a chicken and egg relationship between the two, the organization of the work describes the current climate of the curriculum, while the explication of that work will provide a springboard for better discussion and assessment of the direction the programs may go. The work, developed by our talented students and an inspiring faculty, becomes a launching point—an opportunity to re-read what has been done to help determine the next step.

The USC undergraduate programs include the five-year accredited Bachelor of Architecture program, which is anchored by a ten semester sequence of design studios, the four year Bachelor of Science in Architecture program, which requires from four to eight semesters of design studio, the Building Science specialty for Civil Engineering students, and the minor in architecture. For its inaugural year, the work of this publication focuses on the design studio work.

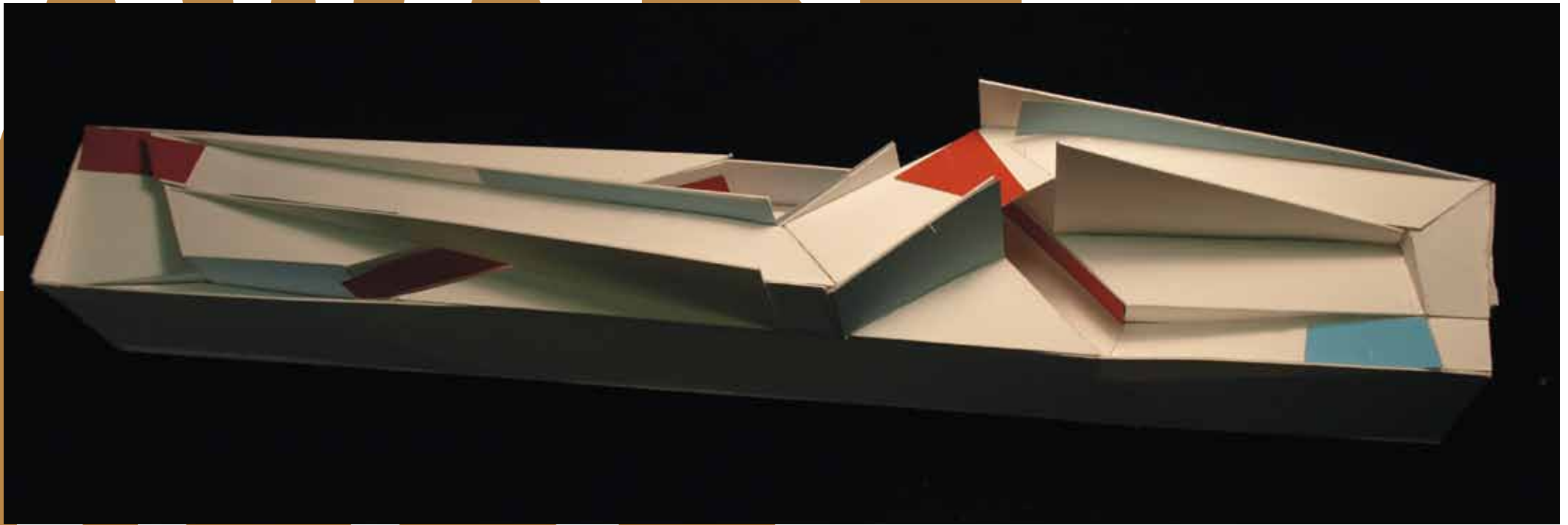
The design studios are seen as the framework for the work of each semester. Two particular initiatives have been the focus of the past year. One is the integration of required specialized courses in technology, history/theory, and professional practice into the work of the design studios. For instance, in the second semester of the second year, Arch 211, Introduction to Materials and Methods, was reinforced in the design studio by a focus on materiality and construction. Sustainable design was an important building block for the third year, first semester design studio, where the work and faculty reinforced the concepts and strategies learned in Arch 215, Environmental Controls. The second goal has been infusing digital technology into the required curriculum to develop basic skills and to use these skills to explore new territory in design. This has taken place at every studio design level, has been integrated into most of our courses, most vividly with professional practice courses teaching Building Information Modeling, and has been an opportunity for many specialized classes, including teaching of CATIA, scripting, and other forward-looking strategies.

The curriculum evolves from the introduction of strategic skills, concepts, and tools in the first six semesters, to advanced, integrative specialized work in the three topic studio semesters and the final fifth year degree project. The topic studios encourage students to select subjects of particular interest to them, which includes participating in one of our global study programs, while the fifth-year final degree project includes an independent research paper and may either fall under a theme outlined by the faculty member or be developed as an independent project. As outlined in the semester level descriptions, each core semester has a particular agenda that builds on the work done in previous semesters.

We are proud of the accomplishments of our students and faculty and look forward to continuing dialogue on issues of architectural pedagogy that this effort represents.

Kim Coleman, Undergraduate Director





ARCH 102A AWARENESS

COORDINATOR: Lee Olvera. INSTRUCTORS: Valery Augustin, Mina Chow, Michael Chung, Rebecca Lowry, Lauren Matchison, Janice Shimizu, Linda Taalman and Rennie Tang.

The first year design studio is the introduction to architecture as cultural practice based on ideas. The production of outstanding work is dependent on both design intent and technical skills, developed through diligent and continuous practice. The ability to embody design work with meaningful intentions only arises through investigation and research, resulting in a collected body of knowledge used in the production of one's own work. The application of this scholarship in design is directed by critical thinking, utilizing insight and discerning intellect in the creative application of knowledge.

The semester began with composition-based projects designed to heighten skills of observation, perception, analysis and transformation by employing oppositional relationships: realism and abstraction, line and surface, object and space, 2-D shape and 3-D form. Students utilized multiple means of reiterative exploration to complete their work, including documentary photography, photocollage, drawing and paper-model making, to provoke inquiry and hone an understanding and appreciation of

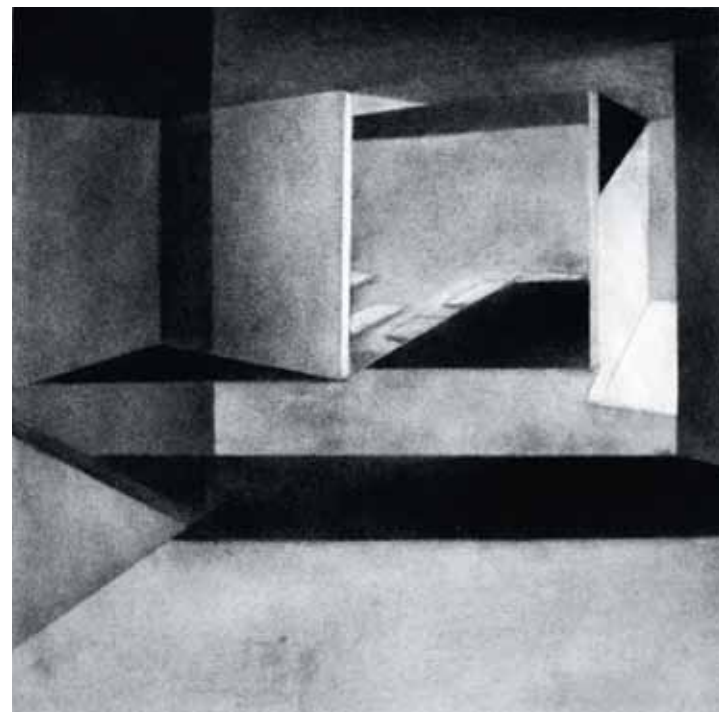
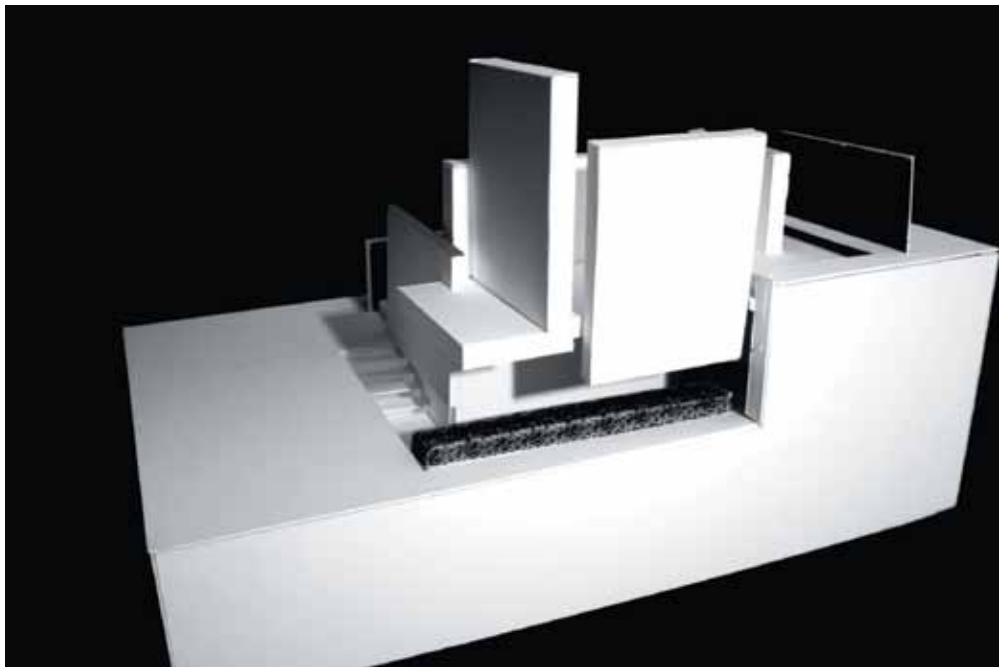
design awareness, intent, and meaning—the foundation of the semester.

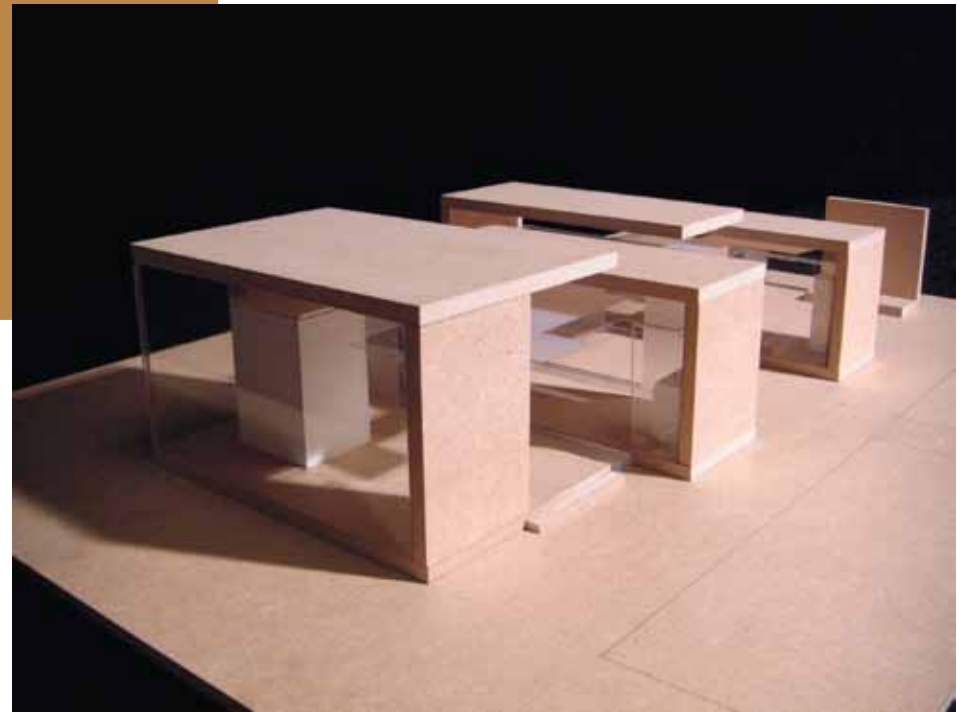
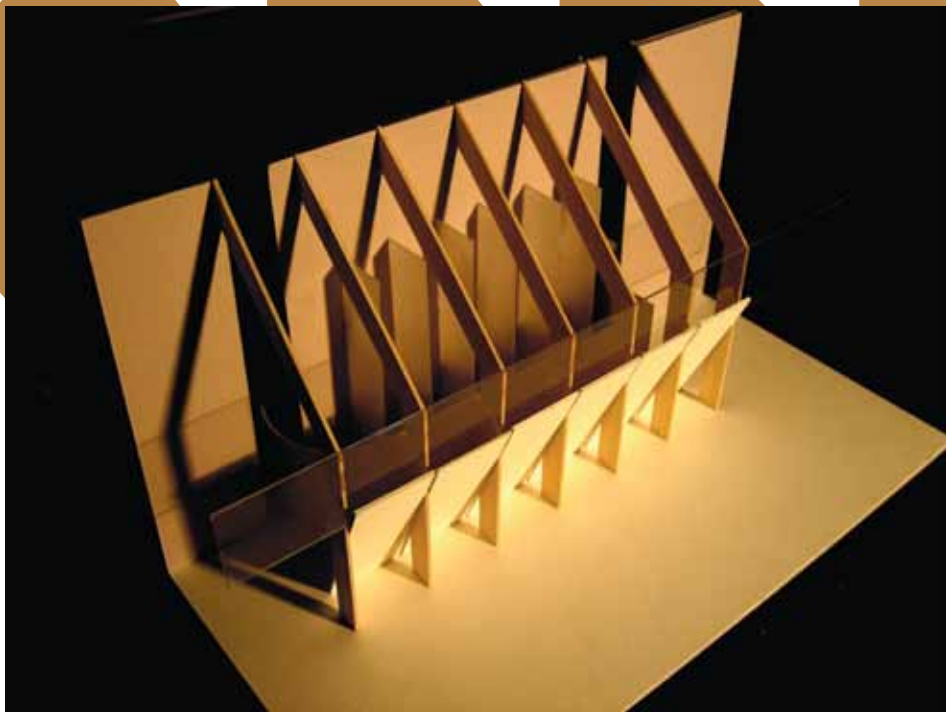
The subsequent series of projects explored concepts of architectural space: scale, movement, transition, materiality, light and context. Building upon the understanding gained in previous projects, students were given hypothetical, though specific programs and sites. Confronting the spatial and formal consequences of program and site through the means of physical and material constraints, the projects further developed each student's critical inquiry, transcending design principles through architecture.

The culture of the design studio, new to first-year students, nurtured critical inquiry through disciplined studio work habits and constructive instructor and peer dialogue. The process of conceptual exploration, methodology of critical input, and practice of reiterative refinement were all essential to the informed development of their architecture.

THIS PAGE: I11 OSAMA IQAB, I31 DANIEL KIM

NEXT PAGE: I11 TRISTAN MCGUIRE, I21 HYO NA CHUNG, I31 SPENCER SANCHEZ, I41 PHUOC NGUYEN





ARCH 102B SPACE AND ORDER

COORDINATORS: Valery Augustin and Selwyn Ting.

INSTRUCTORS: Michael Chung, Hunter Fleetwood, Rebecca Lowry, Lauren Matchison, Janice Shimizu, Linda Taalman

Building on the first semester's studies in awareness and intent, second semester explored the organization of space form, and light—not as an end, but as a means of constructing experience and meaning. Syntactic literacy was reinforced through diagramming precedents to explore a taxonomy of constructs, phenomena, and interpretation. In the generative process, design choices were treated as conscientious manipulations of the experiential realm. Here, formal-spatial ordering of syntactic elements provided the evidentiary link between intent and consequence. Programmatic and tectonic performance provided rigor and realism to design scenarios.

The development of skills was integral to the projects. The instruction in 2-D and 3-D software, sought to accelerate long-term proficiency in inter-dimensional form generation and delineation.

Sequence. The semester began with short exercises: translating found space into written form and regenerating the same words (from a random student) back to form. A comprehensive precedent study analyzing formal and organizational concepts followed.

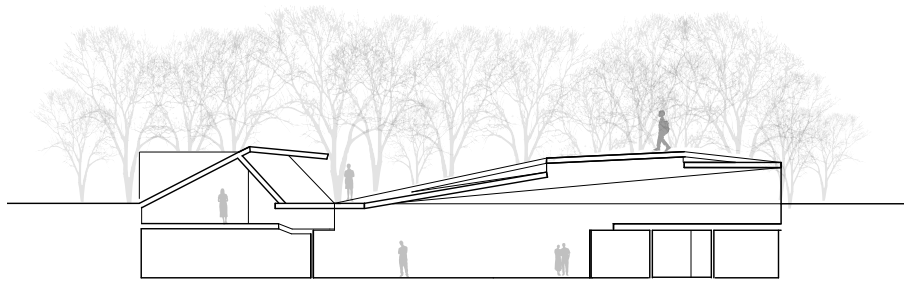
Object, space, and form relationships were explored in a design for the exhibition for three objects. Using a genericized context (trade show) and material palette (opaque, translucent, and transparent), strategies explored in precedent studies were applied towards fixing spatial and sequential structure to mediate objects and experience.

"Light Model" explored the relationships between form, space, material, and light through analysis and replication of specific photographs through models.

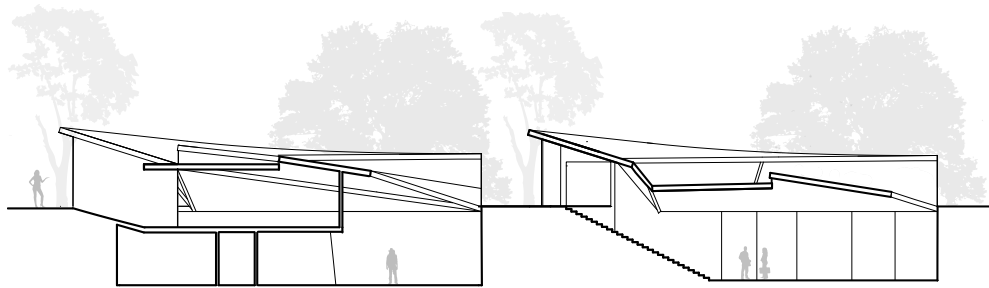
The "Annex to the Schools of Architecture and Fine Arts" synthesized all the critical concepts in a five-week final project that expanded the challenge to specific programmatic and contextual demands.

THIS PAGE: 121 BENJAMIN IRINGA, 131 VICTOR OTTER

NEXT PAGE: 111 121 141 JESSICA CHANG



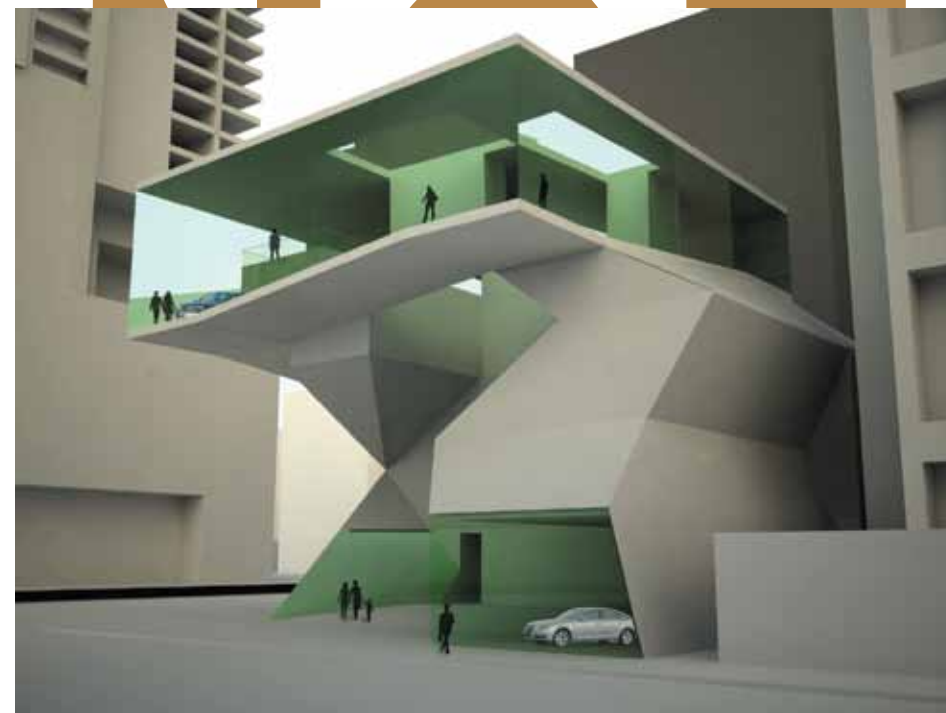
LONGITUDINAL SECTION CUT AA



TRANSVERSE SECTION CUT BB

TRANSVERSE SECTION CUT CC





ARCH 202A ARRANGEMENTS + ASSEMBLIES

COORDINATOR: Andrew Liang. INSTRUCTORS: Mary Chou, Mario Cipresso, Arianne Groth/Ali Jeevanjee, Ana Henton, Jeff Kim, Stefan Leisner, Chris Warren

The first semester of Second Year Studio carried three core objectives: One, the reinforcement of learned ideas, methods and means: familiarity, application and execution as repertoire mainly derive from repetitious engagement of thinking and making. Two, elaboration on principles taught: the non-linear and inherent complexities of ideas, doctrines and assumption are revealed. Three, introduction of new principles and topics: expanding the students' horizon in relevant issues in a process of design through an analogous language study framework.

Architecture, as a generative language requires a fundamental understanding of its syntax and syntactical operations. Whereas syntax conveys the principles of structuring ideas and elements, syntactical operations convey the formal properties and logic of the process. Architectural elements and considerations of space, form, movement, program, experience, etc., were presented through the study of precedents and conveyed as assemblies through a synthesized set of rules.

These core objectives are folded into each other as four topical assignments. In Space and Form Morphology,

spatial concepts were expanded through an ontological study of its inherent opposite—the formal. Emphasis was placed on the intricate dialogues and reciprocal relationships of space and form. Programs and Narratives built upon quantitative and utilitarian values to include qualitative and experiential properties that could inform spatial and formal thinking as well as ordering. Episodic Architecture focused on choreography of architectural experiences through sequencing of programmatic narratives to that of circulatory movement. Emphasis was placed on movement as a spatial and formal agitator that prescribes experiences in architecture. Urban Morphology introduced urban principles through extrapolating the various architectural principles taught. Paralleling the topical teachings are integrated skill set development of both tactile and digital methodologies with emphasis placed on presentation and representation know-how.

A six-week comprehensive final assignment tested the subjects introduced, explored and learned throughout the semester.

THIS PAGE: I2I ELYSE TAKASHIGE, I3I ENOCH CHOW
NEXT PAGE: KRISTIN BUTTERWORTH





ARCH 202B MATERIAL AND METHODOLOGY

COORDINATOR: Gail Peter Borden . INSTRUCTORS: Andrew Atwood, Mary Chou, Chris Coe, Eric Haas, Jeff Kim, Steffen Leisner, Rennie Tang

The first semester of Second Year Studio carried three. This fourth studio in the design sequence developed the connection between materials and architectural design, emphasizing how a material and its associated systems of assembly may be intertwined with the design process to generate the performance, form and experience of architecture.

This semester focused on a series of integrated investigations bracketing a case study. Parallel to each design problem, a series of material themes focused attention on history, representation, tectonics, and theory through readings, lectures, and the integrated parallel lecture class of ARCH 211 (Materials and Methods of Construction) to provide a holistic engagement of the relationship of design to material.

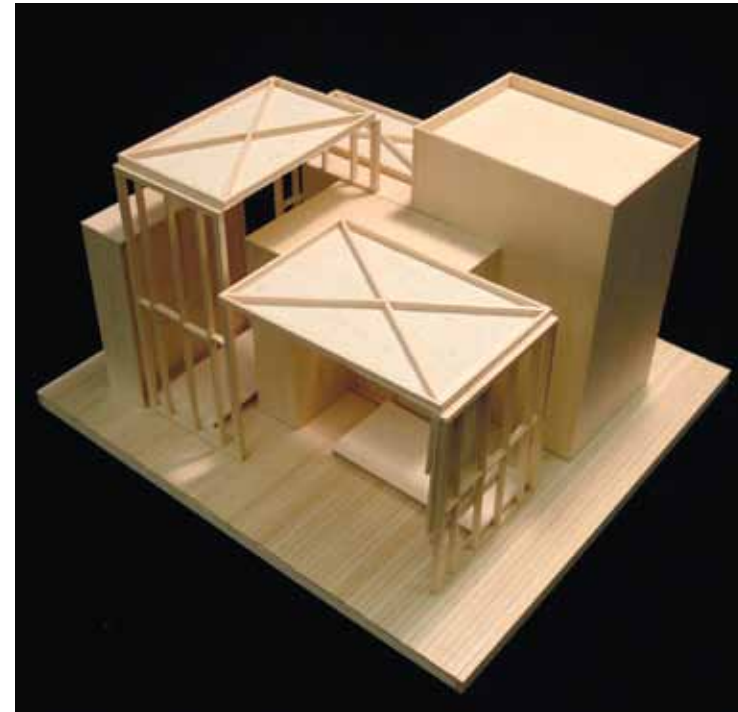
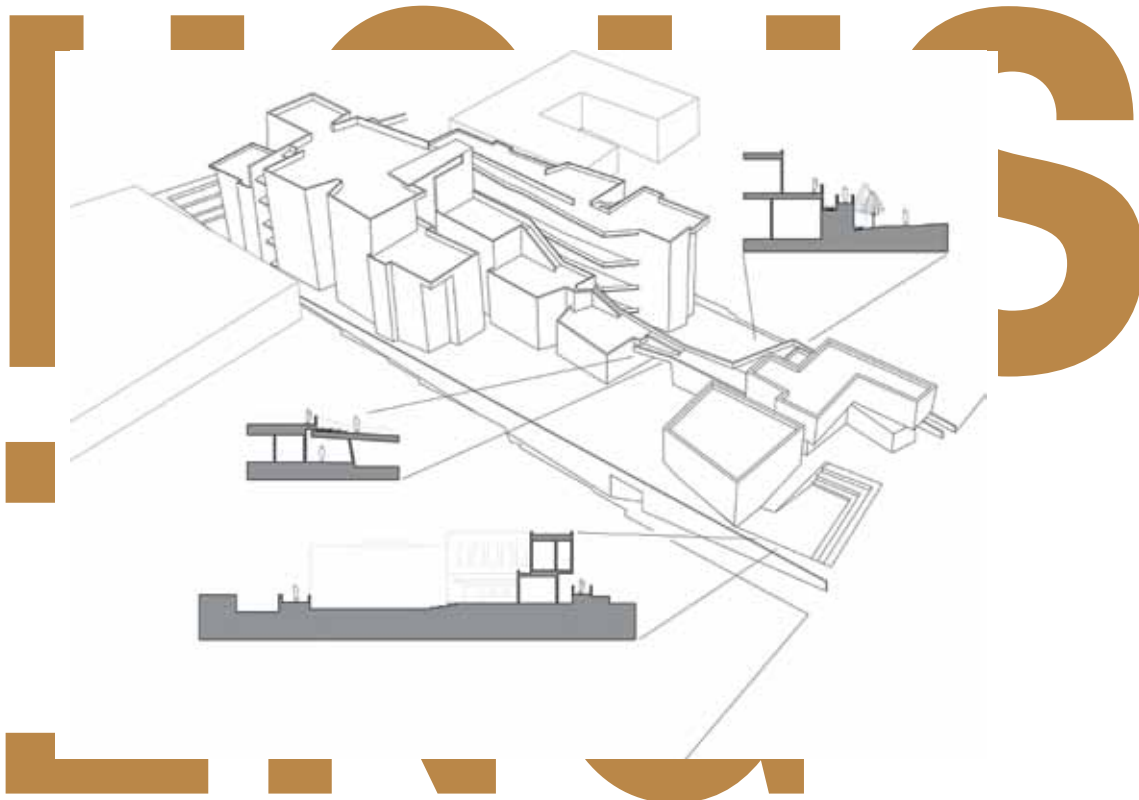
The first segment of the course studied the fundamental relationship of material, place, and ceremony through the development of an organizational concept, orchestration of sequence, and the association of material to experience. A focused deployment of an architectural case study unpacked a historically significance precedent, each student

produced a collection of analytical and representative models. The aggregate display of these precedents created a collective body of architectural research that documented a significant segment of architectural thought.

The final segment integrated process, material, and program in a specifically sited context to develop a clear concept of design through making. Resolving the complexities of structure, materials, program, site, and experience all organized with a clarity and cohesiveness, the scheme required the aggregation of tectonics, history, and representation through design. Private ceremonial programs (collection, performance, and exhibition) adjacent to iconic houses in Los Angeles (the Eames House, Schindler House, and Ennis House) were designed in prescribed materials (concrete, masonry, and metal). The designs emerged from materiality and the application of construction to use.

THIS PAGE: 111 ENOCH CHOW, 131 AARON BENJAMIN
NEXT PAGE: ENOCH CHOW





ARCH 302A HOUSING

COORDINATORS: Alice Kimm, Warren Techentin. INSTRUCTORS:
Annie Chu, Liz Falletta, Anthony Guida,
Eric Haas, Thomas Spiegelhalter, Ed Woll

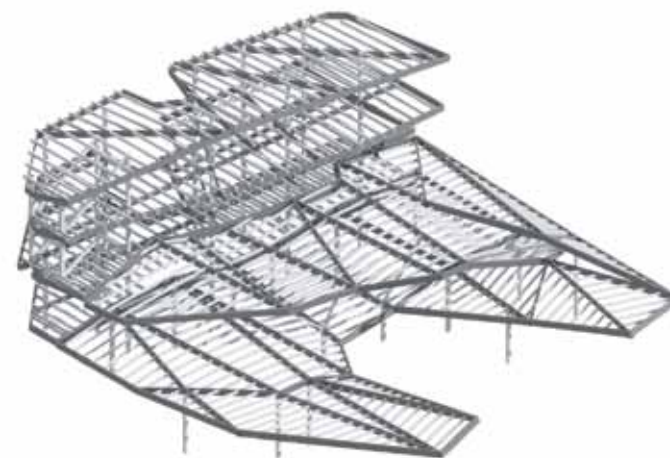
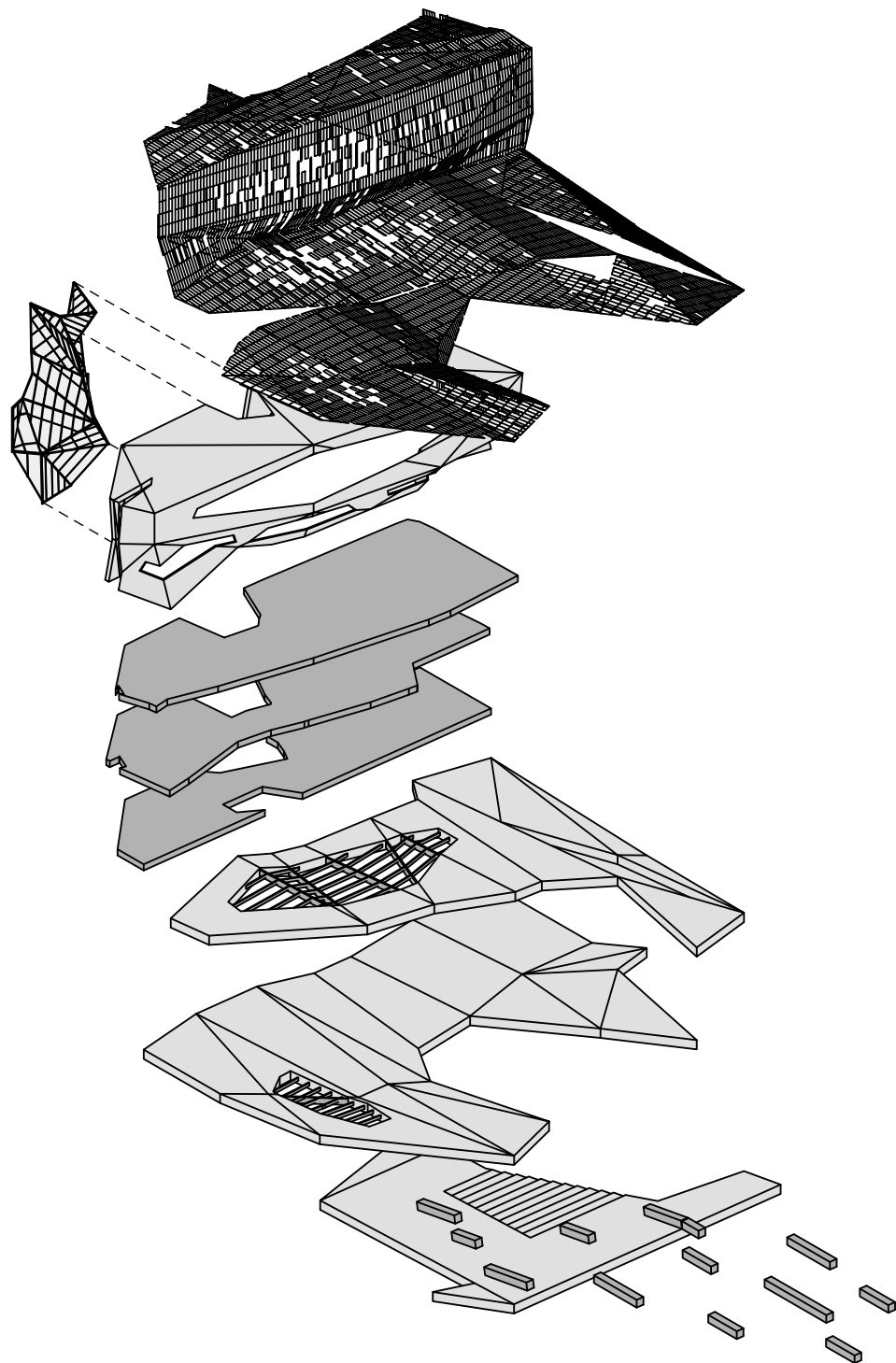
The Third Year Housing Design Studio sought to understand architecture less as an object of design and more as an integrative process of design—as space created by a synchronized network of systems—social, political, structural, technical, mechanical, modular, dimensional, typological, sustainable. Students incorporated a varied and often disparate array of information types into their designs. Additionally, the studio challenged students to integrate and innovate a variety of passive and active sustainable strategies deployed in an effort to reduce the ecological footprint of their designs, while also helping to build sustainable, dense, and expandable neighborhood networks. The students were assigned four projects throughout the course of the semester.

- Project 1: A small, canvas and wood-framed research station for three researchers set in an urban park. Themes emphasized included dimensioning space to the body, site orientation, the use of pre-fabricated elements, and wood framing.

- Project 2: A performative analysis of precedents from both historically significant and topically current housing projects.
- Project 3: Housing in a low-rise setting. Students designed four-unit buildings on a block previously composed of single family residences. Several themes were explored simultaneously, including typological adaptation, unit clustering, material strategies, incorporation of landscape strategies, articulation of privacy gradients, and the development of neighborhood networks to help define community spaces.
- Project 4: High density, medium-rise housing on highly charged sites. Using the parameters of Transit Oriented Development guidelines, students were asked to develop a project incorporating 50 units in conjunction with a limited set of mixed uses and the necessary parking. Several themes were explored in this project including aggregation, access, egress, codes, pre-fabrication of elements, communal spaces, and unit variations.

THIS PAGE: I11 I31 MEDIUM-RISE HOUSING, PREEMA MODHI
I21 RESEARCH STATION, SUSANNAH LOEWENSTEIN.
NEXT PAGE: LOW-RISE HOUSING, TANYA RUTHERFORD





ARCH 302B INTEGRATION

COORDINATORS: Ed Woll, John Enright. INSTRUCTORS:
Christophe Kapeller, Mario Cipresso, Chris Warren, Erik Mar,
Anthony Guida

This studio engaged students' efforts during the time in their design education when they are completing formal out-of-studio courses (including history/theory, structures, environmental systems, materials/methods) and have completed five semesters of studio design instruction (including formal issues, response to program and context, response to code requirements, sustainability and accessibility responses, and a substantial body of investigative, representation and presentation skills). The Integrative Studio aims to have students pull together this prior knowledge and experience with a single design project that responds to formal and contextual issues, incorporates technical and regulatory requirements, and is developed to a high degree of detail. The design project is typically limited in scope but requires the solution of a well-defined program on a site whose urban context must be dealt with. The 2009 program, a neighborhood civic center, mandated a definite civic presence that can be effectively organized hierarchically and that required accommodation and expression of a variety of uses and spatial types.

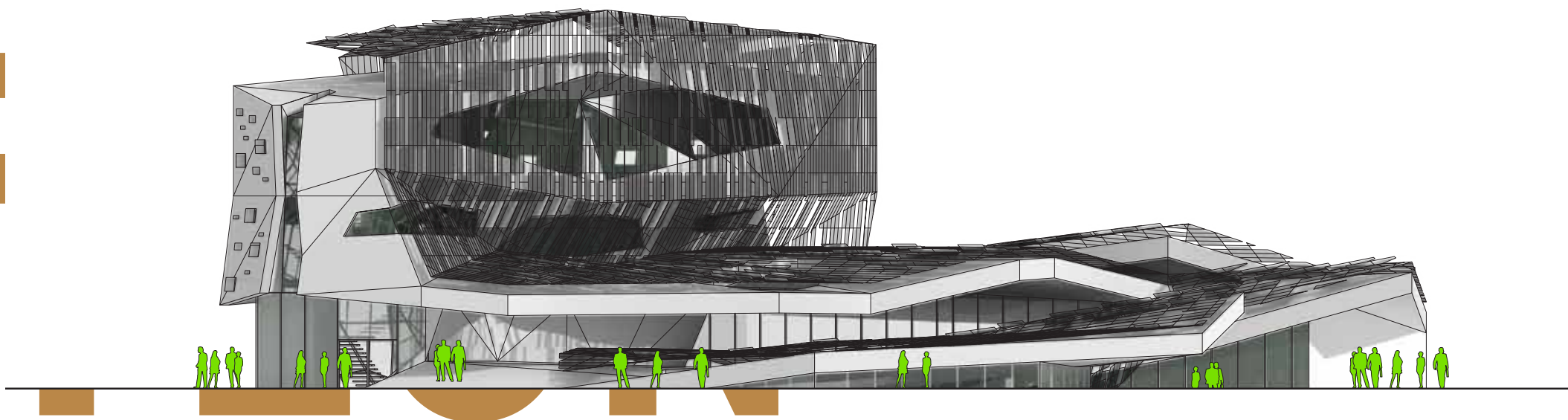
To achieve the desired level of student achievement the semester's activity was highly structured:

The semester began with a quick-sketch problem engaging some particular aspect of the program type and progressed through a diagrammatic site / program design to a mid-term schematic design incorporating site / program / circulation response as well as diagrammatic decisions as to how the building will be structured and environmentally serviced.

Following mid-term presentations students were required investigate, in detail, a fragment of their project using large-scale study models which addressed in physical form all of the formal and technical issues diagrammatically accounted for in their schematic design.

After this "detailed development" exercise, students returned to the task of resolving their projects at an appropriate scale, incorporating the information they have developed in their detailed investigation.

THIS PAGE-NEXT PAGE: ANDREW KIM





TOPIC STUDIOS

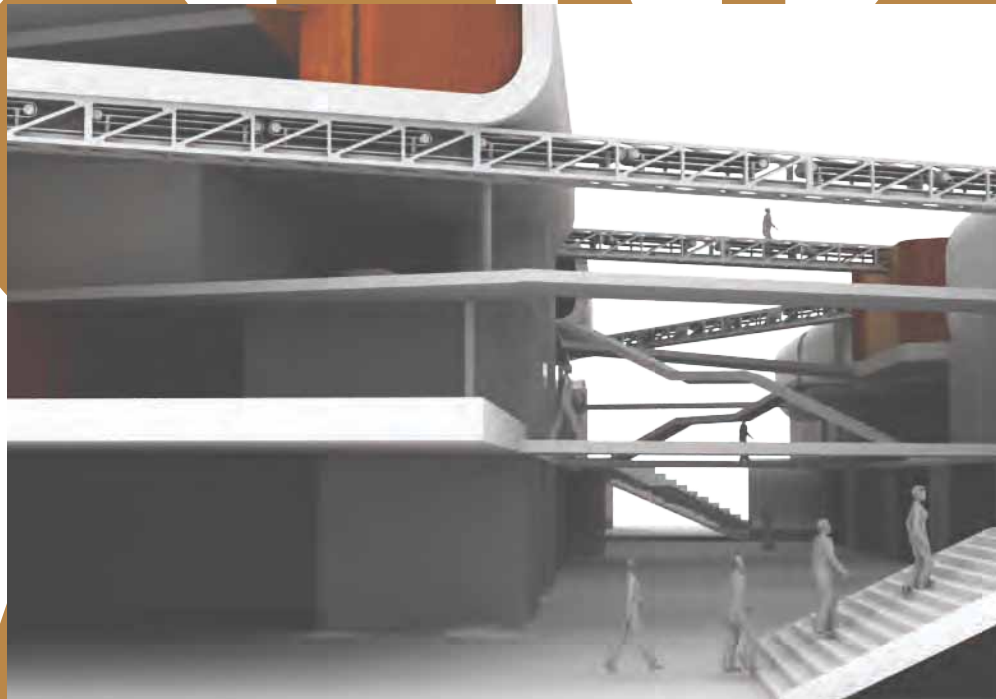
CHAIR OF UNDERGRADUATE PROGRAMS: Kim Coleman

The Topic Studios of the 2008–2009 academic year offered a diverse range of issues for students to test ideas and expand both their own knowledge and the knowledge base of the School. The ten fall studios examined a full range of issues, including social and cultural forces, including the design of a carbon-free town center for Greensburg, Kansas, the development of global prototypical transitional settlements, and two studios taught in collaboration with Architecture for Humanity that dealt with disaster response and humanitarian relief. Other studios focused on the redevelopment of under-performing neighborhoods in Los Angeles, including community design of the area around the USC campus, and the integration of transportation and infrastructure in the Hyde Park community, an area hard hit by the civil unrest in 1992 that continues the struggle for revitalization.

Other fall topic studios began with more specific criteria for exploration. Students developed innovative uses of materials in a studio related to Material Matters, the ACSA conference held at USC in Fall of 2008. Two studios tested ideas about the impact of digital design on architecture: including how digital forces such as scripting might become methodologies for the making of architecture, and how modern digital tools might become models for architectural ideas. Another two studios explored the interrelationships between building and landscape, designing for public parks in Los Angeles.

The spring studios designed smaller scale projects, approaching both contextual issues and tectonics. Studios included a hybridized urban design and infill buildings for ten blocks of the Broadway Commercial District in Santa Monica, a sustainable transit center, the design of urban retreats in Downtown Los Angeles, student housing for an area near USC adjacent to the 110 freeway, and an exploration of abstraction in the design of a faculty club in an historic orange grove at a nearby State University campus.

In addition to the studios at USC, this past year the School had four studios as part of our global study programs, two in Asia, and two in Western Europe, that also developed a range of social, urban and tectonic projects. The Asia I program based in Malaysia designed an ecotourist center for a tribe in Malaysian Borneo, while the Asia II studios focused on two urban infrastructural studies, one in Shanghai and one in Beijing. Students based in Saintes, France and Como, Italy engaged local municipalities to develop urban design and building strategies that revitalized neglected areas of those cities.



ARCH 402ABCL
DESIGN CONVERGENCE: ARCHITECTURAL
PROTOTYPES FOR A TECHNOLOGICAL SOCIETY

INSTRUCTOR: Kara Bartelt

Architects are by nature Futurists. Everything we do supposes, hypothesizes, proposes a way to be, live and develop in the future. But how does operate when the climate (physical and virtual) is ever changing? How does one adapt one's notions of what can or should be in the future when we can no longer rely exclusively on that which is in the past?

Architects must look within and without of known industry standards and re-adapt modern technologies into our field. Design Convergence is the notion that this is the new state of how architects must practice today. They can no longer be generalists. Architects must look to be thing consolidators, inventors, and generators of a new technology. Architecture in the digital age is to be transformed.

In order to explore this the studio choose and individually investigated the following:

- A mechanical or digital developed technology (non construction related)
- Possible future applications of this technology in architecture

- Ramifications of the technology in architecture whether by a material, process, program or systems application in the building industry

Architectural convergence, like technological convergence, is about strategic consolidation. This can be thought of as a literal morphing, coalescing or hybridizing of building types/typologies, technologies and functions. The global markets of technology, media, and developed societies are all participating in this new phenomenon of convergence and multi-valence; architecture too, must now address, respond to, and participate in this contemporary phenomenon. How does new architecture react in this arena? This world? And how do cities respond to these trends? This studio proposed answers to these questions in the assimilation of a new spatial prototype. The studio focused on the conception and development of a technologically driven urban building in downtown Los Angeles.

111 |31 GOLDY LEE



ARCH 402ABCL MATERIAL + PROCESS

INSTRUCTOR: Gail Peter Borden

Conventional materials are consumed as predefined products. The methods of their fabrication and formal employment are the result of the manufacturer's suggested application. This course rethought the fundamentals of material application. Beginning with the conventional, evolving to emerging technologies and ultimately to a physical rethinking of the processes of making, each student defined and investigated a new process fabricating a formal composition through the evolution of a material method. This studio investigated architecture through the potential of material.

APPROACH

The first segment of the course dealt with building science theory, and its practical application through a series of investigative assignments focusing on the physical properties of materials. Primarily from the vantage of surface and skin, the opportunities of repetition and field affect (possible through mass customization or process based iteration and variability) suggested an opportunity for material to influence form.

This phase of the semester culminated in a 1:1 scale fabrication. The segment was founded in a re-assignment

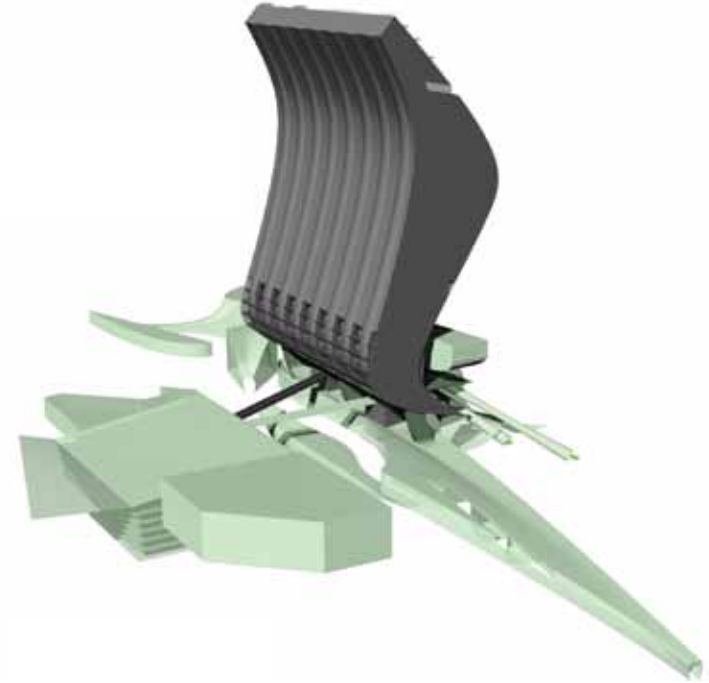
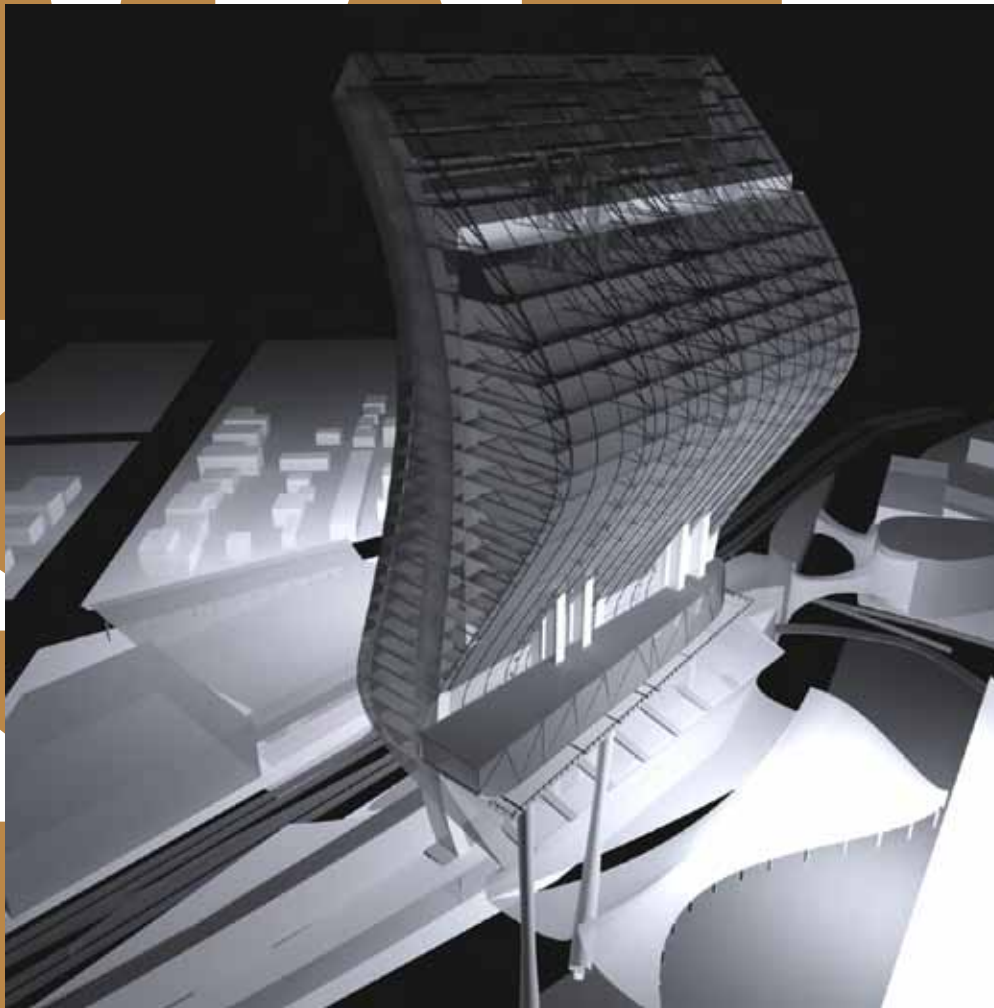
of materials through rethinking physical properties and potential application as processes and components.

The second segment of the studio integrated process, material, and program in a building. Pattern, skin, structure, effect etc. were the premise for the re-interpretive design of a familiar program. In opposition to full project design, the project was the addition, reconfiguration and the cloaking of the existing.

TOOLS AND MEDIA

Throughout the semester we explored the formal implications of material composition, its physical properties, and its fabrication processes at different scales. We worked with a wide palette of tools for representation and fabrication towards the production of physical models and prototypes. The call was to fabricate an architectural composition that employs and investigates the potential of the material media—in its projected or tangible form—as a new kind of architectural application.

111 121 PATRICK WONG



ARCH 402ABCL
MAT & STRAND: NUCLEUS + NETWORK:
DENSIFICATION AND INTENSIFICATION
OF THE PLAINS OF ID

INSTRUCTOR: Mark Cigolle

BACKGROUND: HOW TO UNDERSTAND FUTURE GROWTH

During the next 20 to 30 years, the Los Angeles five county region will experience a demographic earthquake of a magnitude of 6 million more people, which will reshape Southern California, according to a study by the USC Lusk Center. If current development patterns were to be followed, this growth would consume 958 square miles of new development.

APPROACH: URBAN DENSIFICATION OFFERS
A CLEAR ALTERNATIVE TO FURTHER SPRAWL

The studio explored projective strategies for densification of neighborhoods to transform blighted or underutilized zones into generators of place.

PROCESS: HOW THE VIRTUAL BECOMES MATERIAL

The design process followed a continuous exploration of the relationship between idea making and object/place making within a critical process. The Studio proceeded from abstract studies at the urban scale to the detailed design of the Project through text, diagram, virtual and physical representations. Issues of scale, density, hybridization of program and form, the role of urban spectacle

and the making of paths and networks were all integrated into the formulation.

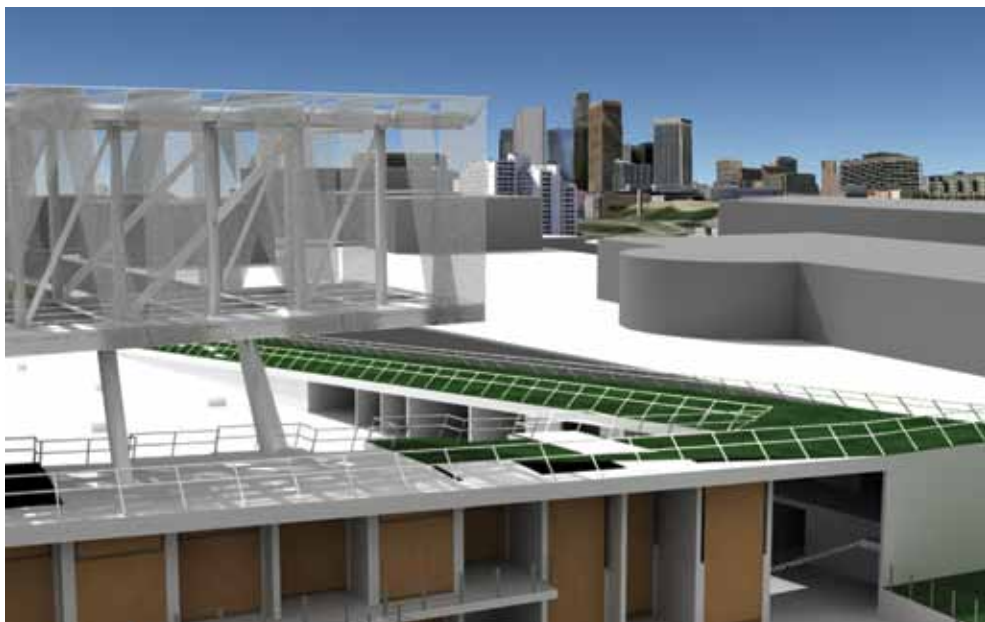
PROJECT: AT THE URBAN SCALE:

Centrally positioned on the direct rail right of way between LAX and Downtown Los Angeles, the Lower Hyde Park Pedestrian District of Los Angeles may form a nucleus for the rebirth of this otherwise underdeveloped plain. Mat, strand, nucleus and network were posited as strategic models for development of competing proposals.

PROJECT: AT THE BUILDING(S) SCALE

Each student selected an element of the proposed urban strategy to develop at the scale of building and detail, using ideas of the whole to develop the part. A wide range of program elements were considered, including a campus for a high tech company, park, mediatheque, retail, cinema, health/gym, office, education, culture, community, housing, transit, parking and infrastructure.

[11] [21] TAYLOR SINNARD



ARCH 402ABCL MONASTERY

INSTRUCTOR: Frank Clementi

The goal of the studio project was to provoke the relationship between live and work, individuals and community, sustainability and commerce, materiality and spirituality, mind and body. Monastery buildings cope with these questions. They range from strictly spiritual retreats to communal work enclaves. These monasteries, convents, and kibbutzim also bring diverse people to a common purpose, often coordinating adherents' appearances to minimize superficial differences.

Each student was asked to design a small monastery for the pursuit of celestial or terrestrial understanding of about about 15,000 square feet, including a dozen individual cells, a large workspace, a sacred or performance space, communal cooking, eating and service spaces, and a space to interact with the public, such as a showroom or gallery. Successful projects challenged *de rigueur* site-building-use relationships. Economic sustainability was an important criterion, particularly with respect to feeding back into the community. Prototypical study in novel relationships to the environment and the land was encouraged, particularly within the infill site of the project between Chinatown and Union Station in Downtown Los Angeles. Equally important was the relationship

between the individual cell dwelling and communal spaces. Adjacent scales were explored through the design of architectural assembly and furniture details, while site planning and landscape integration was expected at the larger scale.

111 131 ZORAN PEVEC



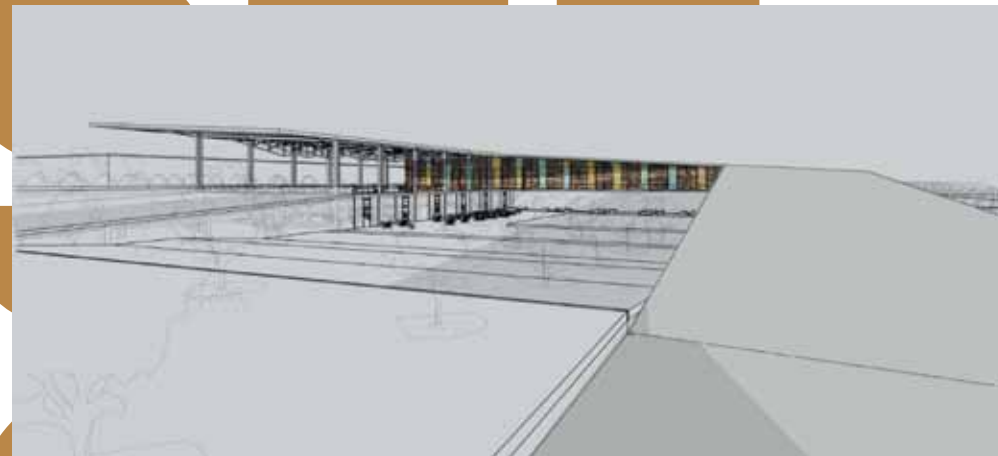
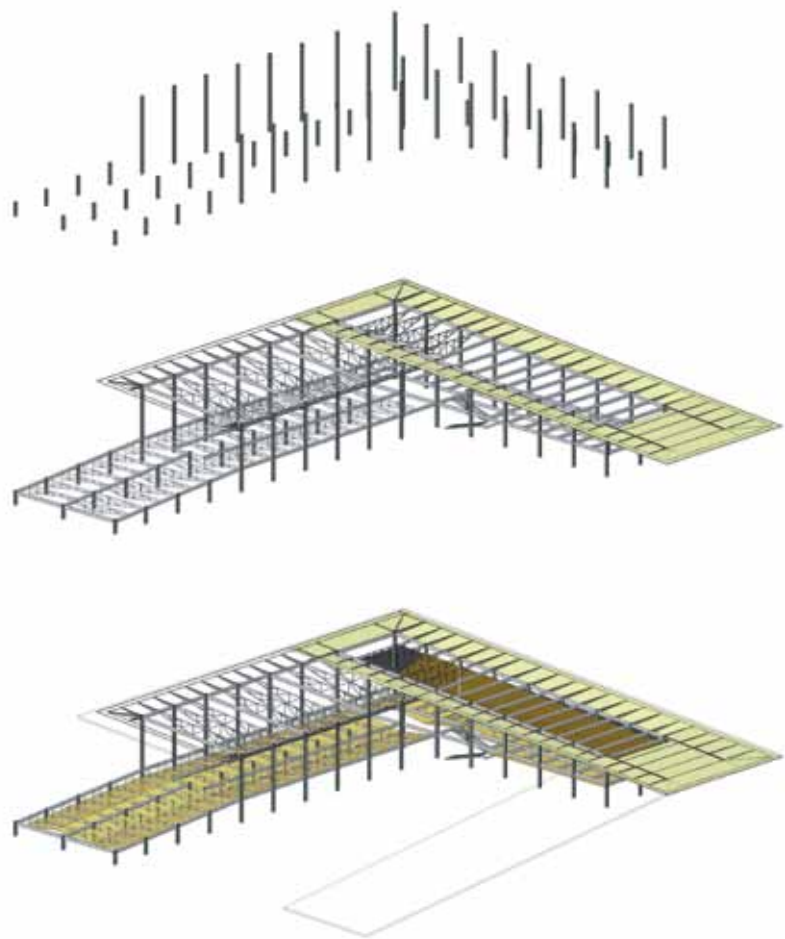
ARCH 402ABCL
CHIMERA: HYBRID MODELS FOR
A MATERIAL WORLD

INSTRUCTOR: Kim Coleman

Project strategies that densify neighborhoods, activate streets, and examine the hybrid building as a microcosm of urban life were tested in designs for the Broadway Commercial District of Santa Monica, an area that the City has designated with zoning possibilities that encourage hybrid uses and small scale development. After developing an urban design scheme for the entire ten-block area as a group, each student designed a project for a specific property along Broadway that included at least three types of metaprogram: public or social spaces, commercial or work areas, and housing. Like the Chimera from Greek mythology, which had the head of a lion, the body of a goat and the tail of a serpent, the three parts of a Chimera project are interconnected functions, places of gathering, of overlook, and of retreat, each best designed for its function and location on the site.

The studio considered two attitudes toward mixed use projects, as described by Joseph Fenton in the book, *Hybrid Buildings: the Amalgam Hybrid*, a combination of diverse elements in which individual elements are distinct, and the *Grafted Hybrid*, one that juxtaposes diverse elements that are joined together but remain visually and formally distinct.

111 131 JACLYN LAZUR



ARCH 402ABCL INVESTIGATIONS IN ABSTRACTION, FORM AND MEANING

INSTRUCTOR: Richard Corsini

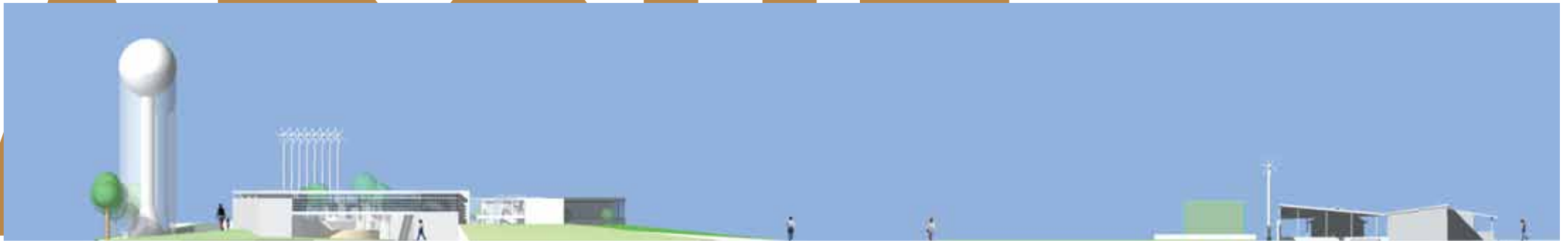
The focus of this topic studio was the study and development of the language of abstraction and its application in architectural terms. Conceptual intentions and programmatic relationships between form, space, and material, manifested through structure and tectonic development were emphasized. Readings, lectures, and discussions focused on the communicative power of abstraction in modern and contemporary art, music, and architecture, with the goal of leading the student toward a sophisticated and personal vocabulary of expression and "making".

The studio began with two- and three-dimensional design assignments with various media, including digital media, to examine the relationship between intuition, intention, and material in the creative process. Various approaches to composition and process were explored. Understanding the expressive capacity of various media was a primary goal of this phase and served as a stepping stone to the meaningful development of conceptual, programmatic, and tectonic expression in the architectural project.

The architectural program is a 15,000 square foot university club and garden, to include dining facilities, meeting

and conference rooms, visiting scholars residences and associated outdoor spaces. The site is flat and adjacent to a historic citrus grove on the Cal State Northridge campus. The architectural and landscape components were to be designed as equal parts of an integrated whole.

111 121 JESSICA SANO

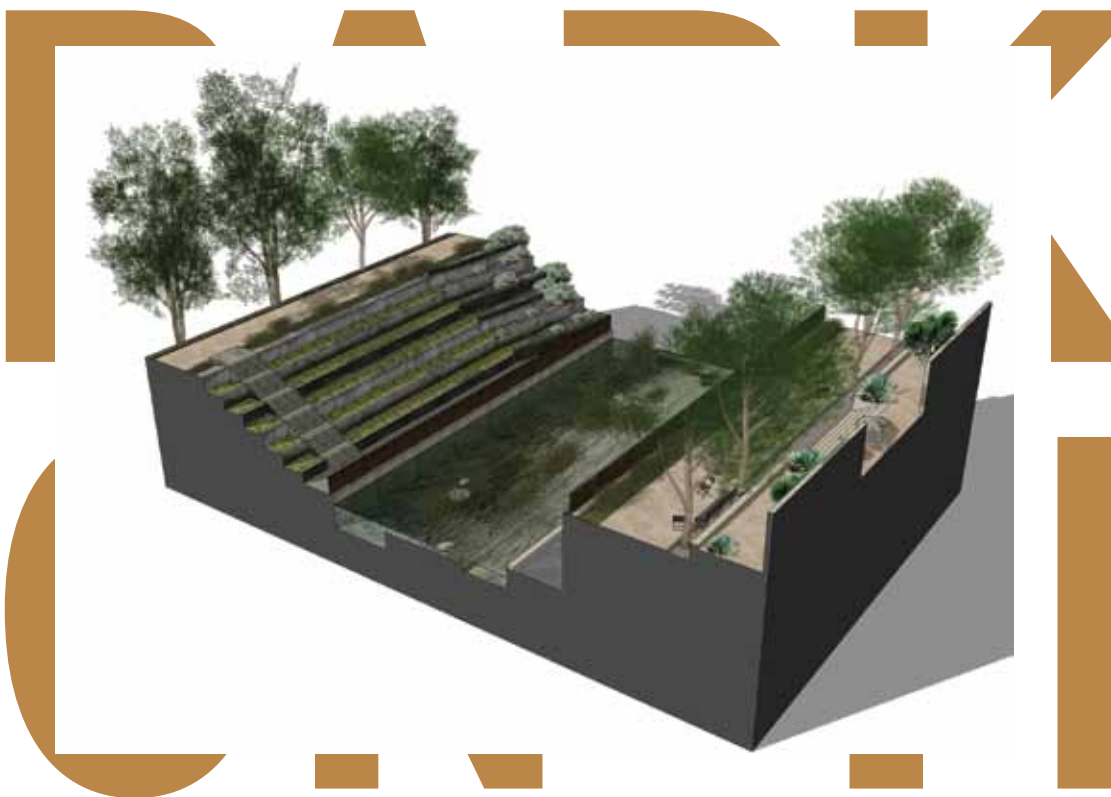


ARCH 402ABCL
ARCHITECTURE OF THE PRAIRIE
 INSTRUCTOR: Janek Tabencki-Dombrowsa

Greensburg Kansas was cleared from the landscape by an EF 5 tornado May 4th 2007. The site was a prairie *tabula rasa* 1.5 miles wide and 2 miles long with basements, sub-grade utilities and memories. Prior to the tragedy, the town had a withering economy and an uncertain future. Today it is reclaiming its social structure and evolving as the “greenest” town in the Midwest. The students re-evaluated Greensburg’s economic base, its social fabric and its physical reality. They explored and debated the master plan proposed for reconstruction, the climatic and land formations and the tectonic nature of the rebuilding effort. They examined the meaning of life on the prairie. They visited the site. How and why do small towns exist? How will they continue in the 21st century? Each student developed sustainability narratives for the buildings he or she proposed. For some, shelter, its relationship to natural cycles and to social norms was the goal. For others, public institutions and community organizations were explored through physical manifestations of space, form, and material. Meaning and symbolism were evaluated. How should social and community institutions exist in the new century? What physical form should they take? These issues of spatial form, cultural continuity, notions of order, response to nature and the material means

of construction were examined in the context and realities of Greensburg. Nature had cleared the site—nature’s cleansing? In what ways will nature be a participant in the new habitation—harvesting of sun, rain and wind? What models can be demonstrated for the hundreds of withering towns throughout the world? Who are we as a culture; why are we here on the prairie and how do we propose to stay? The student work speaks for itself.

111 131 ELKE SCHNITTKER



ARCH 402ABCL
PARK ON THE FRINGE
 INSTRUCTOR: Ying-Yu Hung

Milton Street Park is a linear park located along the Ballona Creek, at the intersection of South Centinela Avenue and Highway 90, approximately 900 feet long by 40 feet wide. It is also part of the six-mile bikeway system linking Culver City to the Strand. The project has a strong physical connection to the Ballona Creek and the Ballona wetlands downstream, with the potential to address regional pedestrian linkages as well as the ecological viability of the Ballona corridor.

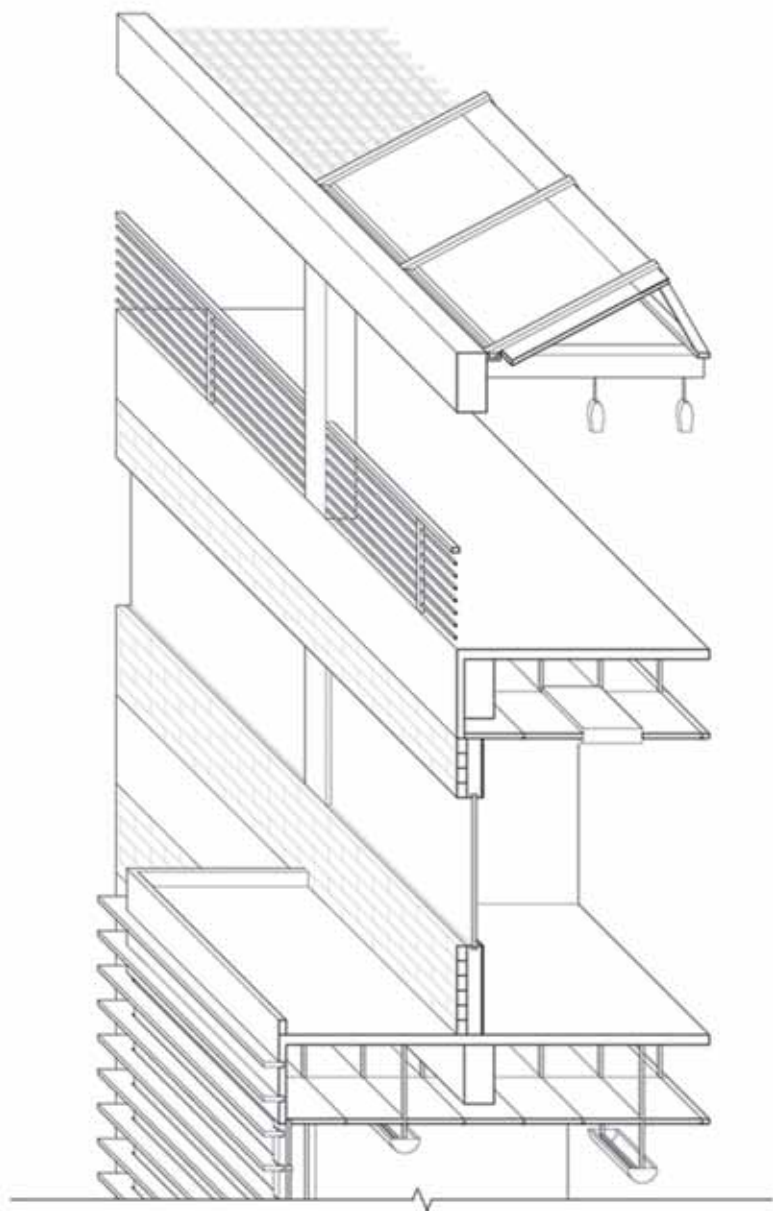
The entrenched belief within the community that a public park will create more harm than good by bringing people from outside the community into the neighborhood, puts the future of the Milton Street Park at jeopardy. Part of the studio challenge was to first address these social issues through landscape design, to seek creative solutions addressing the needs of multiple users.

Secondly, the studio sought to bring forth the importance of ecology within an urban context, by acknowledging natural systems such as topography, water, vegetation, as a design tool. Once these systems are identified and their significance understood, the students integrated these natural features into their designs.

Lastly, the studio studied Milton Street Park, the Ballona creek corridor and its bikeways as part of the larger urban infrastructural system, which serve to fulfill the basic needs of the community through people gathering, collection of storm water, and personal fitness. Just as important as other types of urban infrastructure, this multi-functional landscape requires detailed planning, design, and integration into our urban fabric.

Living in a time of global warming and resource depletion, a designer must employ sustainable measures through the use of renewable energy, local materials and native plant species. The underlying structure of the site: topography, water, soil, vegetation, will also inform and provide guidance on design.

111 131 PETER KOVACICH-HARPER



ARCH 402ABCL CONTEXT, BUILDING AND COMPONENT IN UNIVERSITY VILLAGE REDUX

INSTRUCTOR: Charles Lagreco

For many years the School of Architecture has studied the area north of Jefferson Boulevard, adjacent to the core university campus. This critical area is once again in play as the university has undertaken a strategic expansion in this area with the purchase of the University Village and other sites as they become available. This zone is projected to absorb most of the expansion outside of the core campus for the university over the next twenty-five years and will include the addition of new housing for up to 8,000 students as well as an attempt to transform and extend the larger university community and re-accommodate many university activities currently located outside of the area.

Premise: the studio will act at distinct levels of consideration

- Context: consideration of the identity and proposed growth of USC and its impact on surrounding communities, what can and should be preserved and nurtured and what must change?
- Building: what important physical building components support the proposed urban strategy and where are the critical point of intervention? What institutions

and activities are potentially common to these constituencies and can be effectively used to study this relationship?

- Component: how does the architect's use of materials reflect the urban and building strategy developed?

While individual creativity was a critical component of the design process, the studio did not favor the subjective and personal over the objective and supported. Each student was asked to balance any personal interests or impositions with a fully developed rationale for any proposed solutions including clearly documented technical, environmental, economic and social criteria. As the school has committed to the integration of sustainability into our curriculum, the demonstration of an environmental strategy was a requirement of every project.

111 121 RENEE LUNSON



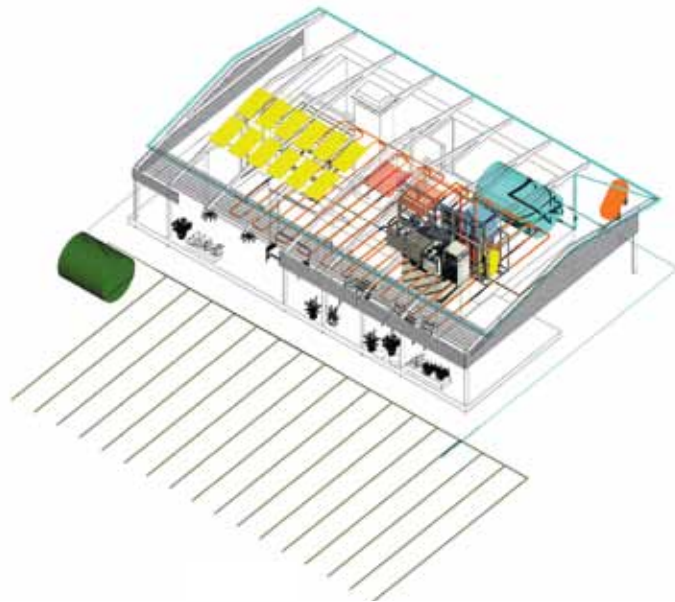
ARCH 402ABCL
TRANSITIONAL SETTLEMENTS
 INSTRUCTOR: Erik Mar

This studio sought, through the development of prototypical components, to design the initial built environment of transitional settlements and, by extrapolation, to understand organic growth in the informal sector. It foregrounded design of the built environment as one part, albeit major, of a series of enablers which provide populations with the framework within which to better their lives in ways consistent with their own values and interpretations. Students focused on one of any number of transitional settlement types: for example, relatively isolated semi-permanent disaster relief camps, marginal and informal settlements such as the *favelas* around Rio De Janeiro, rebuilt neighborhoods in New Orleans' 9th Ward, post-tsunami villages in East Timor, post-earthquake barrios in Mexico City or Managua, or post-war refugee settlements in Pakistan. The specific region and context for study was up to the individual student; however, all projects were intentionally limited in scope so that they could be developed to a high level of detail. While the "big picture" of socio-political and cultural context was omnipresent, each student's design was worked out to small details by the end of the semester. Combinations of vernacular building techniques and forms were considered in conjunction with imported or prefabricated technologies,

and the relative merits of each were analyzed in the search for solutions.

Through various studio exercises, students studied both vernacular building methods in their selected region along with various prefabricated building components and technologies, which were evaluated in terms of performance, maintenance, aesthetics, and ease of construction. They explored different methods of joinery and detailing. They also integrated seemingly disparate and unrelated social, environmental, political, and cultural factors into design in the effort to tie back to cultural continuities in their region as well as project into the future by prefiguring new ways of living yet to emerge.

111 131 KRISTEN SMITH



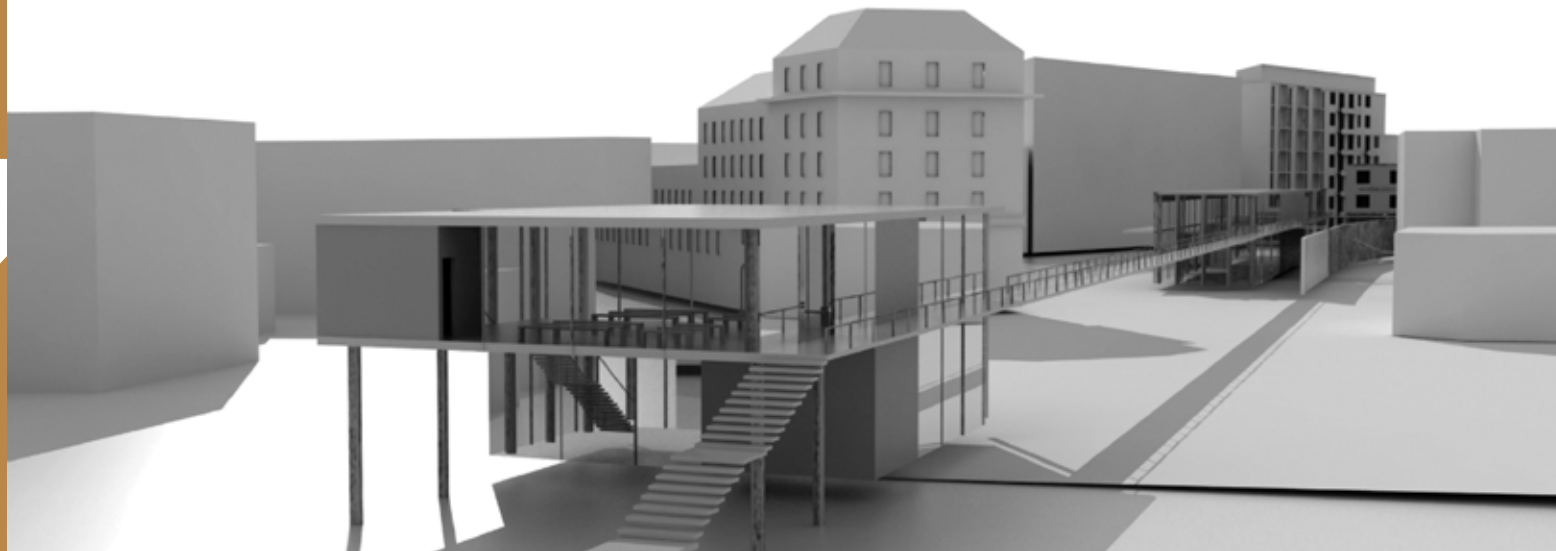
ARCH 402ABCL
ARCHITECTURE FOR HUMANITY:
PREFAB CORE STUDIO
 INSTRUCTOR: R. Scott Mitchell

Both the Fall and Spring design studios were collaborations between USC and Architecture for Humanity (AfH) concerning humanitarian shelter issues. In the Fall, working with the shipping container as salvage module, this studio provided a true hands-on design/build experience. Students directly addressed the question, “What happens after the cameras and media leave the disaster site?” The project investigated the intermodal shipping container as design envelope, structural building block, payload delivery system and humanitarian aid unit. Students designed a temporary outdoor school deployed from a modified container to act as a community hub for communication and education while a more permanent school was being constructed. The students learned metal fabrication and construction techniques and applied them directly to container modification and the construction a final full-scale prototype at the USC campus.

During the spring semester, another group focused on prefabricated housing cores as a vehicle for long-term humanitarian relief for the Navajo Nation, again providing a hands-on design/build experience with direct real-world applications. The first phase of the studio explored the

Alternative Masonry Unit (AMU), using earth and eco-concrete masonry units. Students worked to incorporate the AMU recipes in order to design full-scale shippable molds for use in remote areas worldwide. In the final phase the students applied this insight to the development their own prefabricated cores, investigating a nested package of mechanical services could function as structural core—the actual building envelopes being constructed with local materials and unskilled labor. This would allow imported technologies in core-systems to be smaller and easier to ship. Such core concepts could provide services including power generation, lighting, water, wastewater and communication. Students worked directly with AfH staff to produce a prototype functional full-scale detail pavilion featuring solar hot water, a heat exchanger, solar pumps, photovoltaic panels and a radiant concrete floor.

111 |31 CHRISTOPHER BUSCH



**ARCH 402ABCL
MILAN COMO URBAN REDEVELOPMENT STUDIO:
TRANSPORTATION INTERCHANGE WITH HOTEL
AND TOURIST FACILITIES**

INSTRUCTOR: Graeme Morland

The eastern edge of the historic centre of Como is currently dominated by the heavily used inter-city commuter rail system which terminates at the FNM terminal station next to the lake. This system, which was installed at the turn of the century, is a vital mode of transportation between Milan and Como and all the communities in between. The area of site along this corridor, dominated by the current rail and its adjoining service yards is under review for reappraisal, acknowledging that there are more modern, efficient and environmentally "friendly" means of mass transit available as a substitute for the current "heavy rail" system. The architectural challenge at hand assumes the hypothesis that a light rail trolley, surface or elevated, fixed rail or otherwise might be installed with greater flexibility to enable continued ease of access to the lakefront.

In response to the prevailing demand for tourist facilities in Como, hotel accommodations and supporting facilities, coupled with the ever increasing problems of parking and transportation within the vicinity of the Lake and its amenities, the studio focused on the design of a new public

transportation terminal coupled with hotel and recreational facilities in the area relinquished by the existing FNM system between Piazza Verdi in the south to the lake front at the existing train terminal. The new transit terminal was seen to be the central hub for the new intercity train, all local and regional bus and trolley systems and the network of marine navigation that connects Como with its lake. In conjunction with this transit interchange, the project included a new fifty-room hotel and recreation facilities in the vicinity of the lake edge.

111 131 LORIN JOLIN



ARCH 402ABCL NEW DIRECTIONS IN STUDENT HOUSING

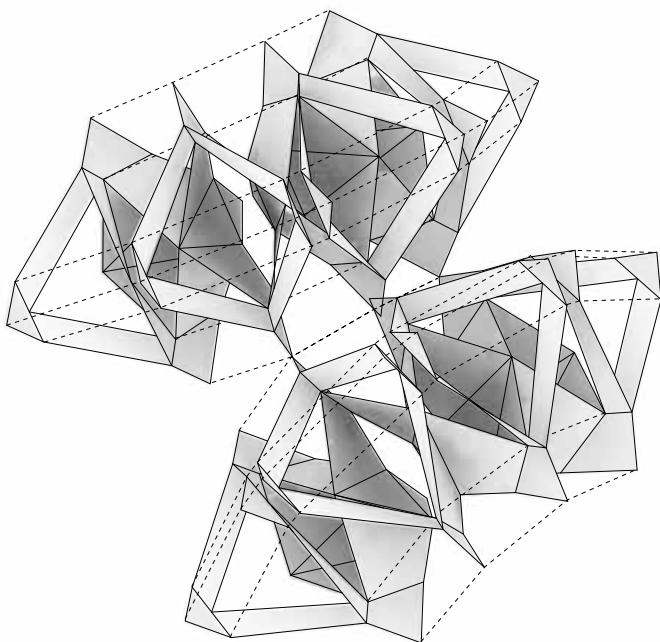
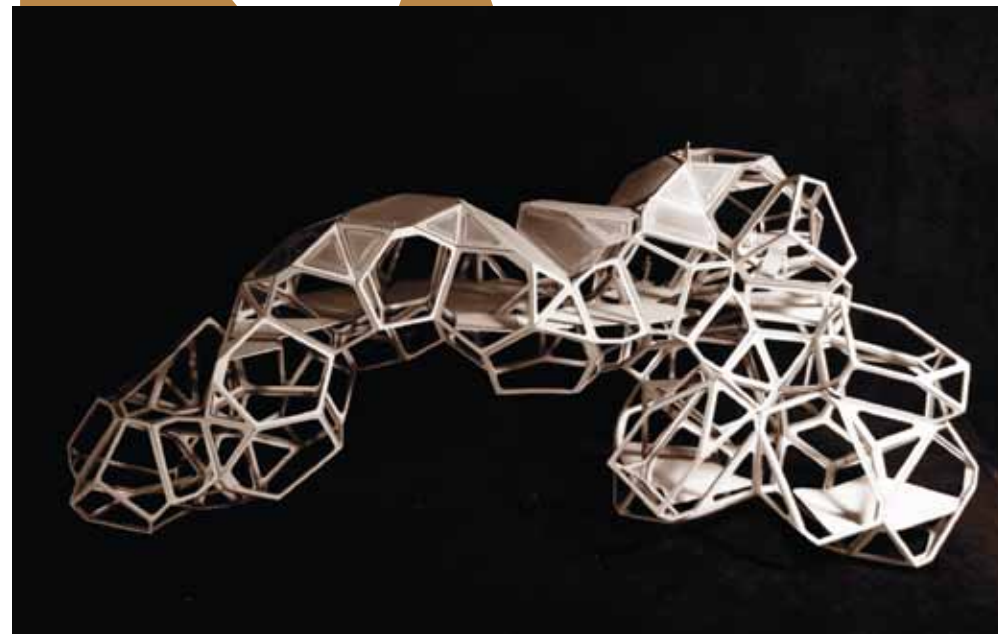
INSTRUCTOR: John Mutlow

Shelter is the primary form of habitable space in a community. Whether temporary (hotel, emergency replacement) or permanent (ownership or rental), places of shelter reflect the needs and aspirations of individuals, or families. The design of shelter illustrates the mode in which we organize our living environment, interface to nature, and choose to relate to our neighbors. Shelter is a primary element of a cities' physical fabric. Considered collectively, it's a dominant form shaping communities, but it is also arguably the form that serves as both the connective physical tissue for the city and as a counterpoint for the public buildings to express their importance of place.

The semester's design studio focused specifically on a housing complex for students, that searched for new typologies that would reflect students' shelter aspirations for the 21st century. The design of the building defined the ecological interests of a forward thinking sector of a population in a potentially environmentally sensitive urban campus location, within economical and technical boundaries and considerations. The student housing projects balanced innovation and the search for new ideas with the pragmatics of context, site, and program. The search for new technologies and tectonics were interwoven with

a user profile that considered present and future cultural behavioral patterns. The futuristic innovative buildings designed in the studio recognized cultural and social traditions in visually iconic forms and may serve as typological markers for new pedestrian and bicycle emphasis, medium density student housing adjacent to urban campuses.

111 SPENCER PURDY



ARCH 402ABCL
GENERATIVE PERFORMANCE: OR STRANDS,
PLANES AND CHUNKS REVISITED

INSTRUCTOR: Roland Wahlroos-Ritter

The studio embarked on a rigorous investigation of the correlation between material behavior and the genesis of material form, using physical prototyping and digital design tools. The mode of inquiry was a continuous loop of production of virtual and physical constructs in various scales. Strands, planes and chunks are three basic occurrences of material form and are adapted by most 3-D modeling software for spatial descriptions. These elementary typologies of material occurrence and spatial delineation were used in the first phase of the studio to develop a design vocabulary and techniques. A brief second phase intensively investigated and evaluated site conditions through research and a field trip.

Design techniques and vocabularies developed in the first phase of the studio were deployed in the third phase of the comprehensive development of a building design from concept to large-scale detail. Our mode of architectural investigation was a continuous critical dialogue between material behavior and formal performance. Performative aspects like structural, thermal, acoustical and environmental behavior of form and material were therefore be the driving criteria for the generative design

process. The studio offered a critical alternative to the conventional model of architectural investigation and worked immediately with physical matter and digital design tools in a continuous feedback loop. As a mode of production physical prototypes and digital models were produced in serial iteration. Orthographic projection was suspended until the last weeks of the studio. Form, tectonics and structural morphologies were described by an assemblage of physical and virtual objects that narrated performative qualities.

I11 I21 JEFF CHINN, I31 TIFFANY WEI



PUB

ARCH 402ABCL SUSTAINABLE PUBLIC TRANSPORTATION CENTER

INSTRUCTOR: Thomas Spiegelhalter

The project was inspired by the Association of Collegiate Schools of Architecture Concrete Thinking For a Sustainable World, International Student Design Competition for an environmentally responsible 30,000 square foot Public Transportation Center focusing on social-cultural, architectural, and economic innovations to preserve tomorrow's resources.

The Transit Hub Studio Design not only offered the opportunity to investigate experimental and resource-efficient design in an area of worldwide growing concern, but also allowed students to gain real-world experience and think innovatively about building systems integration. The studio explored alternative public transportation center typologies and developed innovative transit hub design and construction ideas for a site in Santa Monica California. The design program encouraged ideas with multiple benefits to merge two modes of public transportation while considering the facility's potential symbolic aesthetics and connection to the city with its surrounding community.

This transportation center was to support two means of mass transit and designed to be able to expand in the future. The center was also to be a hub of interaction and a significant emblem of the nature and character of the culture it serves.

121 PASCALE MARILL



**ARCH 402ABCL
IBAN LONGHOUSE COMMUNITY AND
VISITOR CENTER**

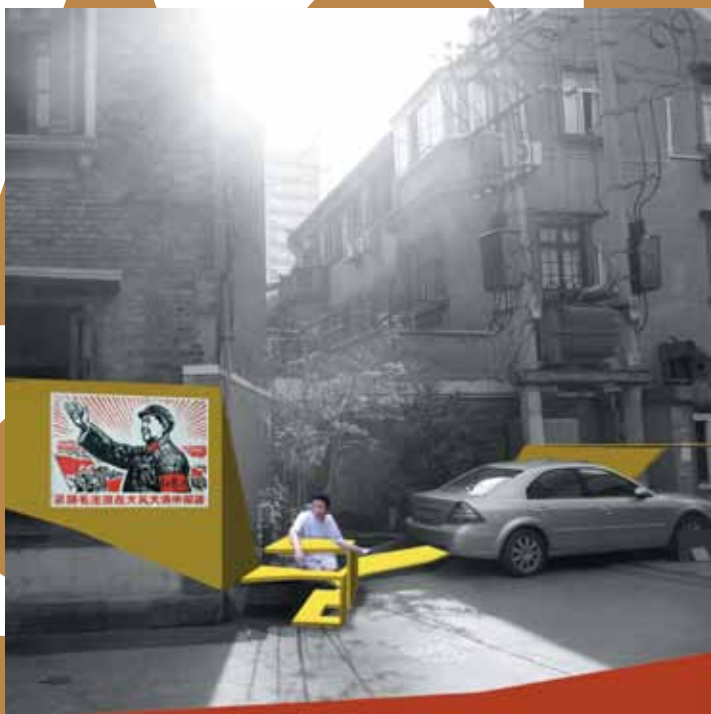
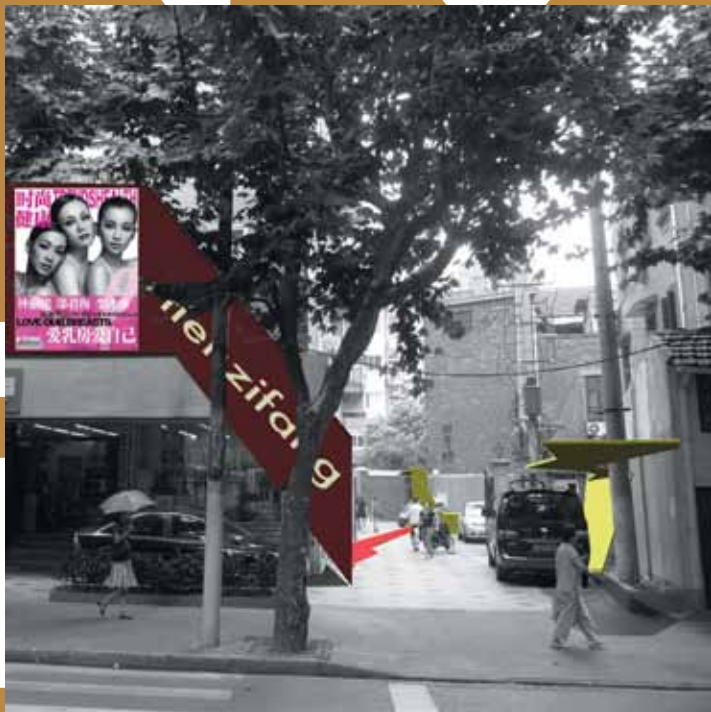
INSTRUCTOR: James Steele

The task of this studio was to provide the Lemanak branch of the Iban tribe in Malaysian Borneo with a facility to receive and entertain tourists in a way that would have as little impact on their culture and social structure as possible. This circumstance presented an opportunity to explore how architecture may help to preserve the lifestyle of a traditional culture, while still allowing a tribe to receive the financial benefit that tourism can bring them. The project was the design of a village's visitor center for the Iban longhouse that could accommodate 40–50 people in dormitory style accommodation, together with support and dining facilities. The most important consideration was to design a sustainable architecture using traditional local materials and technology in a method that could be easily built by the Iban. Any modern materials included in the designs were to be portable enough to be transported by Iban longboat. As there is no electricity, alternative energy sources, such as photovoltaic panels, were a part of the consideration.

The course began with a field trip to the remote Iban village of Rumah Kanyan, with students interviewing the tribal elders and other members of the group, surveying

the site, and determining possible locations and program for a facility that could serve to accommodate groups in the future. Following that, students returned to Kuala Lumpur to work in teams with students from the Universiti Malaya to assemble site information, develop a program, and gather information about the cost of local materials to be used in the construction of the center. The final jury selected one scheme from the twenty-two that were presented as being most appropriate for its purpose, and funding is in progress for the facility to be built by the Iban in collaboration with the students involved.

111 I31 TONY TUTAY, JR AND ZORAN PEVEC FROM USC AND UNIVERSITI MALAYA STUDENT, UMMU HANI BINTI NOR AZMI AHMED.



ARCH 402ABCL PROJECTIVE ENGAGEMENT, SHANGHAI

INSTRUCTOR: Paul Tang

Architectural and urban studies must embrace multiple disciplines in social mobility, urban dynamics, cultural debate, social habits to bring about inquiry into their relationships and physical manifestation. In this regard, China is a rapidly emerging country that offers enormous opportunities of architectural engagement in its defining moment of development. Within this larger urban objective specific issues of tradition versus contemporary, historic versus adaptive, social/political versus global/economic were explored as value systems of investigative and design engagements as acts of "remodeling". Fundamental questions of appropriate design intervention as conditions of change and renewal were the main focus of the AAC Summer 2008 academic engagement.

The design component of the program was offered in Beijing and Shanghai. Both workshops focused on the two extreme hybrid urbanisms of China. In Beijing the students examined the viability of mega scale urban intervention of the northwest quadrant of the historic ancient capital city of China as it transforms and expands through political and economic shifts. The existing fabrics of the mega blocks as remnants of Mao's revolutionary policies to create an egalitarian society were examined as China

shifts toward capitalism as a necessary mean to modernize into the global stage. In Shanghai, the students analyzed the rapid rise of a post colonial city into an international city of commerce where mega developments are slowly being replaced by smaller organic developments. In this sense, the notion of control and master plan are slowly being eroded and replaced by smaller episodic interventions.

111 131 REID CIGOLLE



ARCH 402ABCL
TRANSFORMATIVE URBANISM
 INSTRUCTOR: Selwyn Ting

THE PROGRAM

For more than a decade the Global Studies Program in France has promoted a research-based approach to design, with field studies in architecture, urbanism, culture, and technology forming a foundation for the synthetic processes of the studio. This approach provides a coherent semester pedagogy, while fully exploiting the foreign experience as a comprehensive resource.

To accommodate specific topical agenda, the studio traveled a full 31 days studying Amsterdam, Barcelona, Berlin, Bordeaux, Paris, Rotterdam, and Utrecht. New exposures were incorporated into the studio's challenge to analyze and affect the subject city of Saintes, France.

THE PROJECT

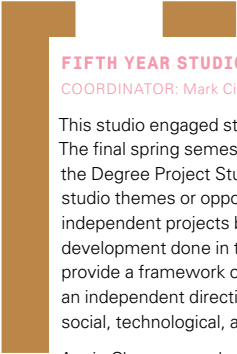
Saintes, the principle city, and once Roman capitol of the Saintonge region, is located about 100 kilometers north of Bordeaux along the Charente River. The project is centered in the Quartier Saint Pierre, comprising the city center and corresponding to the walled city of antiquity. The 4.2 ha project site is situated on the plateau above the medieval core. Once the center of the Roman-era city, it was occupied by the Centre Hospitalier de Saintes until 2007.

Student's research explored the broad issues of historic and current urban growth patterns. Diagrammatic studies tested the systemic effects and potential of redeveloping a historical site in the city center. The latent possibilities of the site to mediate social, cultural, economic, perceptual and physical conditions were examined at various scales of influence, from local and immediate responses to long term urban and regional outcomes.

The design project sought a strategy-based solution for urban problems and arguments formed in the research phase. Working towards a transformative urbanism, and based within the limits of the site, projects were encouraged to intervene through programmatic, infrastructural and systemic modification, and to provide a medium for study of the broader implications of architecture and the urban condition. Students explored plausible scenarios that were to be sustainable within an environmental, economic and architectural framework.

[11] [2] SHAWN SWISHER





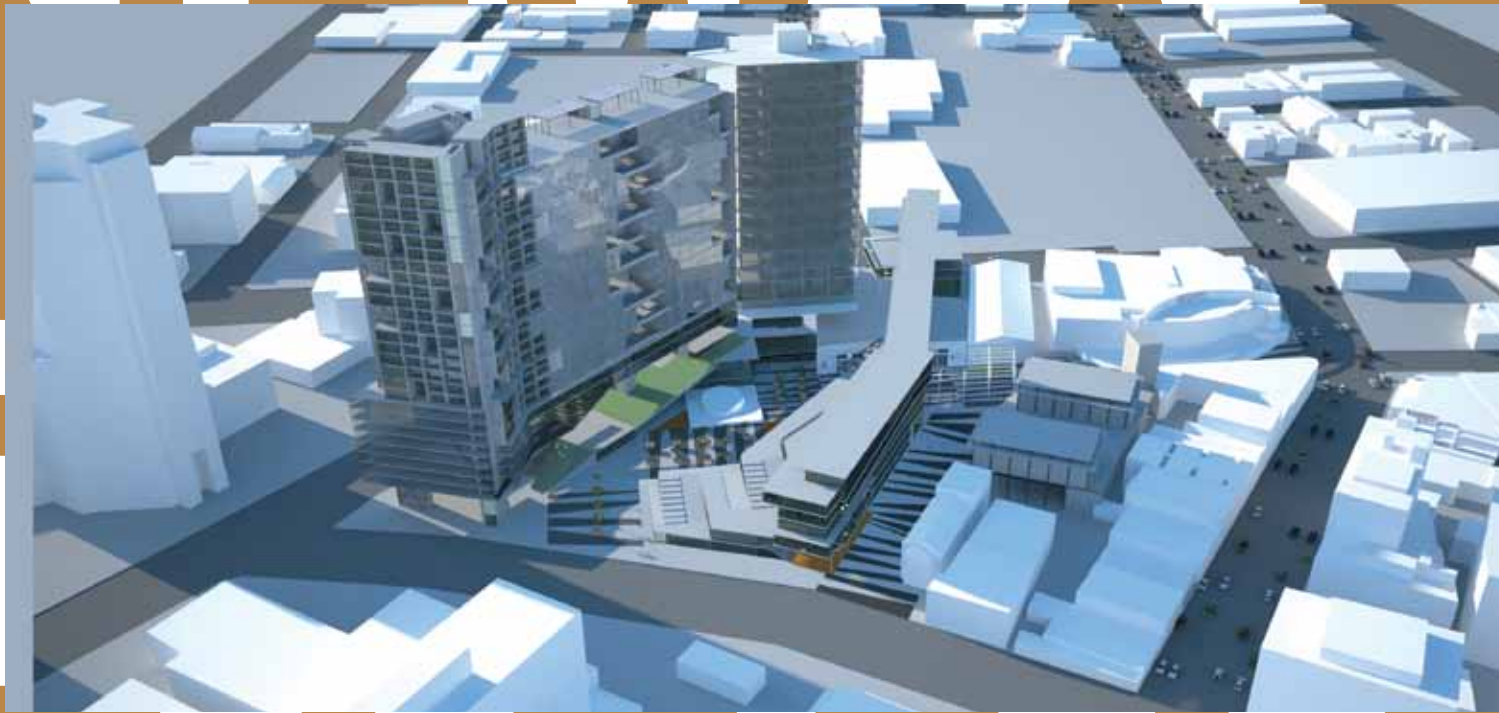
FIFTH YEAR STUDIO

COORDINATOR: Mark Cigolle

This studio engaged students' efforts during the time. The final spring semester of the undergraduate program, the Degree Project Studio, offers either faculty-initiated studio themes or opportunities for student developed independent projects based on research and proposal development done in the fall semester. Faculty typically provide a framework of strategies for students to form an independent direction, including a full range of urban, social, technological, and sustainable issues.

Annie Chu proposed a studio in which each student defined a set of Situations as design advocates, forming strategic alliances of program, building, landscape and culture in Hollywood's Barnsdall Park. Mark Cigolle focused on urban densification using the injection of increased hybridity of use and experience as an ecological catalyst for the projective reformation of Little Tokyo. Along a similar line but much larger scale, Andrew Liang's studio explored the concept of projective Urbanism drawn from realities found in Downtown sites. Students in Lee Olvera's studio were asked to form paradigms between architecture and landscape, filled and empty, space and place, in questioning and reinterpreting accepted spatial relationships of the city. Doris Sung approached the studio working from detailed studies looking at how specific materials or material systems may be responsive to environmental changes and how these properties may be engaged in the creation of the building skin and tectonics. Finally, Warren Techentin proposed a careful look at the nature of garage as host to an ever-expanding range of programs speculating on a trajectory leading all architecture to "garage space".





ARCH 502
NEW ARCHITECTURE LANDSCAPE ECOLOGY
 INSTRUCTOR: Christophe Mark Cigolle

This studio engaged students' efforts during the time the studio postulated that:

APPROACH

Urban densification and hybridization of program offers a clear alternative to further sprawl: densification/urbanization as a generator of place (infilling underutilized urban zones), dynamic regrowing (ecological cycle of life, dross as the place of re-growth), and reclaiming (blighted or brown field sites and adaptive reuse) offers a more sustainable strategy for growth than continued leap frog sprawl which has lead to overextended systems of connection, inefficient use of resources, and collapsing centers of cultural diversity, energy and engagement.

SITE

Downtown LA East: Little Tokyo block bounded by East 1st Street, Temple, Alameda, Judge John Aiso Streets presently occupied by the Geffen Contemporary at MOCA, the Japanese-American National Museum, the Go For Broke Monument & proposed Interpretive and Education Center, the Union Center for the Performing Arts, and the proposed Central Avenue Art Park. Potential Site Option: LA River/Rail Yard Landship Bridge at East 1st Street.

CATALYST

Seen as drivers of culture and social priorities, how can ideas drawn from art, new media and advertising as a source of cultural perturbation impact on strategies for cross-fertilization of the project in terms of urban hybridization, branded/generic synergy, landscape/builtscapes connection?

METAPROGRAM/PROGRAM

Meta Program, the program that conceptualizes program, as the driver.

REQUIRED PROGRAM ELEMENTS

Housing: Multi-format Unit Types such as New Media Live/Work Housing; SRO Housing; Go For Broke Learning Center; Connection/Access to Alameda Street Light Rail Transit Station; Urban Landscape (horizontal/vertical)

Examples of additional program elements that may be included: Community Law Courts; Mediateque extension to MOCA with artist in residence program; Place of spiritual regeneration, Baths, Spa, Swimming pool; Little Tokyo retail extension; Art Hotel (short term versus long term stay); Cinema; Market restaurant; Parking (automated)

111 121 131 MASON NG



INSTRUCTOR: Annie Chu

The studio focused on exploring the beginnings of such a strategic alliance model in Hollywood via resource analysis, program development and environmental design responses. Students interpreted a new entity born from collaboration between the Barnsdall Junior Arts Center, the Los Angeles Children's Hospital and neighborhood organizations at Olive Hill in Barnsdall Park. Each student's program of use was developed independently and reviewed by a strategic and facilities planning professional.

The studio addressed an amalgam of pedagogical intents: to explore the expanded role of the architect / advocate, to investigate the contemporary role of the urban park, to achieve a detail study of a space for healing / art / culture / education / community and to synthesize perceptual / architectonic and conceptual notions in design. Idioms of design investigation exercised in the studio included architecture, landscape, interior, industrial/product and exhibition.



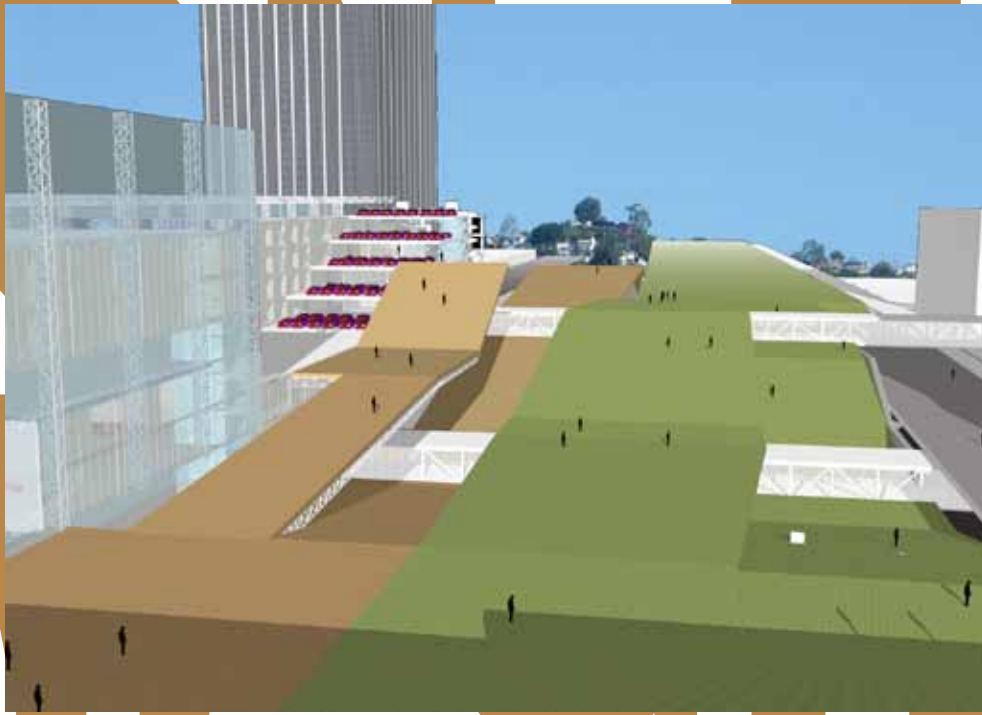
ARCH 502 PROJECTIVE URBANISM

INSTRUCTOR: Andrew Liang

Hybridity is the goal of mediating between differential objectives. It provokes a multiplicitous encounter where the traditional notions of "boundary" now take on complex implications of "place" framed in the milieu of socio/political/financial/cultural/spatial conditions and congestions. It has become a vehicle that triggers our contemporary experiences and exchange for which architecture and urbanisms are inevitable components. Its conceptual and operational potentials can therefore be appropriated and applied to architectural and urban speculations. Its impact on architectural syntax is undeniable and is arguably changing architecture from a typological application (static) to one that is "projectively" applied (dynamic)—a syntactical model that is subject to mutations through interdisciplinarity. The conception of hybridity in architectural thinking can be applied directly to the roles of architectural programs in establishing a project's performative and projective matrix. Instead of understanding programs only through their traditional quantitative and functional (utilitarian) roles, it can be argued that architectural programs must be conceptualized through their provocative and experiential frameworks—frameworks that embrace extreme realism. Another precept of hybridity in the architectural realm is its influence on scale—its

need to flourish under the theorems of Bigness! Adhering to the premises outlined above, this studio will investigate and speculate on the implications of hybridity through projective frameworks. We will explore and study through precedents, the spaces, the programs, activities, techniques and ideologies by which projective architecture and urbanism can dramatically altered our understanding of public and private spaces, and how they could refashion our sense and understanding for a new architecture and urban paradigm of renewed significance.

111 121 COURTNEY SCHEFFLER



ARCH 502 ON FALLOW GROUND: DISUSE, MISUSE AND REUSE

INSTRUCTOR: Lee Olivera

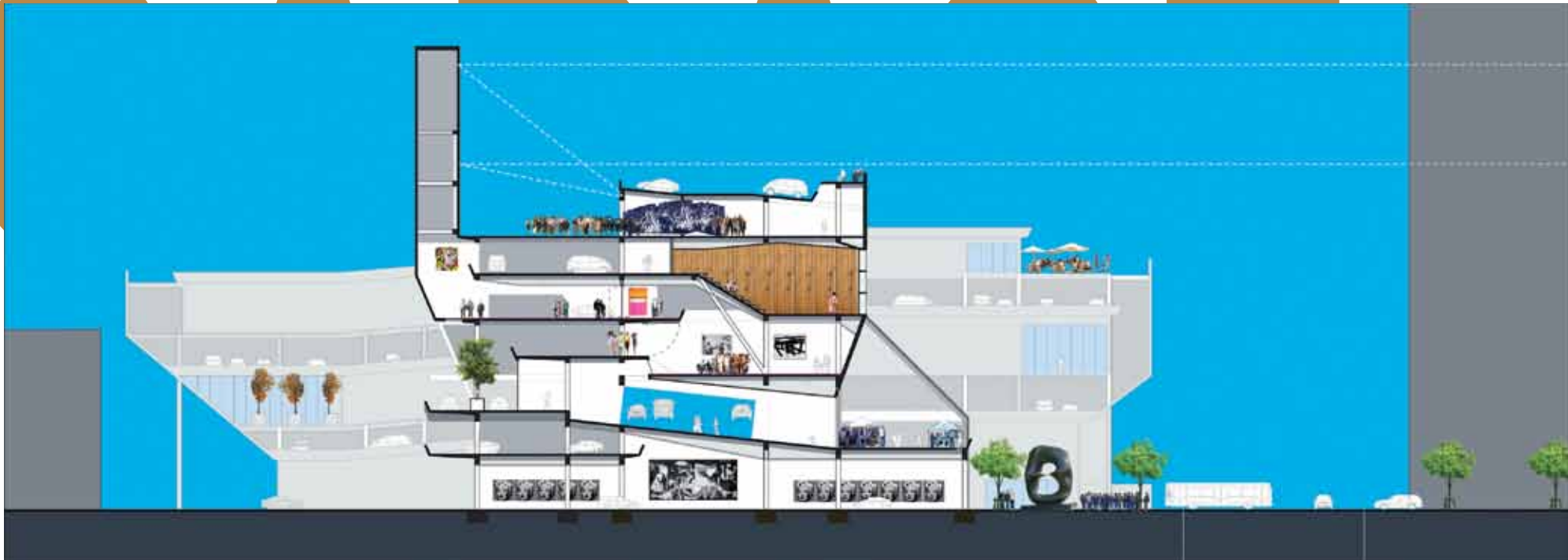
Los Angeles, laid loose over mountain, valley and desert, offers a framework rich in cultural and contextual meaning. An amalgam of ethnic, consumer and automotive cultures, the city offers the opportunity to explore and interpret both historic and contemporary urban conditions. Paradigms between architecture and landscape, between building and garden, between filled and empty, between space and place, question and reinterpret accepted spatial relationships of the city. Readings once obvious and familiar become elusive and contradictory.

The theme of the studio focused on the development of a project to house a research institute, an athenaeum, dedicated to the gathering and dispersing of knowledge. Sited within, the interpretive spatial relationships of the city, each student's program explored a development solution that moved beyond the fulfillment of functional requirements toward an ideological and physical manifestation of their mission statement, seeking to purpose the empty and repurpose the derelict. The institute required an environmentally responsible project that exemplified a heightened awareness of the relationships between building(s) and site relative to the sustainable

use(s) of spatial resources within the public realm of the city. Within this public realm, incidental space, both land: vacant lots, abandoned easements, rights-of-way and buildings, structures, varietal in form and scale, once programmed, found empty, jointly served as the datum for students to explore the transformative potential of developed space, from fallow space, into place.

The studio began with an analytical series of site selection and programming exercises exploring issues of entitlements and due diligence, spatial use patterns, contextual demographics, site and use histories as well as the particular physical characteristics and circumstance of their individual sites and buildings. Upon completion of this analysis the studio moved toward the development of individual site and building use strategies.

111 121 131 ZORAN PEVEC



ARCH 502 GARAGE

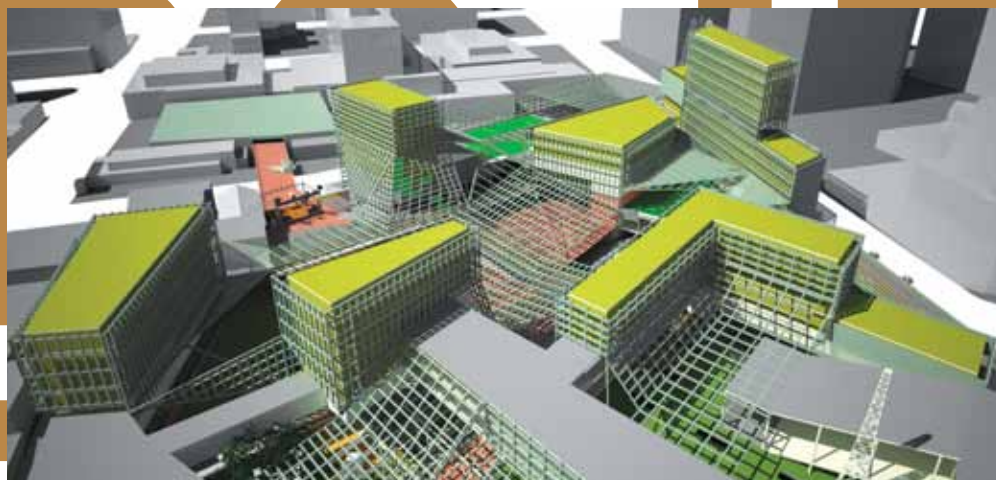
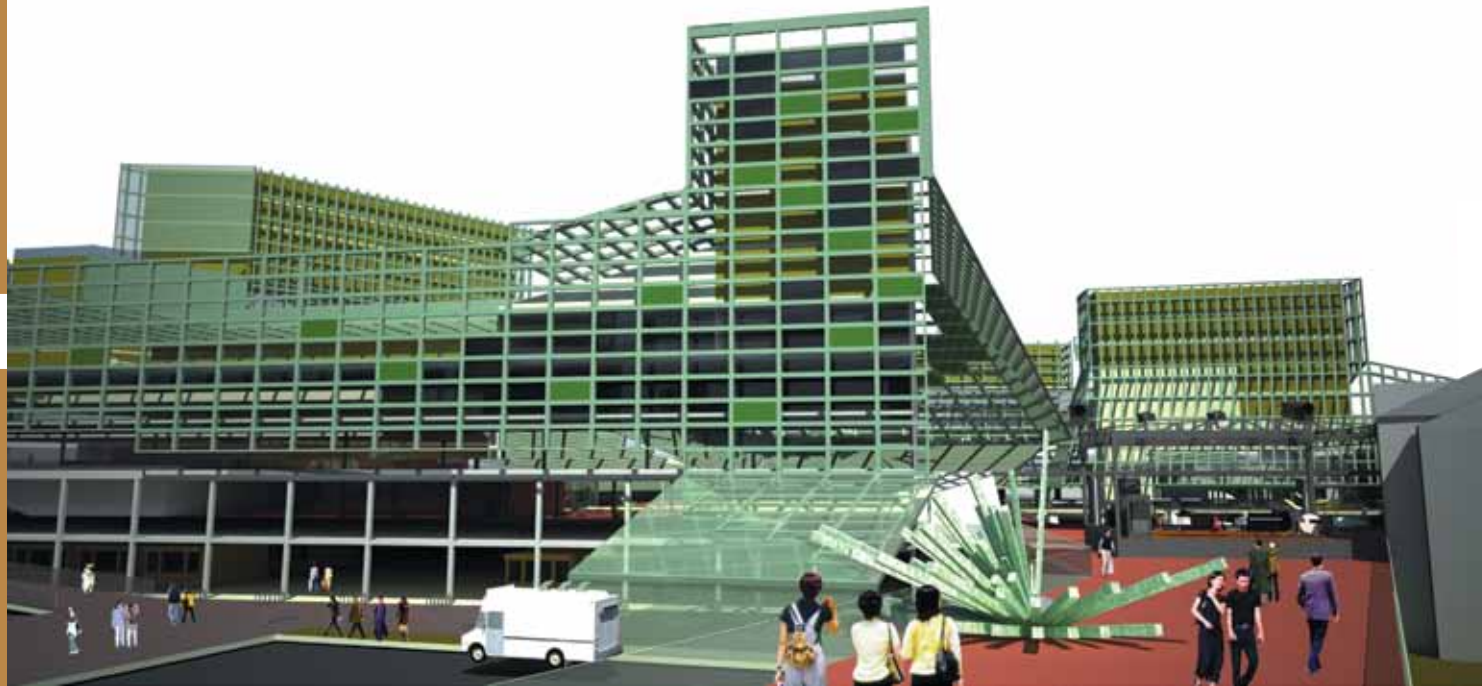
INSTRUCTOR: Warren Techentin

Garage is an immensely pervasive yet overlooked program of the everyday environment. The hypothesis of the studio implicated the garage (in conjunction with parking and storage) as a typology, a site, a program, and even a cultural condition of immense unfulfilled potential which, when combined with other programs and situations, offers new and fertile ground to architecture, landscape architecture, and urbanism. Moreover, the studio embraced the notion of “garage culture” or the condition whereby space and program—ostensibly meant to function as single-purpose pieces of infrastructure—become uncoupled; modified to support new, varied, and often unexpected sets of uses and programs. The studio was a program-intensive studio which investigated the relationship of programming to auto-mobility, mixed-uses, temporary uses, and provisional uses. Integration and compression of programs were encouraged between the garage and its host programs rather than unwinding and separating them to understand new possibilities for each.

The students were responsible for understanding and identifying a thesis idea of their own within the context of a studio looking closely at garages. Issues of convergence, infrastructure, exhibitions, surface, flow, array, folding

plates, long span systems, pre-cast concrete construction, densification, and hybridization are just a few of the thesis topics this studio adopted. The first half of the semester was devoted to research which cataloged, categorized, and analyzed the salient and unique issues inherent in the design of garages and the host programs they support. Students developed their thesis idea during the second half of the semester with strategies gleaned from their research on one of several sites of their choice in the South Park area of downtown Los Angeles.

111 |31 OLEN MILLHOLLAND

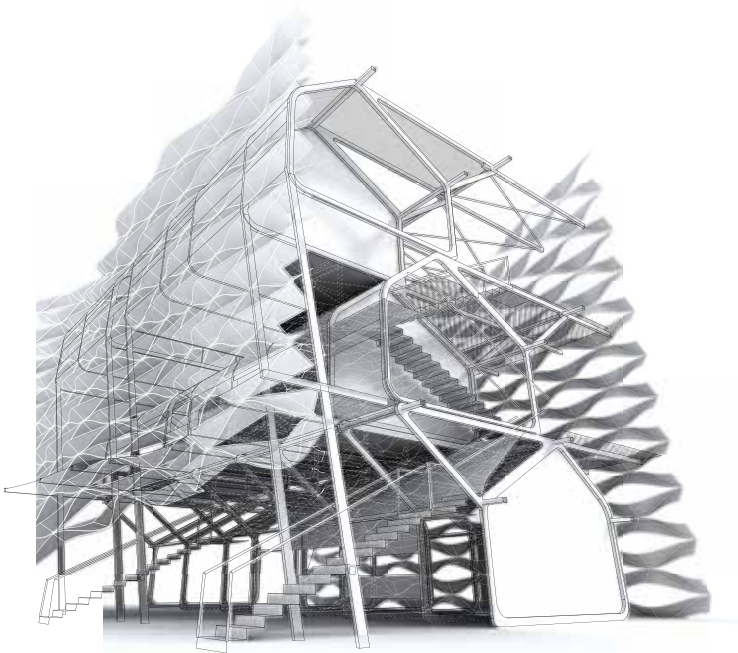
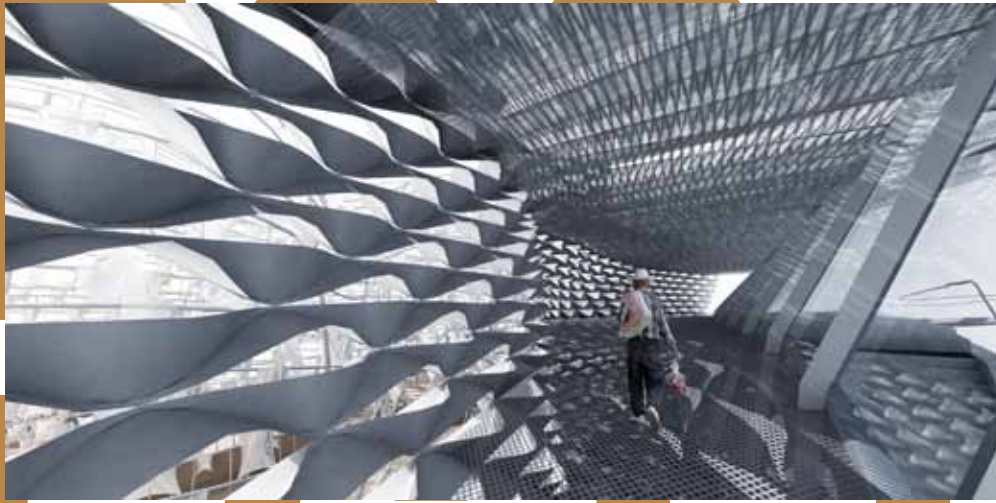


ARCH 502
REMAPPING THE PROJECTIVE LANDSCAPE:
TRACING EMERGENT STRATEGIES FOR A
REACTIVED LITTLE TOKYO

INSTRUCTOR: Mark Cigolle

The district of Little Tokyo has become disconnected from the larger city of Los Angeles. The future of this community will either be its disintegration into a silent neighborhood overtaken by commercialism and tourism or its reinvigoration through a reinfusion of activity and density. The more promising outcome can be realized not through a further introversion of the tightly knit local Japanese community, but, rather, by embracing and balancing the inevitable influx of recent populations and cultures. Implementing emergent strategies, that is, referring to the existing underlying social and cultural forces, as well as to contemporary urban models found in highly active areas epitomized in many Asian cities, offers increasing potential for realizing hybrid situations and creating unanticipated activation on and around the site.

111 |31 ALVIN NG

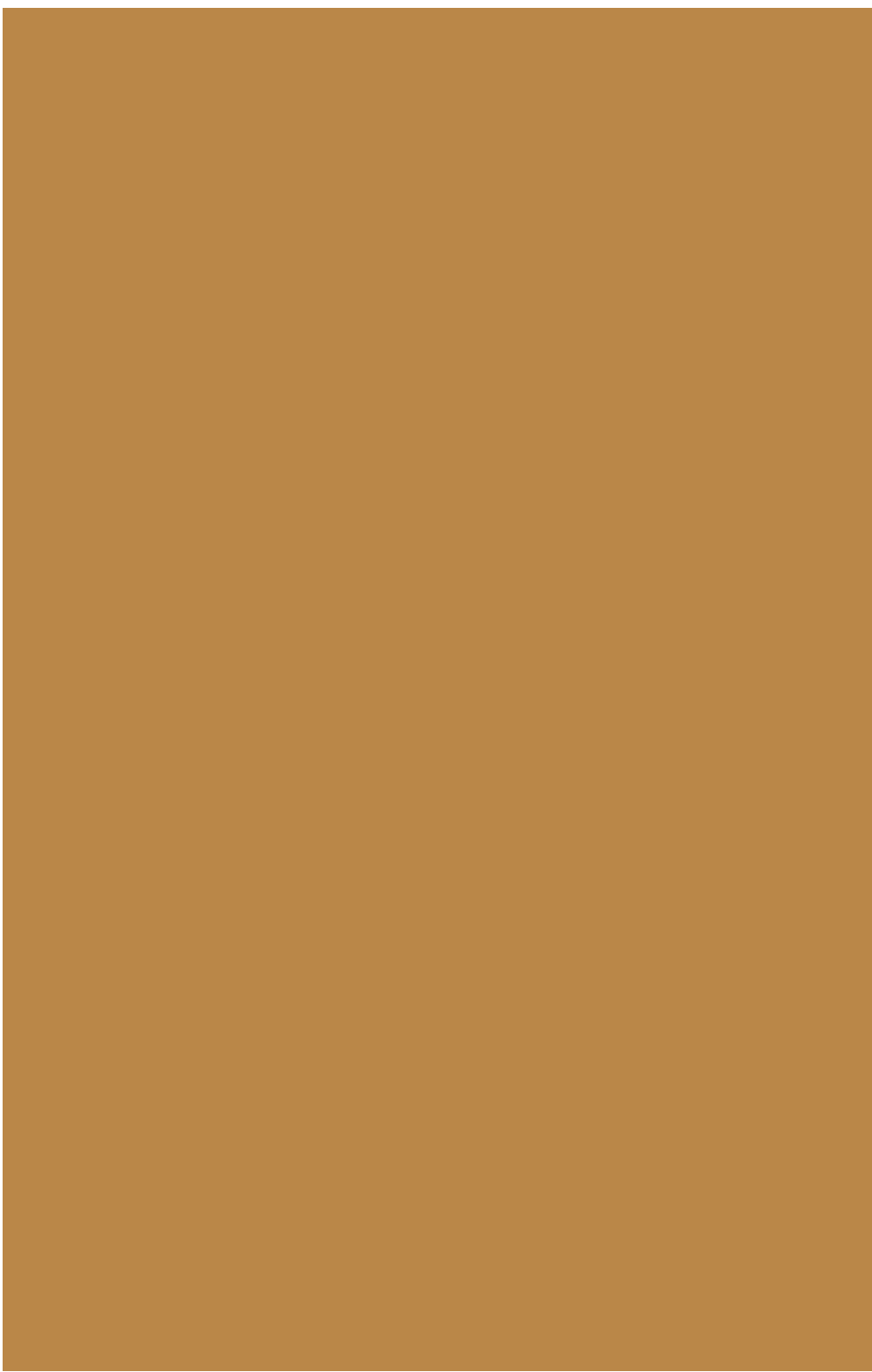
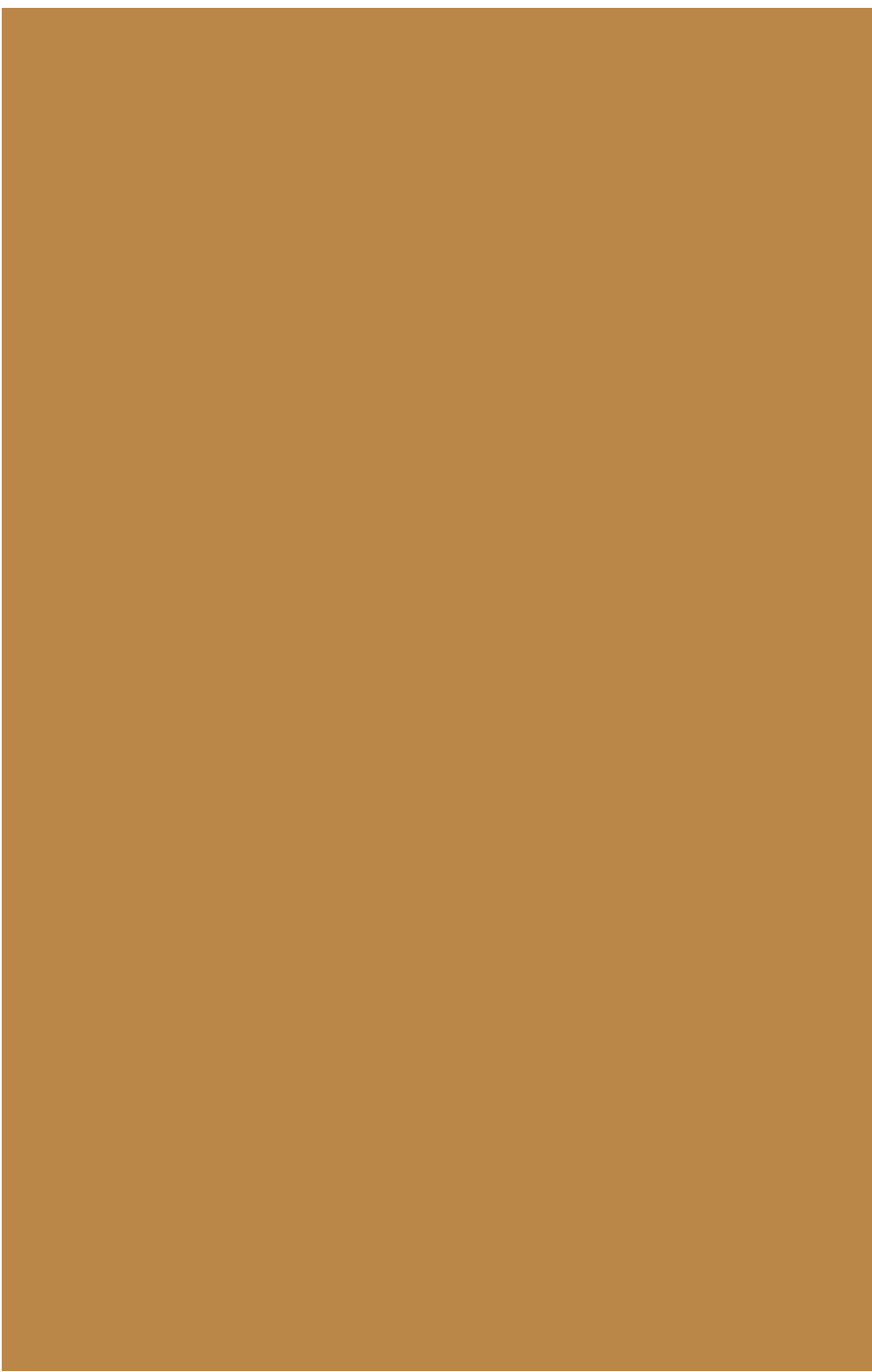


ARCH 502
FOG COLLECTION, URBAN AGRICULTURE
 INSTRUCTOR: Doris Sung

This is an undergraduate independent degree project at USC that investigates the notion of fog collection and urban agriculture in the city of San Francisco. The building is comprised of a beach promenade at Ocean Beach, which serves to contain a volume of fog-condensing polypropylene meshes to be filtered and used as irrigation for a hydroponic farm. The plants are farmed in a vertical hydroponic system which uses a stacked pod modular unit for irrigation.

Paracloud was used to generate both the fog collection meshes, as well as the hydroponic vertical wall. The double curvature of both surfaces allowed for parametric design, which allows for individual variation within the components based on solar orientation and view angles.

111 121 MICHAEL LEUNG



GRADUATE PROGRAMS

Graduate students come together with a diverse and distinguished faculty at the crossroads where knowledge of current conditions and history is dissected, extended and transformed. Theoretical explorations are combined with technical and performative examinations. Outcomes are not known in advance, just invariably a step or more beyond current design intentions and production conventions—ready to transform the future in the face of wide-ranging present conditions and critically important local and global challenges.

Five graduate programs are located in the new Robert Timme Graduate Research Center. The former roof of Watt Hall of Architecture and Fine Arts has been converted to a light filled steel and glass third floor studio space whose open plan configuration facilitates interaction among students and faculty across distinct but highly related disciplines.

A graduate student population of 200 is enrolled in four Master Degree Programs and four Certificate programs in Architecture, Landscape Architecture, Building Science, and Historic Preservation and a new Ph.D. degree. A unique aspect of these programs is that students immersed in any of the master degree programs can simultaneously obtain a Certificate in one of the other three programs. This form of interdisciplinary collaboration is considered essential to address critical environmental and social issues of 21st century global conditions.

The academic opportunities offered are numerous, thus students are provided options to pursue their own professional interests. The first professional degree programs in architecture and landscape architecture are designed to meet national accreditation standards by providing a comprehensive set of basic studies. Upon completion of the basic sequence, students are intermixed with post-professional degree students in advanced studios and courses to generate progressive, supportive and sustainable projects, places, and infrastructures suitable to cities around the world. One element of sustainable preservation studies includes evaluation and restoration of the USC owned Frank Lloyd Wright Freeman House. Research opportunities continue to be an integrated element in both the Building Science and Ph.D. programs, and the two new research centers being formed by Dean Ma: COPE, Center of Performative Environments, and CODO, Center of Design Operatives.

Several theoretical studios in architecture are utilizing digital parametric software and biometric thought processes with Gehry modified CATIA software. Visiting faculty from both ARUP and Buro Happold offices provide the experiences for the parametric investigations and explorations where geometry can be rationalized and tested. In the Ph.D. program advanced performative and tectonic research is conducted. Design research in landscape architecture addresses parallel forces of natural systems restoration, of cross-cultural cultural diversity, and of the transformation of urban infrastructure.

Other unique opportunities that exist include the Graduate Research Scholars program (GRS) where graduate

students are linked with faculty members in the investigation of similar research interests. This program offers wonderful opportunities for students to engage on-going research studies. A series of study abroad programs expand educational opportunities and global awareness. Dean Ma has established the USC American Academy in China (AAC) where students are immersed in the local culture of both Beijing and Shanghai, fostering academic exchanges with the participation of both local and international universities and led by leading creative minds.

Recent visitors to the graduate programs include Sir Peter Cook, Enrique Norton, Rem Koolhaas, Ian Richie, Michael Maltzan, Thom Mayne, Laurie Olin, Charles Waldheim, Stan Allen, and David DeLong.

John Mutlow, Chair of Graduate Studies
FAIA, RIBA Professor

MASTER OF ARCHITECTURE

INTERIM DIRECTOR: Eui-Sung Yi

The overall goals of the Masters of Architecture Program are to provide students with a competitive edge of advanced knowledge and skill, to provide study choices that support career interests and address societal issues, and to make fully available the Los Angeles region as an instructive laboratory for advanced architectural studies.

The program focuses on Global Urbanism, Digital Intelligence and Innovative Sustainability and stands on USC's proud legacy of professional training and preparation. The program believes validating the transformative power of advanced concepts, innovations and strategies lies within the unpredictable, problematic and resistant environment of reality—the reality of culture, site and construction. By engaging real cities around the world and by resolving complex building technologies, the program champions research endeavours by expanding beyond the confines of academia.

Architecture in cities throughout the world face conditions of increasing density and require design initiatives that support amenity, sustainability, and cultural meaning. This is a serious search given the complexities of modern cities and their wastefulness with regard to natural resources and societal potential. There is a call for a new paradigm-shifting tool to address these issues with intelligence and efficiency.

Within an overall consideration of urban studies, digital technology and sustainable systems, five sets of investigations are fully supported by the faculty and other resources of the University and the region. These design and research directions include the following:

- The strategic opportunities to create more supportive urban places—amenity, sustainability, and meaning: habitat, places of commerce and exchange, the public realm, historic districts, open space and the streets, circulation interchanges, and infrastructures.
- The transformation and redefinition of building typologies—housing, cultural and educational institutions, civic and social service facilities, centers for health and well-being, market places, and environments for production and employment.
- Understanding the integral importance of advanced technology and engineering, applied towards the advancement of and ecology-building construction, materials and methods of assembly, structures, environmental systems, manufacturing procedures, industrialization, energy and natural forces, and natural systems.
- Attention to design methodologies and processes, theories of architectural design, process structures, visual communication, digital studies, methods and techniques of architectural simulation.
- Investigation of issues of theory, history, criticism, historical inquiry and methodology, theories of interpretation, architectural criticism, history of ideas, cultural and social implications.



ARCH 505AL
URBAN NOMAD'S PARADISE, LIVE-WORK HOTEL
 INSTRUCTOR: Christophe Kapeller

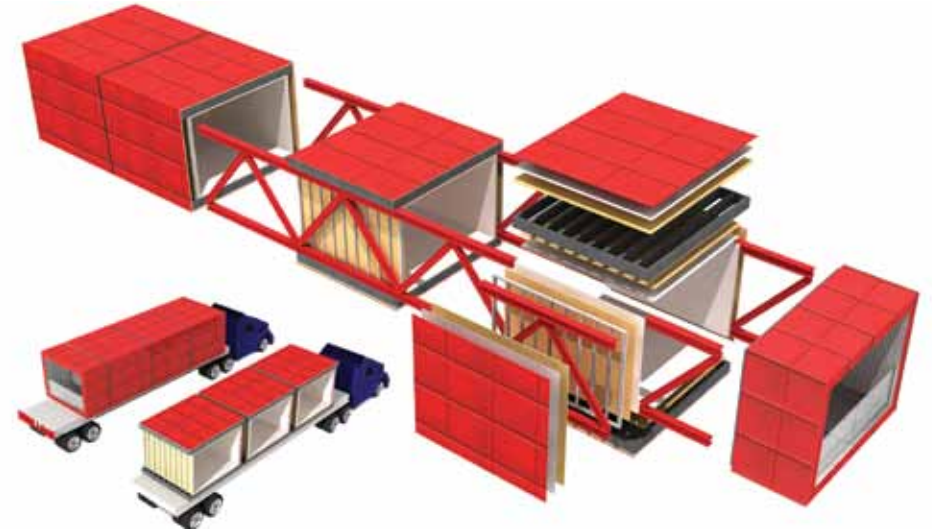
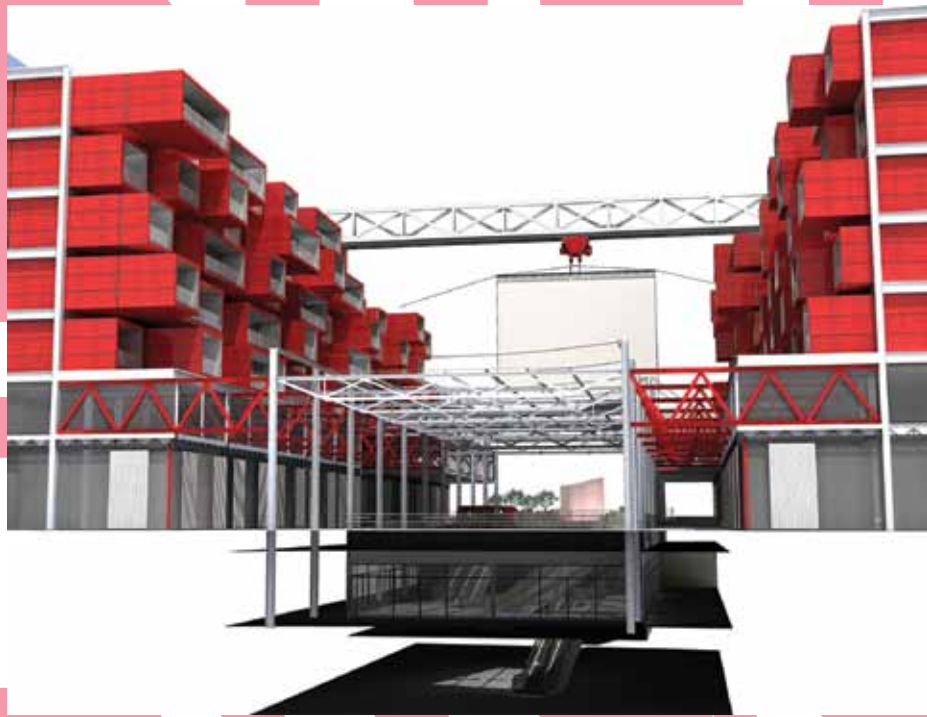
While the "loft" trend has been sweeping through the American metropolis over the last thirty or so years starting in New York City, Chicago, infecting San Francisco and finally arriving in Los Angeles just before the turn of the century, little has changed in the temporary accommodations offered by urban hotels. There are the trendy luxury brands, the modern boutique hotels, the big chains and the low-cost or SRO-type urban hotels, but in essence the basic hotel accommodation consists of a bed, a bathroom and a television set and a telephone. No matter how sophisticated the contemporary hotel room has become technologically it is a place to sleep and wash, but rarely a place where one could conduct some serious work or play. The traditional room consists of a bedroom with a small seating and working area, a bathroom and sometimes a kitchenette. This combination is called the "hotel room". It usually is highly standardized and economized to the square inch while richly decorated in more or less questionable interior design.

As this capsule for sleeping and washing can be rented by the night, the question remains if there are other combinations of human activities that could be marketable on a short-term basis and included in the package. More to the

point, the main question would probably be how many and which activities could be included into the package and how segregated should they be from each other. Furthermore, what would increased or decreased segregation of activities mean for the social contacts and/or privacy?

The challenge of the studio was to explore the possibilities of combining working and living situations within a mixed-use hotel-plus building type.

111 | 21 | 131 NICOLE TORO ARAÇON



ARCH 505AL BUILDINGS, "STREETS & PEOPLE", A WESTLAKE GATEWAY, LOS ANGELES

INSTRUCTORS: Graeme M. Morland, John V. Mutlow

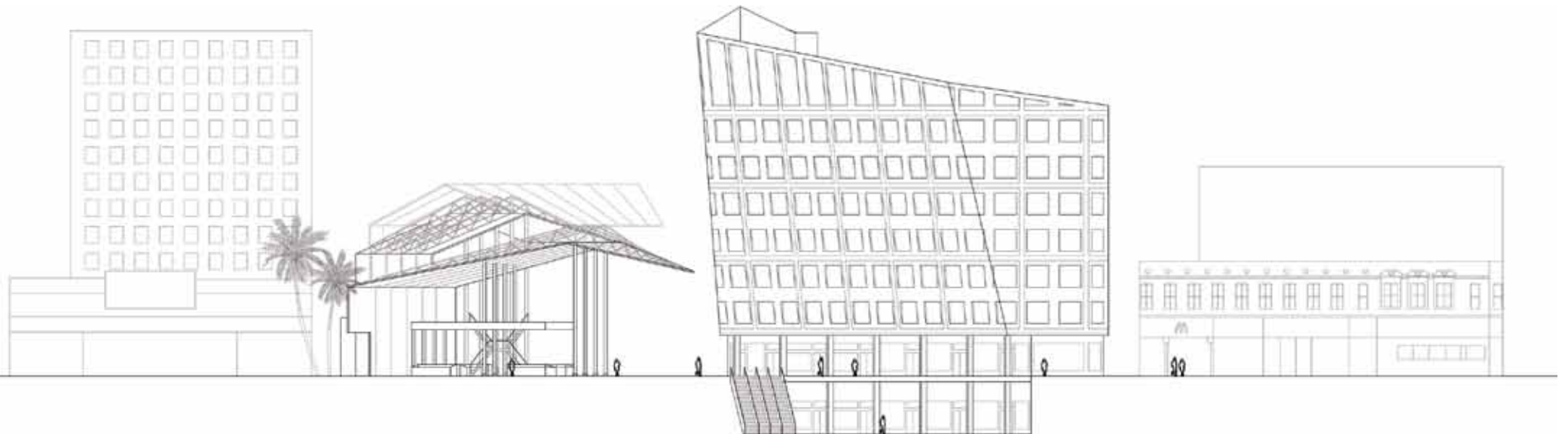
This studio dealt with the engagement of "Architecture & Place", where the dialogue between building and context is fundamentally inseparable, where buildings reach out beyond the primacy of their program to influence and instruct the larger place, and similarity, where buildings welcome and invite the public realm to engage within the building, consequently dulling the abrupt embarkation of public and private or entry and exit. The transitional domain that belongs to both building and "place" of building, might be described as the entry porch or stoop in a small project, or the *portico* or courtyard in a larger context. This dialogue can be extended in the larger urban landscape where the building takes on the role of marker or *campanile* instructing the order of the surrounding place of the city. A classic example of this engagement can be described in the relationship between the "Pantheon" in Rome, and the piazza it engages. The porticoed entrance is not only directly connected to the rotunda within, but belongs more to the outside public room which it oversees and orchestrates with ageless presence and authority. Similarly, The Ponte Vecchio in Florence, a Building, Bridge and Street combined, where the distinction between building and context is "blurred". These examples

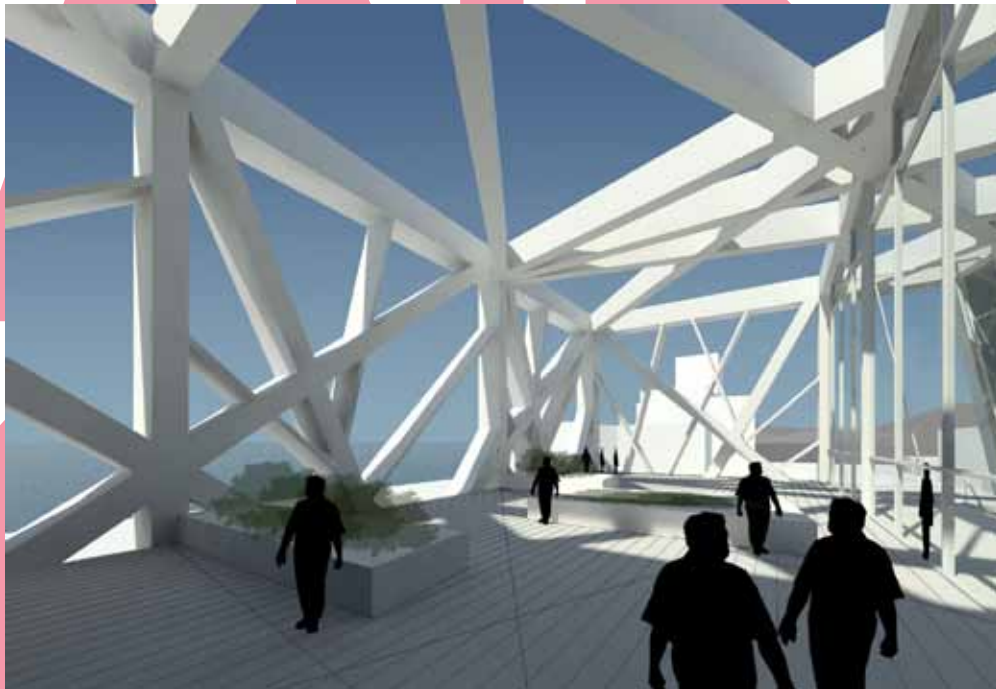
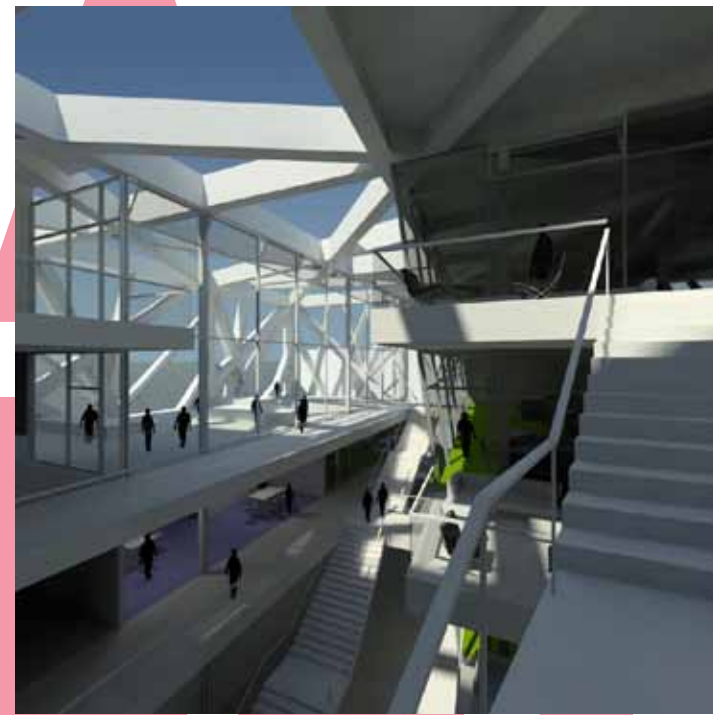
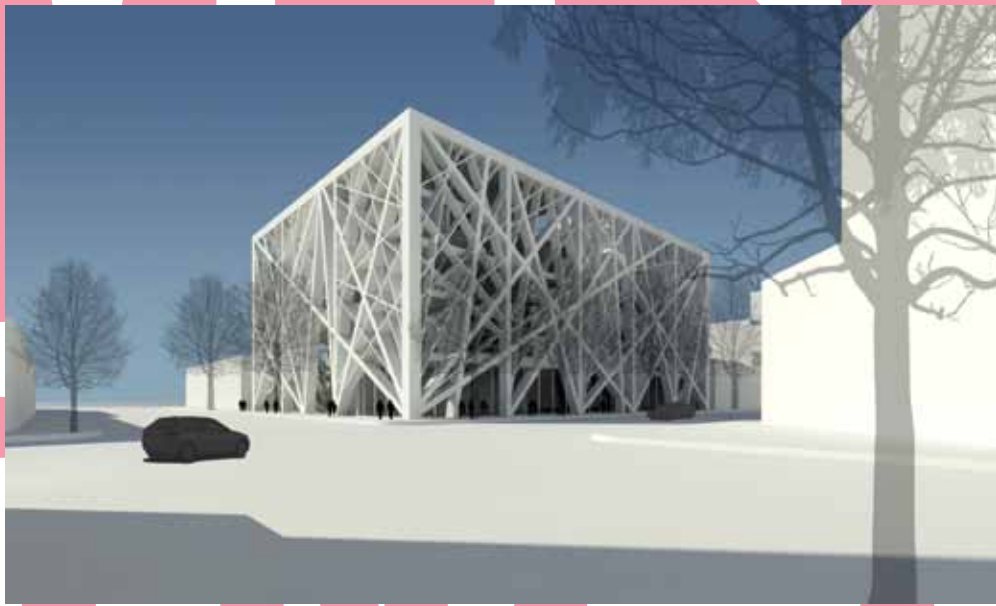
served to introduce some of the principles of engagement between "building and place" which were intrinsic to the design studio focus.

The site area studied was earmarked by MacArthur Park, traversed by Wilshire Boulevard, the foremost arterial street connecting the Los Angeles CBD, with the ocean at Santa Monica. Consequently, this prime location can be described as an East-West Gateway center of the City, highly connected and rich with urban amenity. The propensity for economic development in this district is unquestionable in this highly desirable area of Los Angeles.

THIS PAGE: I11 I21 I31 RYAN AUSTIN

NEXT PAGE: I11 I21 I31 HAYLEY BURNS





ARCH 505AL
MEDIA, INFILL, AND THE CREATIVE WORKPLACE
 INSTRUCTOR: Richard Corsini

This project consisted of a mixed use urban infill building for a leading creative advertising agency on a corner lot in downtown Santa Monica. The program posed contradictory modes for the conveyance of meaning: the physicality of place and material and the ephemerality of image. The intention was to give the students rich conceptual opportunities for critical discourse regarding language, media and meaning in contemporary society as well as creative solutions for an unconventional workplace.

The site conditions and context were straightforward, and the program was not technically complex so emphasis could be placed on a high degree of design and tectonic resolution. The first half of the semester focused on the overall conceptual and design development of the project. The second half focused on detail and tectonic development of the design concept and integration of building systems.

The studio focused on the problem of developing a physical and functional identity expressing the philosophy and values of an organization and its outward representation and internal operation. Alternative methods of representation were explored through metaphor, symbolism, and abstract association developed through tectonic

expression and the strategic ordering of form and use. Alternative organizational strategies were explored to nurture a creative workplace. The objective was to transcend the use of iconography alone as signifier by the purposeful organization of function and habitation.

[11] [21] [31] ERIC ANDERSON



ARCH 505BL EPIGENETIC LANDSCAPE

INSTRUCTOR: Raveevan Choksombatchai

In biology, the term epigenetics refers to heritable changes in phenotype (appearance) or gene expression caused by mechanisms other than changes in the underlying DNA sequence (hence the name epi- "in addition to" -genetics). These changes may remain through cell divisions for the remainder of the cell's life and may also last for multiple generations. However, there is no change in the underlying DNA sequence of the organism; instead, non-genetic factors cause the organism's genes to behave (or "express themselves") differently.

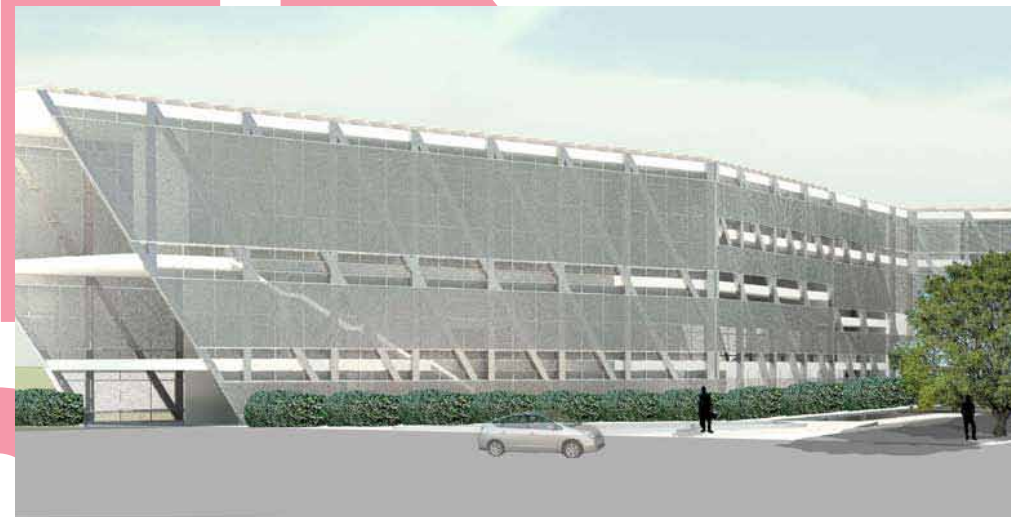
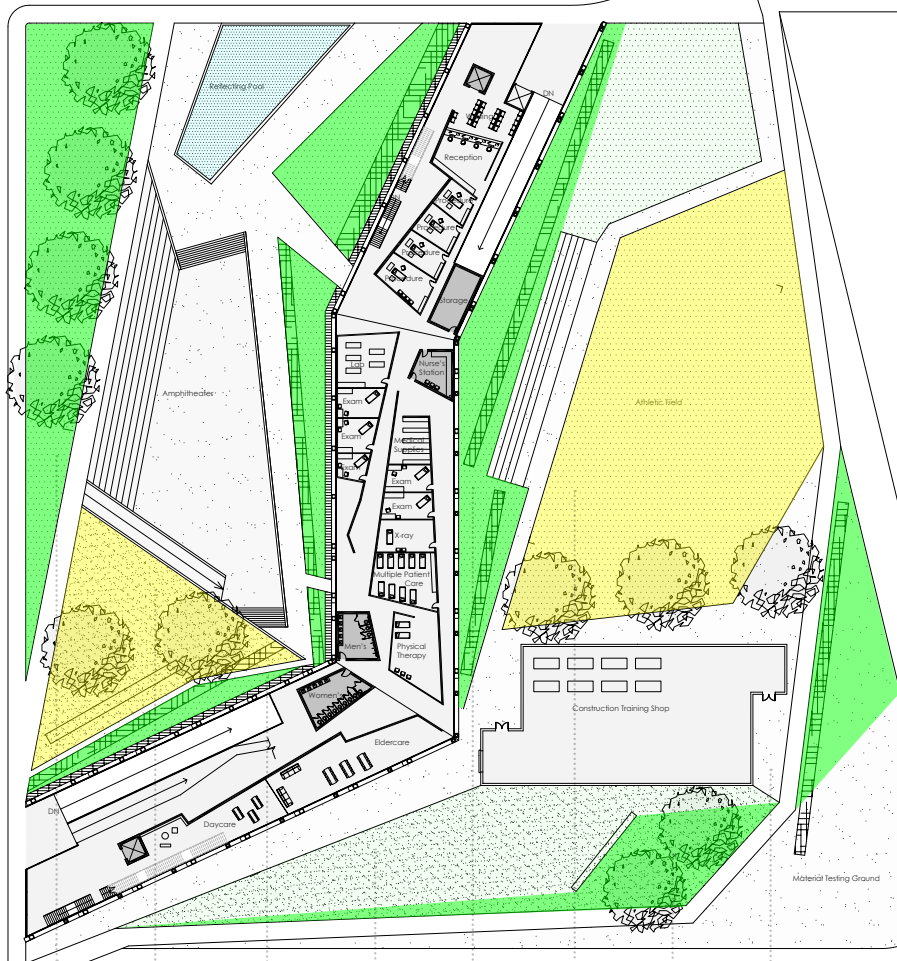
The word epigenetics has had many definitions, and much of the confusion surrounding its usage relates to these definitions having changed over time. Initially it was used in a broader, less specific sense but it has become more narrowly linked to specific molecular phenomena occurring in organisms. When the word "Epigenetic Landscape" was invented by C. H. Waddington in 1942, the physical nature of genes and their role in heredity was not scientifically known. He used it as a conceptual model of how genes might interact with their surroundings to produce a phenotype.

This design studio speculated on a crossing of architecture, landscape, and artificial intelligence that was capable

of learning from its own environment. This crossing performed within an architectural paradigm of desirable habitations and a technological paradigm of infrastructure and energy production. As a studio that was experimental in nature, we attempted to explore exhaustively many knowledge-based design possibilities to create a new cultivated farm field of "Intelligent Landscape" that achieved architectural, technological and aesthetic aspirations.

Our society, which is single-mindedly driven by an exuberant engagement with technological invention, is rapidly evolving. The design exploration in this studio fully celebrated the richness and latent potentials of architecture, art, and science, while attempting to understand and expose the repercussions and potential risks of their global trajectories.

111 IVAN PRIATMAN



ARCH 505BL CENTER FOR COMMUNITY, RE-USE OF THE COMPTON ARMORY

INSTRUCTOR: Sarah Graham

This studio proposed the investigation of urban sustainable development within a context of economic, social, and environmental issues. The studio began with conceptual analysis of the urban, physical, and social conditions within the Compton Armory. Strategies of re-using the existing buildings within the facility as well as adding to them required programmatic proposals aimed at intensifying the position of the Armory within the City of Compton. Architectural ideas were developed into building proposals that promoted the social program and demonstrated progressive technologies, including structural and engineering building systems and sustainable design.

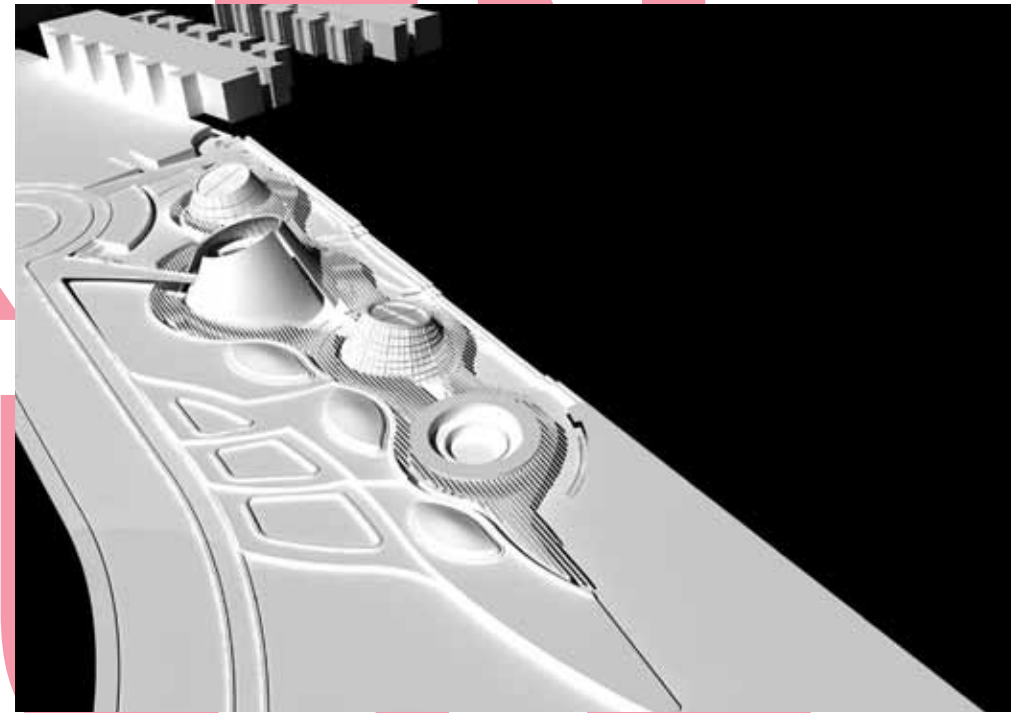
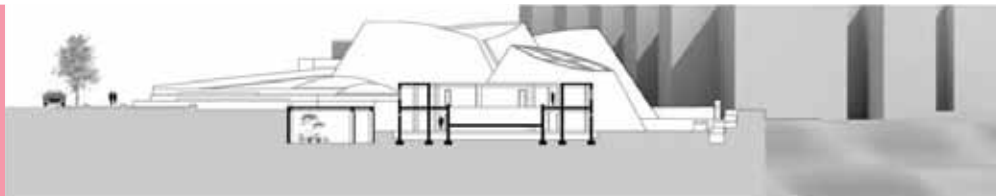
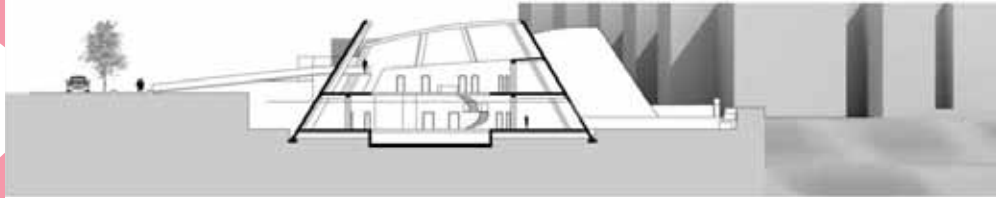
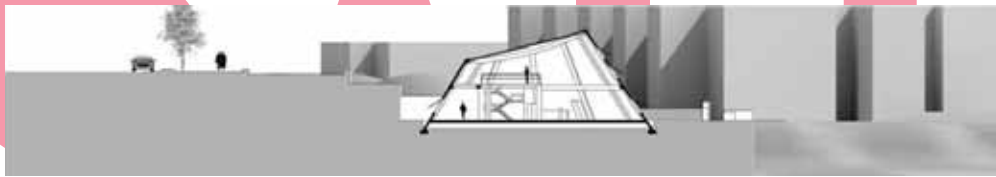
The project site was an abandoned Army National Guard facility, known as the Compton Armory, located in a quiet neighborhood, surrounded by public schools and suburban tract housing. The abandoned facility has for some years attracted vandalism and crime, with the buildings deteriorating in the process. Currently a non-profit economic redevelopment group is proposing to lease the Armory for purposes of building a Center for Community in Compton. The Center will provide skills training, jobs, and community

facilities for local residents with a focus on disaster response and the development of green technologies.

Learning from New Orleans, communities require comprehensive networks of emergency and disaster response teams, trained and supplied to be immediately effective, both in relief and in prevention. Individuals will be trained to support first responders, as well as gaining disaster risk, prevention, and management skills. Construction training will be central.

The development of green technologies plays an integral role in the strategy of disaster response in promoting alternative sources of energy not dependent upon the existing utility distribution grid. In a broader view, green technologies will reduce the political and economic dependence on foreign energy sources, and development of new industries can be anticipated from emerging green technologies.

111 | 121 KELLY OLSON



ARCH 505BL SALK INSTITUTE REDUX

INSTRUCTOR: Charles Lagreco

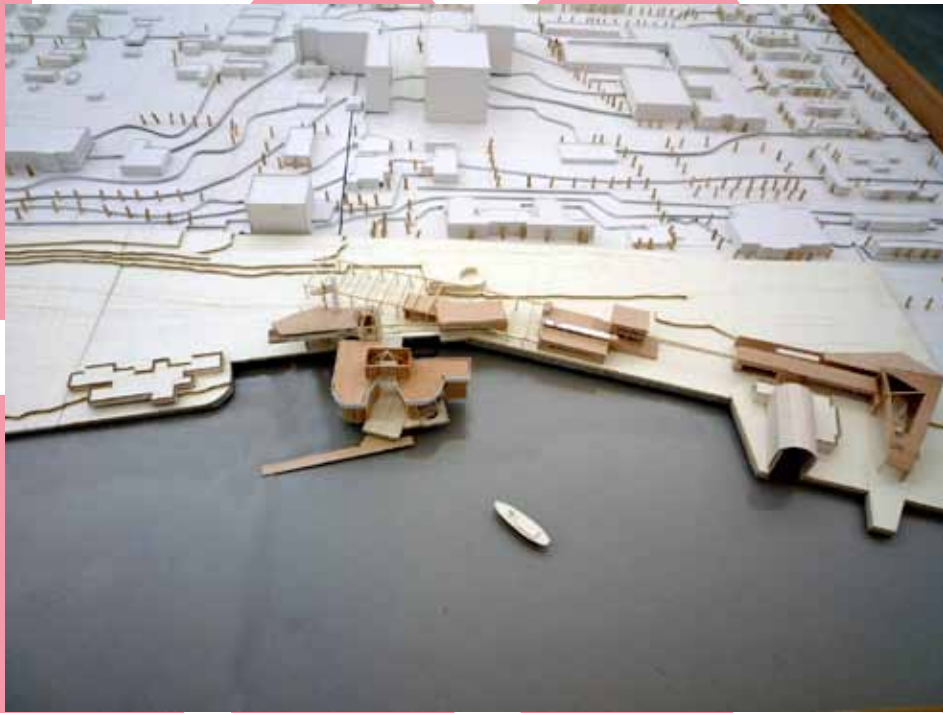
Collaboration between a great architect and a visionary scientist created one of the most significant building projects of the 20th Century. The Salk Institute complex was originally proposed to house research facilities, residential facilities and a conference center but in the mid 1960's but only the research facility was built following Kahn's design. Later in 1995, architect's who had worked with Kahn on the original project added additional labs, auditorium, and multipurpose spaces. Currently the Institute needs to expand both to realize the original Kahn program intentions and to accommodate changing needs as well as increased space requirements.

This studio used the ACSA 2008–2009 International Student Design Competition brief to address issues of “composition, construction and building performance,” consistent with the semester focus on building design development. Each student worked in teams to analyze and understand the unique context for the project, visiting the site and taking advantage of the extensive writings available on this masterwork. Master planning and schematic design of the expansion, using the program supplied by the competition followed the analysis phase. Every student was then required to design the Campus Community

Center area of the campus in detail. Students desiring to enter the competition as a team of three, based on a collaborative master plan effort, were responsible to pick one of the three distinct areas of the campus to develop in detail. The three areas addressed in the competition were:

- Science Center: New / Additional Lab Space and Green Houses.
- Campus Community Center: library, conference, offices, dining, lounge and exercise facilities.
- Residential Facilities: accommodation for scientists in residence.

111 |31 QIAN LIN



ARCH 505BL LOS ANGELES MARITIME MUSEUM

INSTRUCTOR: Roger Sherwood

The existing Los Angeles Maritime Museum at the foot of 6th Street in San Pedro was established in 1981, the result of efforts to find a worthwhile use for the Ferry Terminal building on the site which was a national historic monument. The site next to the Main Channel and the large open spaces of the interior of the terminal building suggested the conversion to the new Maritime Museum be made with modest remodeling. The Museum collections at this time were modest, in keeping with the undeveloped nature of the San Pedro waterfront that was still dominated by industrial and shipping functions.

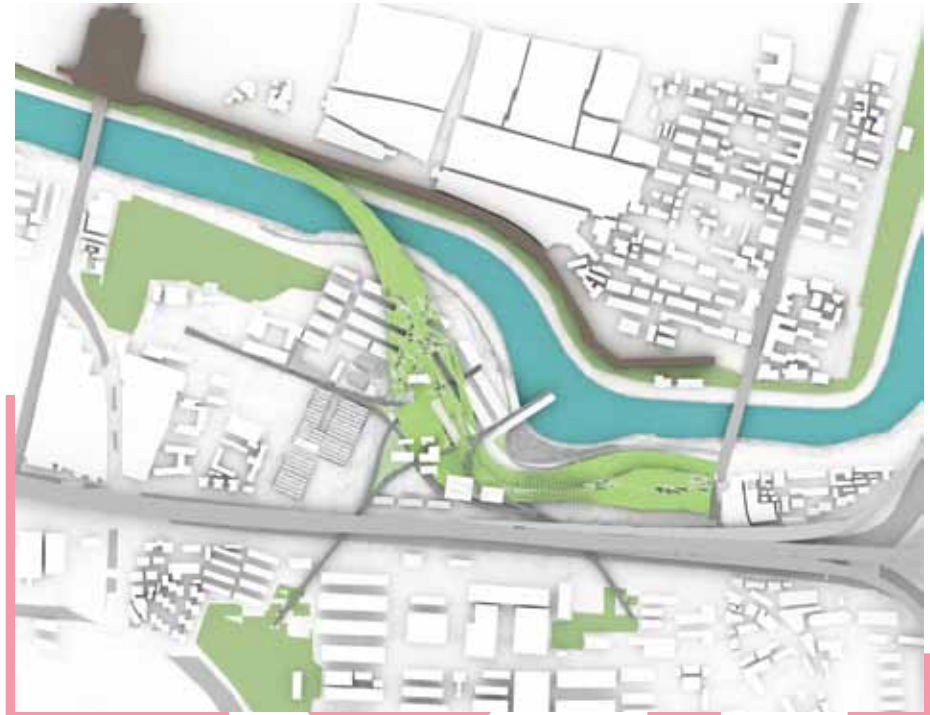
As the Museum collections grew and the nature of the waterfront changed, the Museum came to be a much more dominant presence. In addition to the models and smaller exhibits that were housed inside the old terminal building, the space outside came to be occupied with larger exhibits that could weather well outside, ship parts, the mast of the Los Angeles cruiser, torpedoes, a battleship gun barrel, and other large exhibits.

The Maritime Museum now needs to redefine itself and develop the spaces, and facilities necessary to service a major museum; enlarged and improved exhibit spaces, better public spaces, reception, entry and support, proper

curatorial and administrative quarters, storage, real teaching spaces, workshops, a major public auditorium and a smaller lecture hall, and a Marine Theater. The existing building is to be remodeled and re-organized and will continue to be a critical part of the waterfront complex.

Critical to the overall development of the site is the perception of the Museum as a multifunctional Center that maintains traditional exhibit facilities, but also sponsors many different kinds of activities; teaching, research, public meetings of all kinds, and maritime demonstrations such as the annual parade of tall ships.

[11] [21] ANQI ZHANG



ARCH 605AL
1865 PROJECT, NANJING, CHINA
 INSTRUCTOR: Paul Tang

Architectural and urban studies must embrace multiple disciplines in social mobility, urban dynamics, cultural debate, and social habits to bring about inquiry into their relationships and physical manifestation. In this regard, China is a rapidly emerging country that offers enormous opportunities of architectural engagement in its defining moment of development.

The fact that post Cultural Revolution Chinese contemporary society is increasingly globalized means that the values of individuality, specificity, language, or idiosyncrasy need to be reevaluated in light of processes that require trans-cultural, trans-subjective operativity. An open ended interrogative approach is needed, not necessarily just aimed at solving practical problems, but exposing inherent contradictions, vacillations, and constant transformations. Therefore, as a historic preservation and/or adaptive reuse project, the intent and approach of the studio was the process and translative definitions as domains of design research rather than language, image, character, or subjectivity characterized by the romantic, the expressionistic, the picturesque, and vernacular.

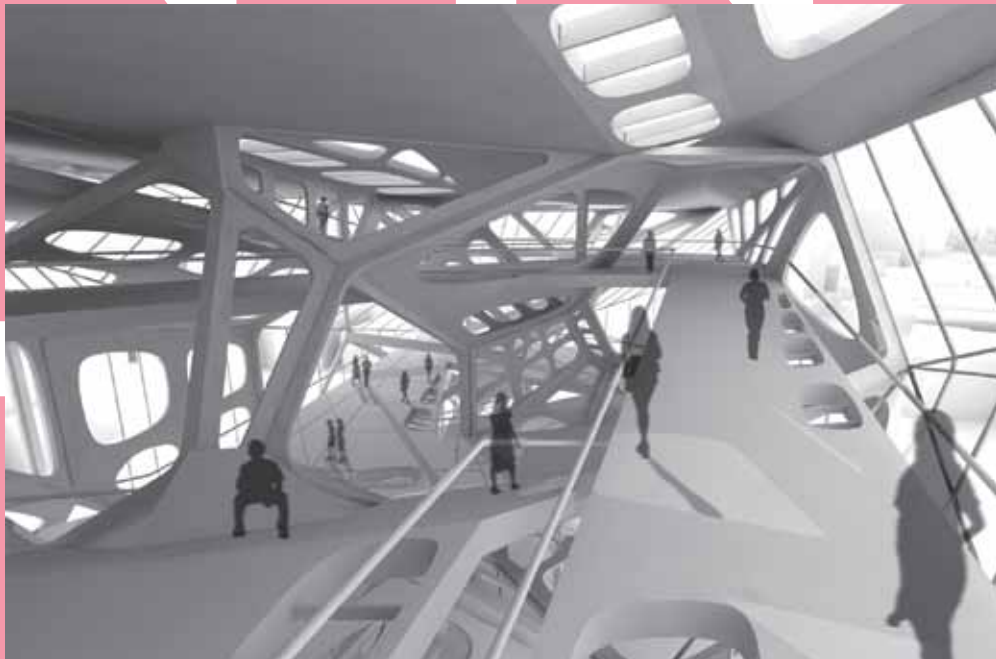
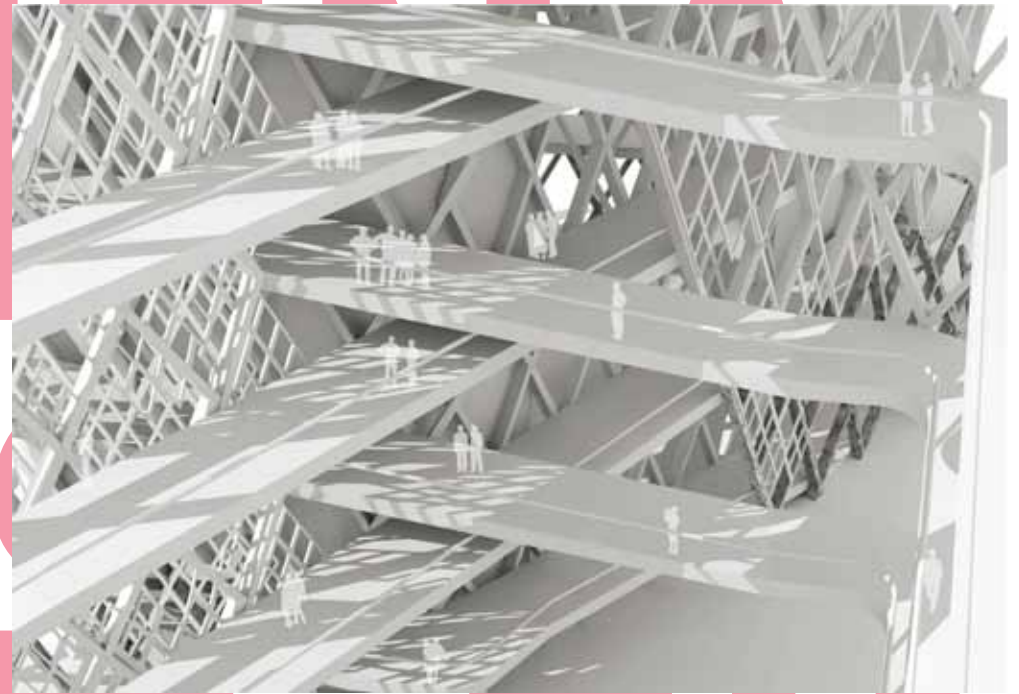
Architectural and urban design proposals are at best understood as urban models projected as a possible

scenario based on fixed parameters. In this regard, the most powerful notion of "model" lies in its potential "remodeling".

Within this framework of "model/remodeling", the design studio addressed specific issues of tradition versus contemporary, historic versus adaptive, social/political versus global/economic as value systems which guided the design engagement as conditions of "remodeling". Fundamental questions of appropriate design intervention as conditions of change and renewal were analyzed.

From our academic position, adaptive re-use with an historical awareness is only recently emerging in China as a viable alternate development strategy. For the past 20+ years the approach has been to completely demolish all existing and re-develop from a clean slate. With the above in mind, 1865 offers a real case-study in China to better understand these issues through research and design investigation.

111 121 131 ANNIE CHAN



ARCH 605AL EXAMINATIONS IN PERFORMATIVE ARCHITECTURE

INSTRUCTORS: John Enright, Mark McVay

Within the field of architecture we are currently at an interesting time where perhaps there has never been such a plethora of differing architectural strategies fueled by new digital tools. These new modes of design have in the past decade both produced an enhanced efficiency within the design studio while breaking open new possibilities of complex form. Parallel developments in digital manufacturing and materials research continue to offer new modes of how the built world is assembled, manufactured, erected and realized. Of particular interest is the emergence of performance driven design techniques that challenge architects to adopt new approaches to the parameters that influence space and material.

When one speaks of performance, we simultaneously address aspects of form, but also the specific force to which a performance is asked to generate. This can be utilitarian driven as in the case of environmental systems, sustainable facades, etc. but must also address the phenomenological aspects of space, time, and effect.

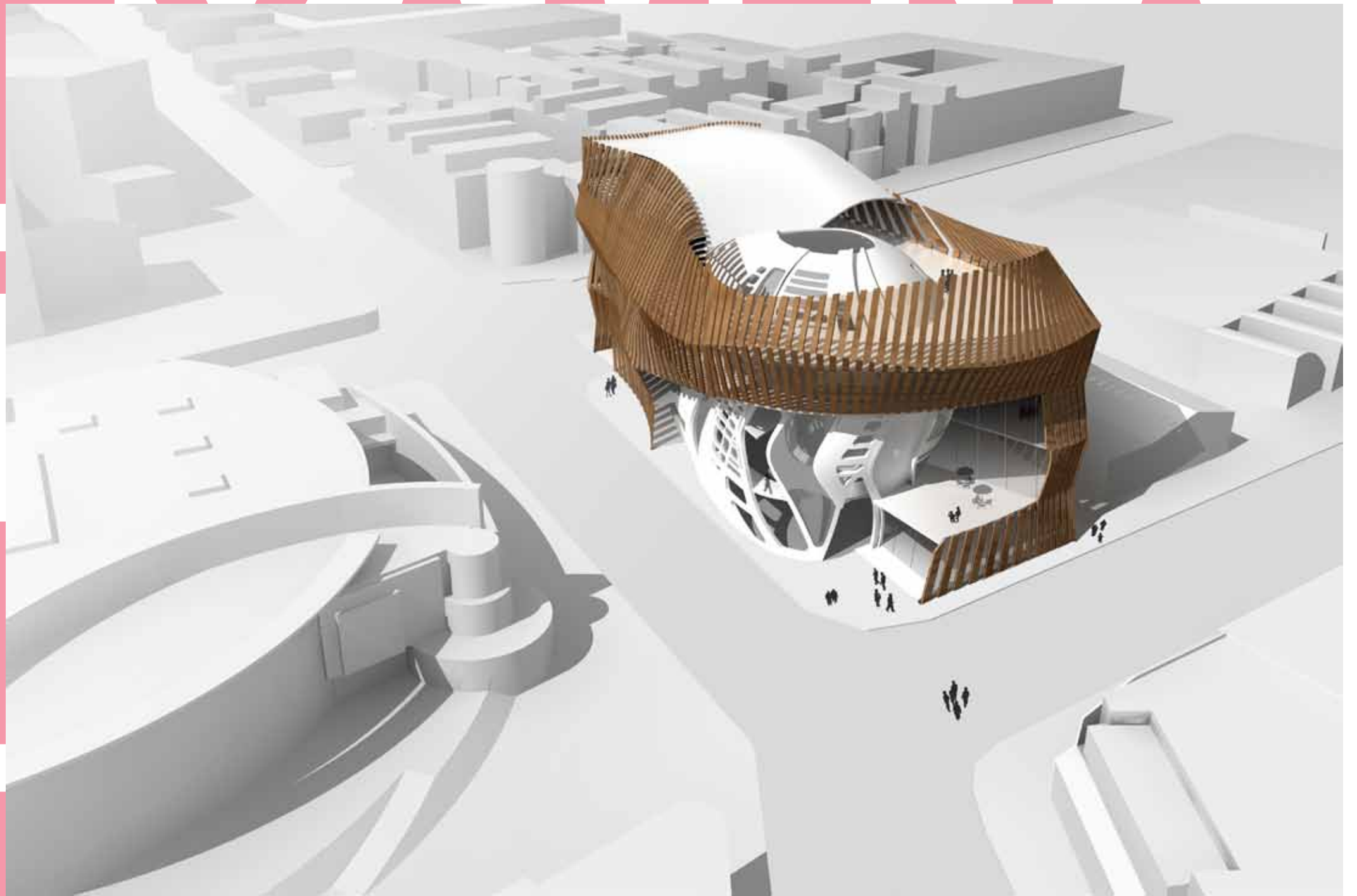
This course set out to simultaneously address current issues of building technology while creating projects of cultural significance that change the way humans inhabit and occupy space. But what of beauty, design, or

pleasure? Too often the modes of technology and design are separated into competing camps. Sustainable building technology within the larger field has been relegated to categorization (USGBC, LEED, etc.) which at times do not address the larger scope of architecture's cultural impact on society. The studio attempted to congeal these sometimes polemical aspects of contemporary architecture to simultaneously examine performance as a technological and an artistic endeavor.

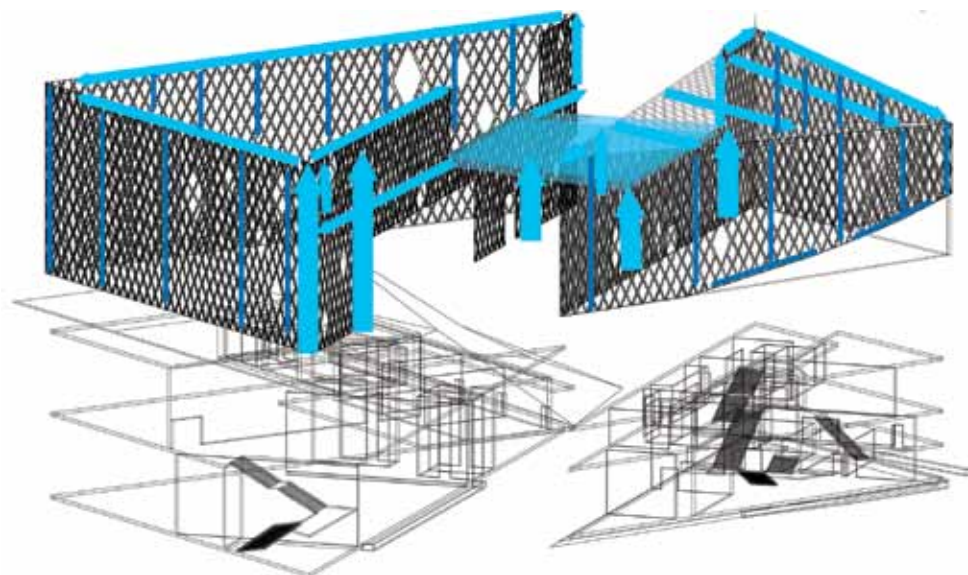
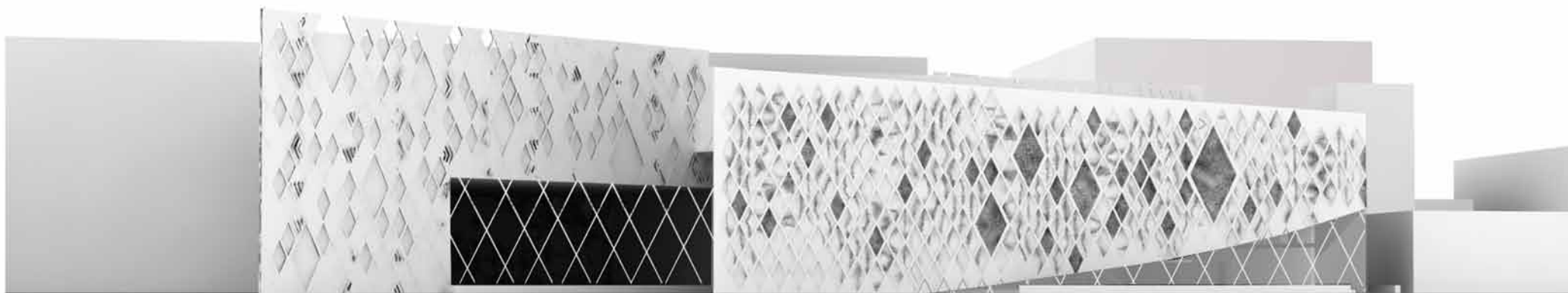
The aim of this studio then was to create new models for an architecture that acts and performs to create culturally significant projects that invent new ways of perceiving and inhabiting built form while seriously exploring the tectonics of material and structure.

THIS PAGE: I11 I21 LIN XIE, I31 MARCUS CHEN

NEXT PAGE: YING LIU



VIA I LOVE



ARCH 605BL LITTLE TOKYO ATHLETICS CENTER

INSTRUCTOR: Alice Kimm

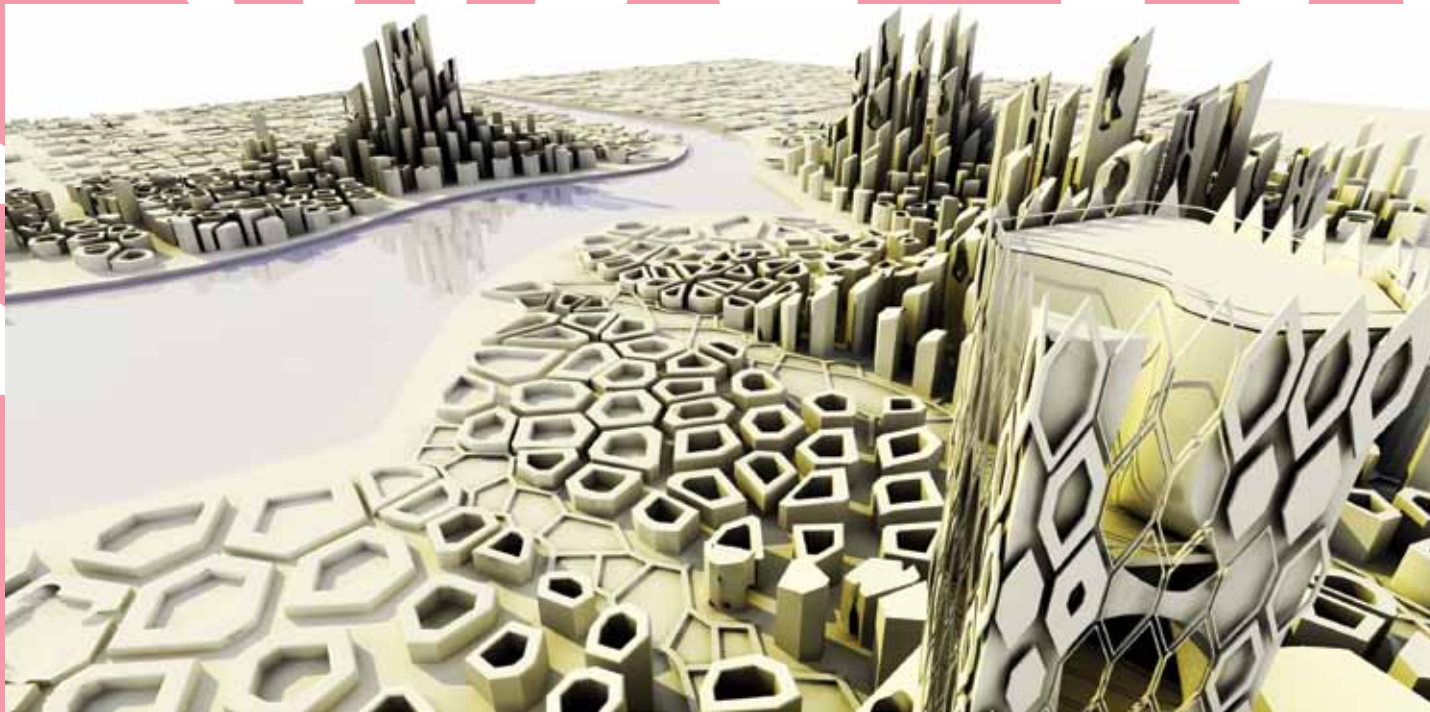
Architecture is a cultural production; the buildings that we produce become entrenched in our collective psyche and, as such, operate on or are operated upon by the same factors that define our contemporary zeitgeist.

Technology is now a primary player atop the architectural chessboard. Much of what we study as exemplary of skillful contemporary design integrates structure, technology, surface, program, and form utilizing increasingly sophisticated digital design and fabrication tools that we have at hand. But often we see design that falls short—because of a single-minded focus on mechanical processes, or an emphasis on just one aspect of performance. (How many “green” buildings have we seen that miss most other targets that might define design intelligence, or design excellence?)

This studio asked students to generate a building design solution that focused on technological performance-based solutions and forms for a given program—a new, and highly anticipated, athletic center to service Downtown Los Angeles’ Little Tokyo population. The background information on the site and the proposed program’s history clarified the cultural and urban implications raised by the project’s imminent realization. Studies and analysis of the

human body’s structure, skin, and performance—under stress, in repose, and in action—informed the technological and formal directions the projects took. Solutions were expected to be fully integrated with an informed manipulation of the myriad other parameters that result in an integrated architecture that succeeds in positively augmenting the cultural landscape.

111 | 21 SONG HEE YOU



ARCH 605BL SWARM URBANISM

INSTRUCTORS: Neil Leach, Tom Reiner, Roland Snooks

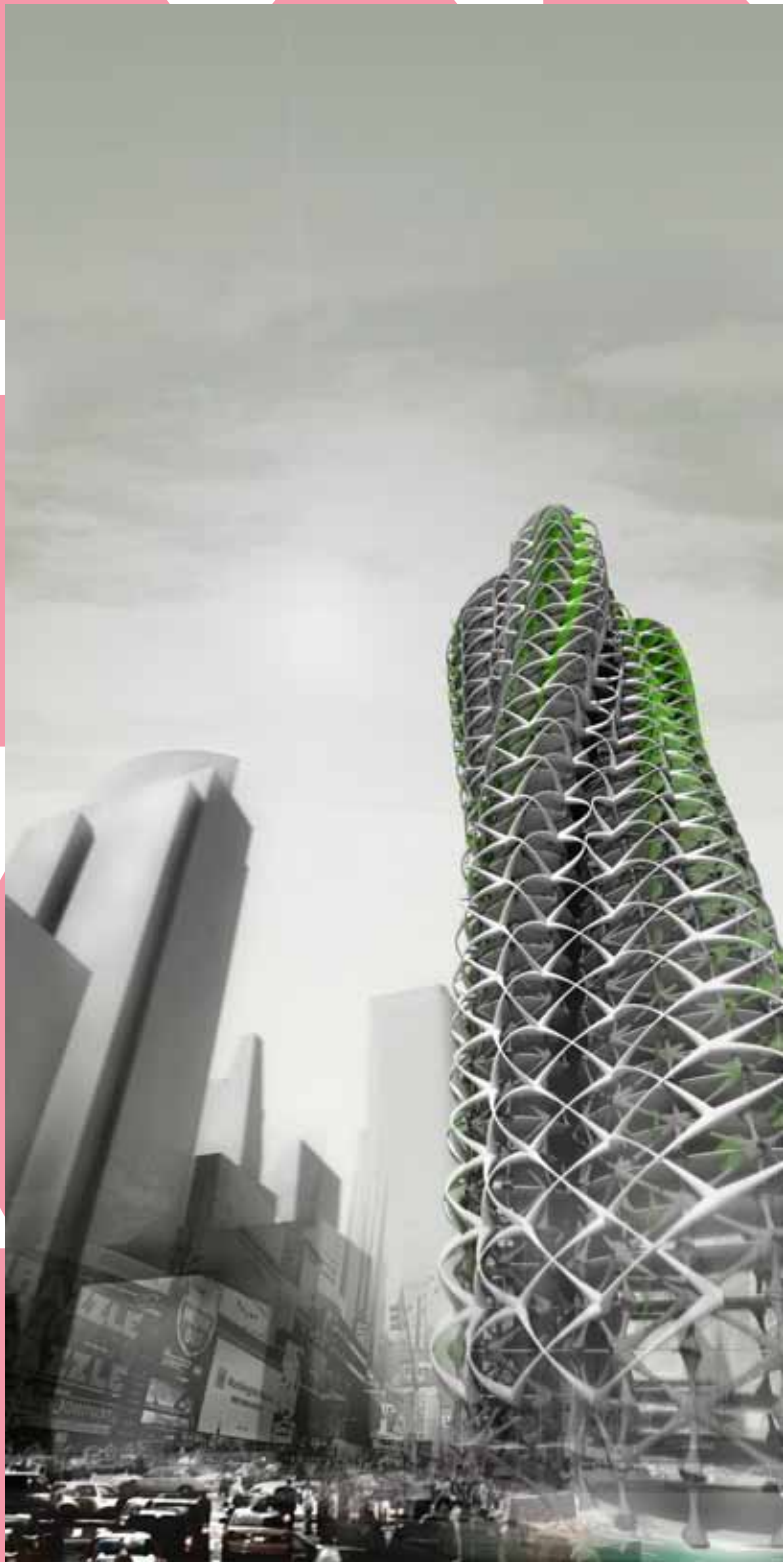
In his book, *Emergence: The Connected Lives of Ants, Cities and Software*, Steven Johnson presents the city as a manifestation of emergence. The city operates as a dynamic, adaptive system, based on interactions with neighbours, informational feedback loops, pattern recognition and indirect control. "Like any emergent system", notes Johnson, "the city is a pattern in time". Moreover, like any other population composed of a large number of smaller discrete elements, such as colonies of ants, flocks of birds, networks of neurons or even the global economy, it displays a bottom-up collective intelligence that is more sophisticated than the behaviour of its parts. In short, the city operates through a form of "swarm intelligence....Importantly, Johnson extends the principle of emergence to the operations of certain software programmes. If cities and software programmes display a similar emergent logic, how might we make use of digital technologies to model a city?" Neil Leach, *Swarm Urbanism*

For some years now we have been using digital technologies to design buildings, from the use of standard drafting

packages to more experimental use of generative design tools and parametric modeling. But how can we use digital technologies to design urbanism?

The logic that informs this studio was one of "swarm intelligence". This is the theory that multi-agent systems of various kinds—from flocks of birds and shoals of fish to neural networks, software programmes and even cities themselves—all begin to display similar forms of behaviour. How then can we use software programmes to generate urban design proposals according to the logic of "swarm intelligence"? By developing from analogue to digital techniques, and shifting in scale from urbanism to individual buildings, this studio offered a comprehensive understanding of the way in which "swarm intelligence" can inform architectural and urban design.

111 YING LIU, MARCUS CHEN, JUHI DAHR, RACHEL ZHANG



ARCH 605BL BODY PLANS (OR BREEDING BUILDINGS)

INSTRUCTOR: Roland Wahlroos-Ritter

Of all conceptual paradigms of architecture, performance is the one which seeks to evaluate the efficiency of its ambitions. Opposed to an architecture for the sake of architecture, it investigates the feed-back loops between architecture and the systems it is embedded in. Isolated questions of form, process, fabrication etc. cease to be apriori conditions of architecture. Performance does not ask how a form looks like, but what it enables. It does not focus on what process was used to make a design, but on what the process was able to generate in the design. Thus performance shifts the focus of interest from essence to effect. The question is not what something is, but what it does.

Andreas Ruby

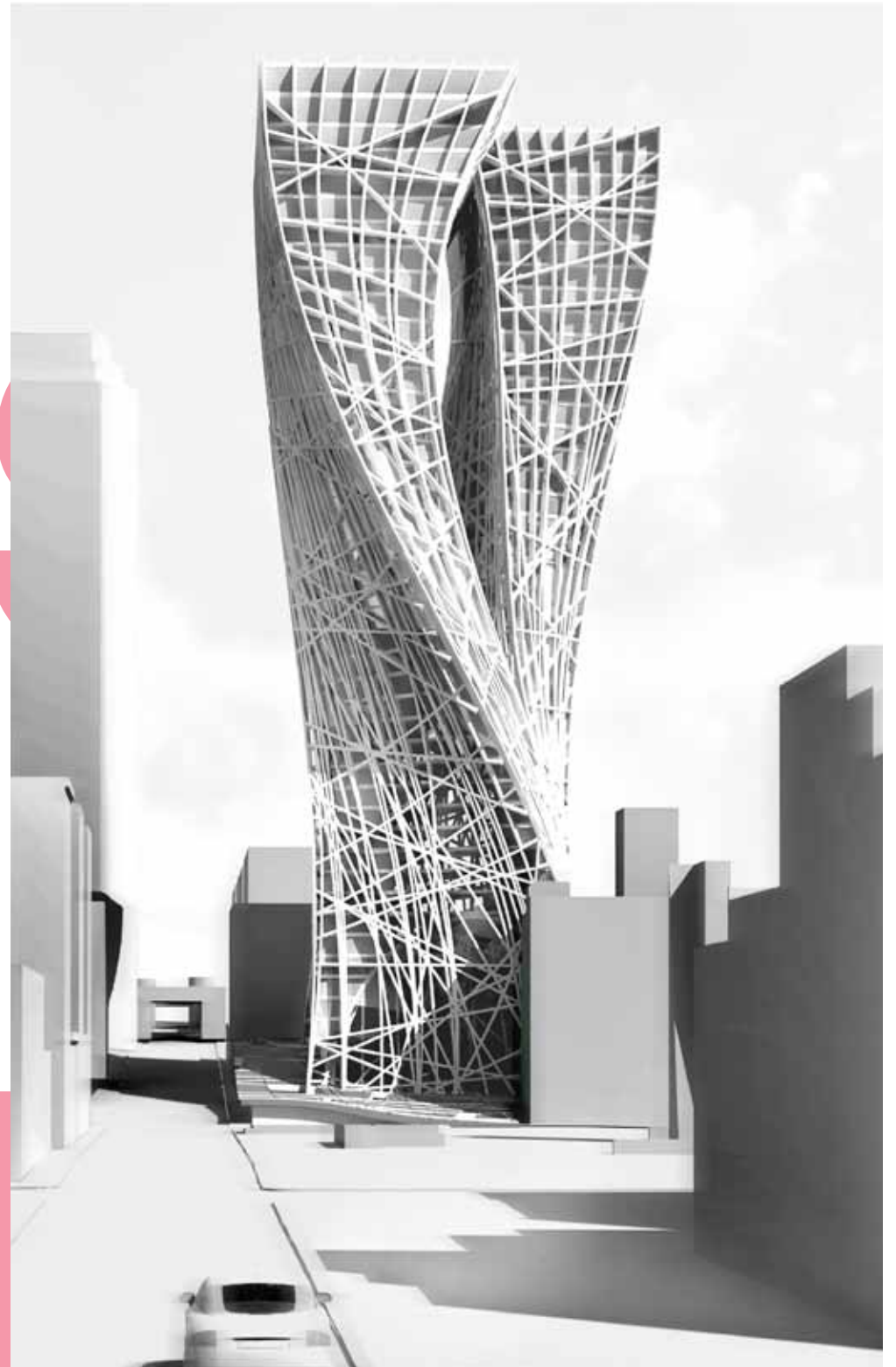
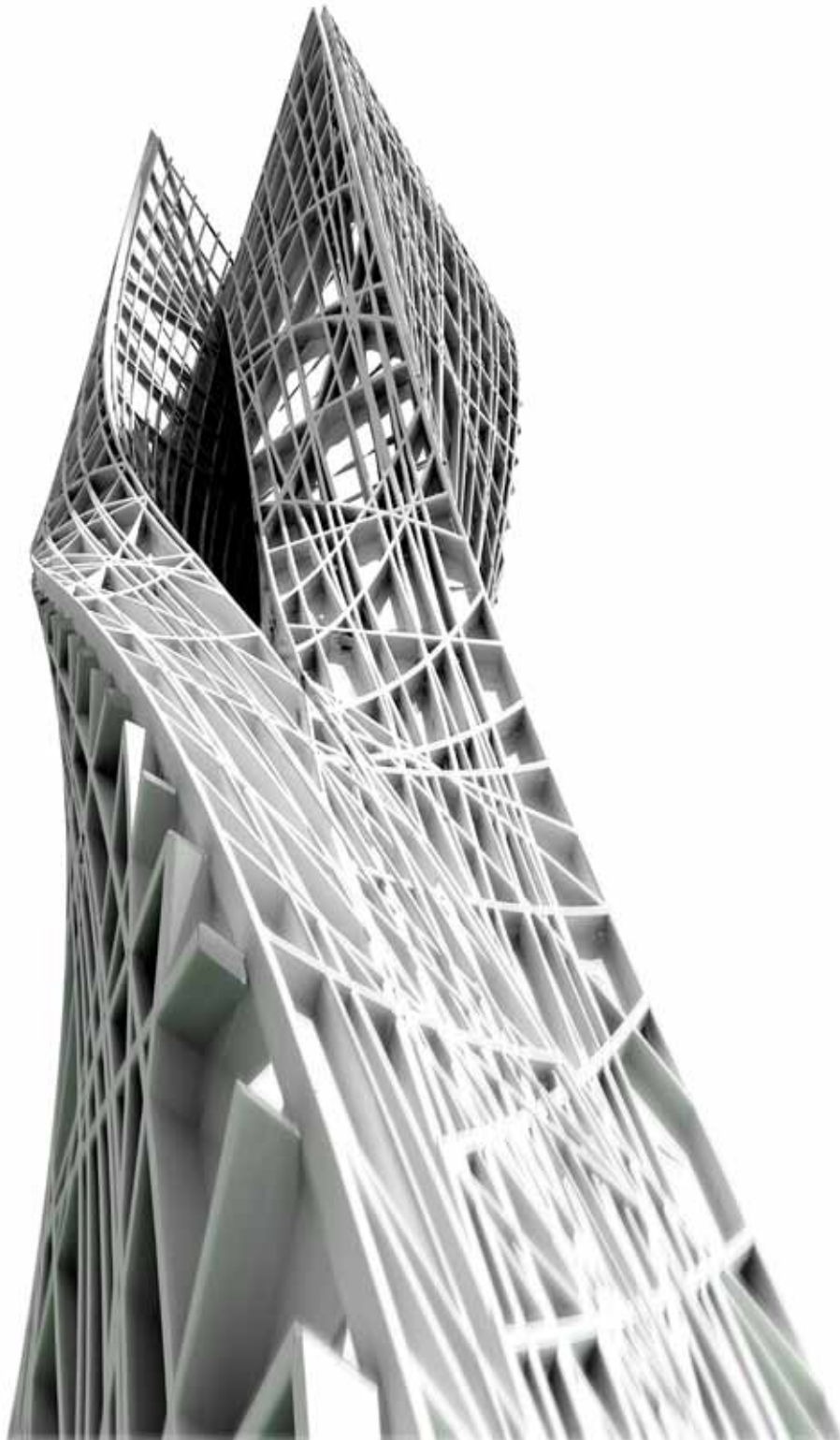
This studio embarked on a series of inquiries to investigate the possibility of breeding buildings within a rich search space. The driving idea was that of designing an evolutionary process from which a large population of potential building designs emerged rather than designing a building in itself.

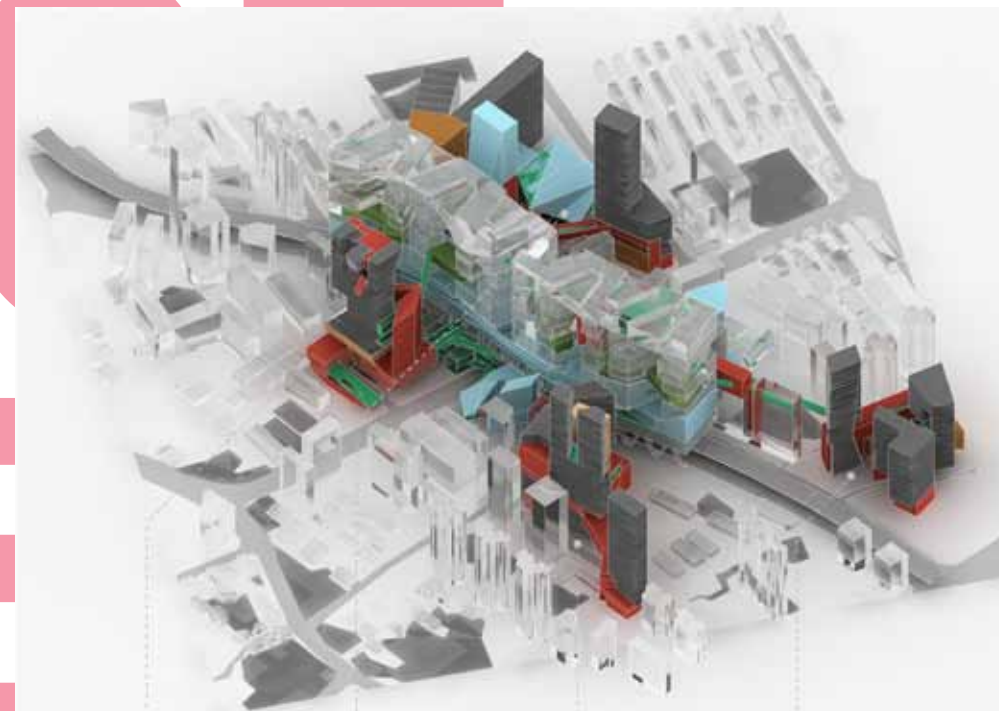
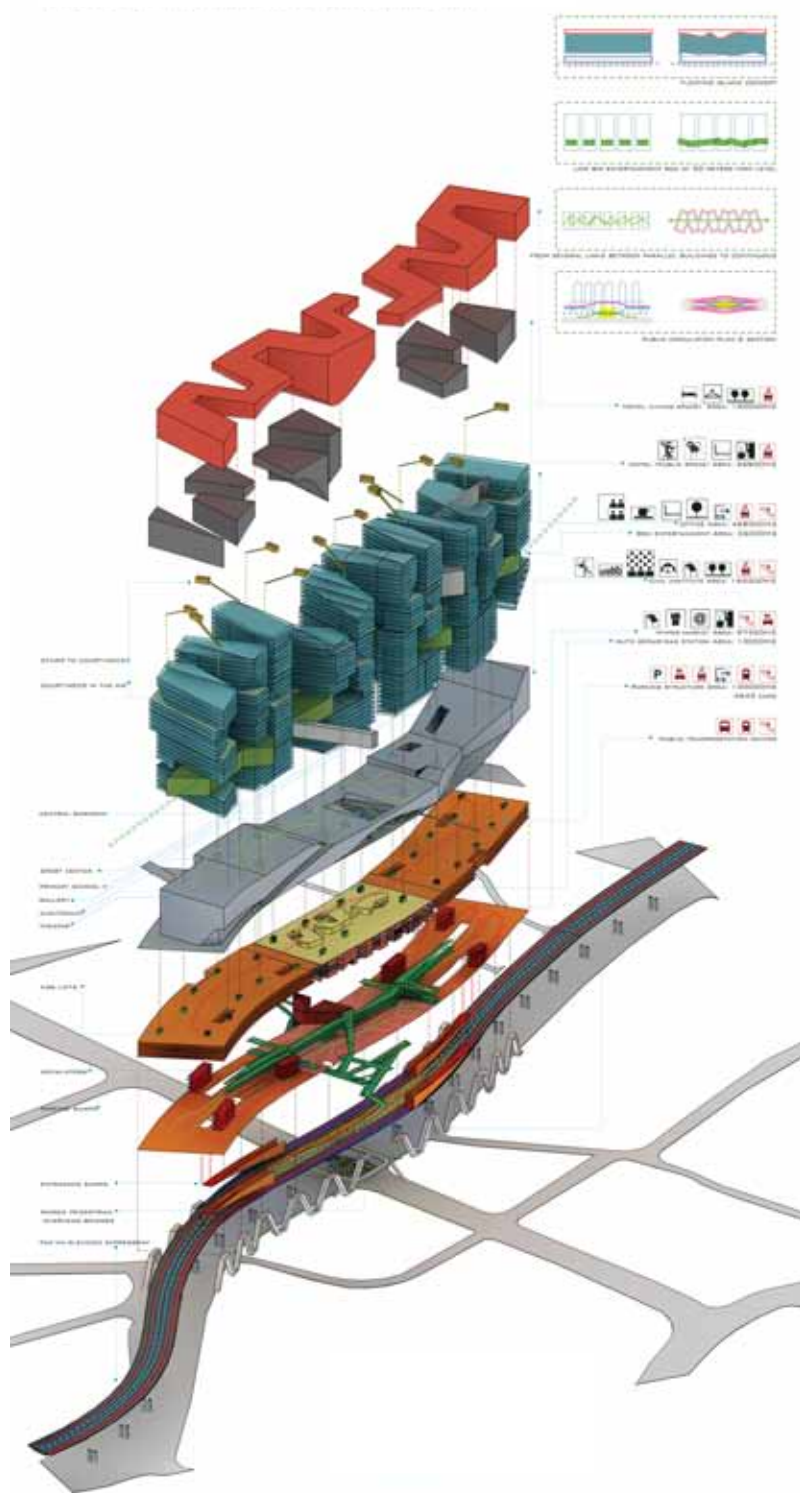
The studio was structured in four sequences:

- Material Computation: In this first sequence the studio explored the morphogenetic potential of material behavior.
- Body Plan: In the second sequence we engaged in articulating basic parametric concepts or “Body-Plans”, to use a Deleuzian term, of our building designs.
- Cellular Aggregations: In the third sequence we established the “bones”—the tectonic elements’ of our building designs and investigated possibilities of automated aggregations of our tectonic elements.
- Phenotypes: The last sequence was dedicated to establish a rich search space within which we bred based on our body-plans a large population of building designs. Selective aesthetic and performative criteria helped to identify fit building designs or phenotypes.

THIS PAGE: I11 I21 SHUANG XU

NEXT PAGE: I11 I21 LIN XIE





ARCH 693B / ARCH 695B DIRECTED DESIGN RESEARCH / THESIS

INSTRUCTORS: Robert S. Harris, Eui-Sung Yi, Paul Tang

Directed Design Research (DDR) is the title given to the independent design exploration that is the final studio-based requirement for the M.Arch degree. The sequence of design studies builds in complexity and scope from one semester to another. The DDR overlaps the second studio and continues through to the third and final semester of the program. As a basis for the DDR studies, each student chose a focus and project requiring initiation of creative action, authorship of an appropriate program, and a response that is consequential both as a design and as an exploration of transcendent, generally applicable, issues and principles.

"Thesis" is the title given to the independent exploration using academic inquiries rather than design. As a basis for thesis study, each student chose a subject and issues requiring initiation of creative research and authorship of a scholarly paper that included findings that are consequential and transcendent.

The distinction between "thesis" and "directed design research" follows the distinction between the primary means of inquiry in the arts and the primary means of inquiry in the physical and social sciences. A "thesis" in the sciences is a proposition that allows a method of study

towards a resolution or "proof." Such study allows replication by other persons to validate the findings. Such proof and validation is not characteristic of findings in the arts. Rather, issues and ideas are explored to generate greater insight about "aspects" and about "qualities," as well as the generation of background knowledge and information. The findings are valuable as they resonate with the experience of other artists and with the public. In both the thesis and directed design research, serious inquiry requires both an identification of an issue that deserves exploration and a means of study that promises to provide useful findings.

111 121 GUANG XU

MASTER OF BUILDING SCIENCE

DIRECTOR: Marc Schiler, FASES, LC

Building science and technology studies at USC recognize that exemplary buildings are based on responses to the human condition and to natural forces, requiring good judgment and knowledge for the creative use of architectural technology.

The Master of Building Science program is intended for students with a degree in architecture, engineering or related areas. The typical program length is two years. Students with a professional five-year architecture degree may qualify for advanced standing. Studies are centered around each student's thesis and are supported by research seminars and electives from architecture, engineering and other related fields. Students are individually guided through their study and thesis by three faculty advisors. The faculty has academic, research and professional practice experience in architecture, civil and structural engineering, environmental control system design, and computer applications. Many papers based on thesis work have been co-authored by faculty and students have been published and/or presented at professional conferences.

DESIGN AND RESEARCH DIRECTIONS

The need exists for a new generation of professionals whose education has prepared them to fully participate in bringing appropriate technology to the building and rebuilding of humane and supportive cities. Within this context, the program emphasizes:

- The integration of planning, design and technology to form a coherent and interdependent force for the appropriate construction of urban places.
- Recognition of the ecological importance of energy-conscious design and construction as well as the high social value of places in which natural forces and systems are being utilized rather than suppressed.
- The development of research and design methods suited to the complexity of building in urban settings and effective in the use of extensive information.

AREAS OF STUDY:

- Design processes that explore form in response to natural forces: sun, wind, water, seismic and thermal
- Exploration of unique structures: lightweight, long-span and high-rise
- Static and dynamic simulation models for investigation of structures
- Lighting and daylight design
- Passive and active solar design for heating and cooling
- Acoustic isolation and performance
- Systems integration: structure, mechanical, electrical, envelope, for fit and synergy with architectural objectives
- Industrialized construction processes, automation, transportation, etc.
- Materials and methods of construction
- Theory of architectural technology
- Computer tools: animation simulation, structural and environmental analysis, simulations of lost architecture, design information systems, smart building technology, stereoscopic visualization, and related topics
- Sustainability



ARCH 611
ADVANCED BUILDING SYSTEMS INTEGRATION:
STRUCTURES AND MATERIALS

INSTRUCTOR: Gail Peter Borden

An understanding of fundamental issues of structures and construction materials is necessary for the pursuit of architecture. Proficiency with these technical principles will stimulate their design possibilities and increase their practical and technical value. This course related the theories of structures and technologies with construction materials so that their interaction could be better understood historically and in their current practice. Through this course students were able to bring leadership to a multi-disciplinary design and engineering process. The aims of this course were:

- To acquire a conceptual framework and vocabulary for dealing with building structures and materials.
- To be able to compare various possibilities for a given application.
- To understand the relationships between technical systems of a building and their direct influence on design.

The course combined classroom lectures and discussions with hands on projects focused on the construction activities and the manufacturing processes of construction materials. Tests and projects were intended to stimulate

design decisions regarding material selection, application and performance.

This seminar delineated the full-range of performance mandates required for today's complexity of responsibilities. The course focused on the macro and micro considerations of material, manufacturing, fabrication, construction and innovation. The course explored real world connectivity through material themes.

111 RYAN HANSANUWAT, 131 LUTAO WANG

mission
how to...green your
homeinteractive
case study map

glossary

links

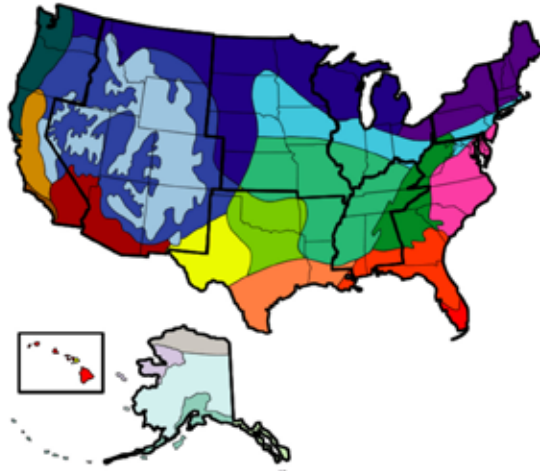
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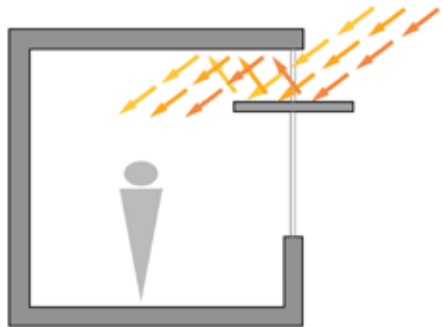
home

Click on the region in which you live.

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Light Shelves

A light shelf can solve several problems at once. If it extends past the face of the building, as shown, it can shade the view glazing - windows - which are often a source of glare in the space. It can also reflect natural light off of its top surface to the ceiling, which would more evenly distribute it into the room.



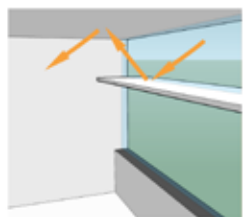
DAYLIGHTING

HEATING

VENTILATION

COOLING

POWER



For a light shelf to work properly, mount it between the top and bottom set of windows in a space.



ARCH 692B

BUILDING SCIENCE MASTER'S THESIS

INSTRUCTORS: Marc Schiler, FASES, LC, Director,
Master of Building Science Program, Doug Noble, FAIA, Ph.D.,
Chair Ph.D. Program

This course had several coincident agendas. It entailed the completion of the Master's Thesis for the Building Science program which each student had developed in preceding 596 and 692A classes. In the process, a broad range of ancillary topics were addressed and a "culture of learning" was created as part of the course. Although it was a studio course, there were guest lecturers, lectures of assigned topics and periodic reviews, as well as normal studio time.

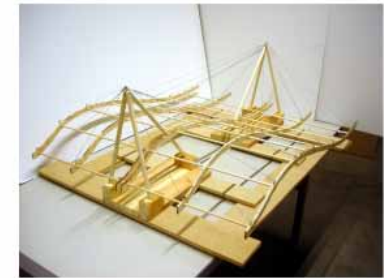
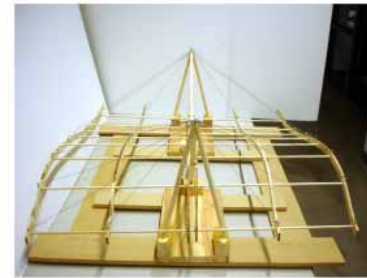
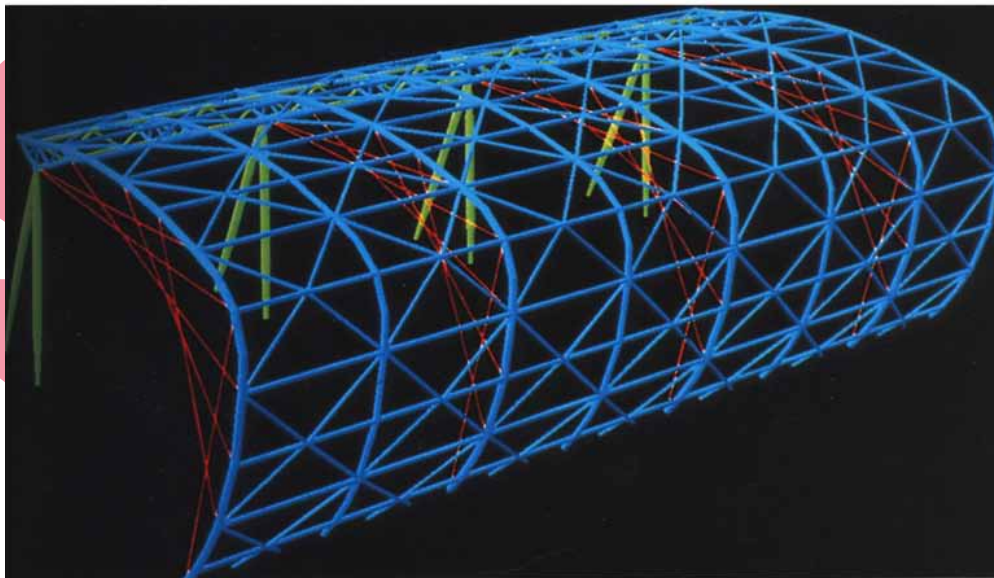
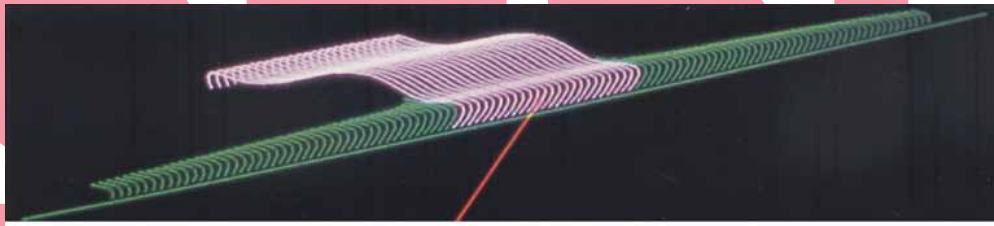
The scientific method in general was reviewed as it applied to each thesis topic. The value and impact of investigative tools in the process and product of Architecture were considered. Papers were written which could be submitted to conferences or journals as a prototype of technology transfer (and a measure of the value and validity of the material.) Several interim presentations to the first year students and to outside consultants and committee members, occurred prior to the final presentation. Topics in Building Science which are of current interest were examined, whether or not one of the current theses addressed these topics. The

theses were written in several stages, so that there was opportunity to modify and improve both the research and the writing prior to the thesis due date. Finally, each student produced a shorter version of the thesis material in a format consistent with publication. In the process, it was hoped that each student would learn something about the content area of each other student's thesis.

The course had several overlapping agendas:

- Experimentation (data collection or computer simulation, analysis and theorizing, or tool creation, testing and prototypical results.)
- Scholarly research (writing about the precedents in the field.)
- Completion of a coherent and accurate thesis.
- Translation and condensation of the thesis to create a reasonable understanding of the work accomplished and its implications.

111 | 31 EMILY KEMPER



ARCH 613 STRUCTURES RESEARCH

INSTRUCTOR: Goetz Schierle, Ph.D., FAIA

The objective of this course was to develop informed intuition for structures, their response to natural forces and integration with architectural objectives. The subject matter included the study of vertical structures in response to gravity, thermal, and lateral wind, seismic forces; integration with architectural objectives, fit and synergy of form and structure through computer aided design and analysis. Structure systems investigated include: shear walls, braced frames, moment frames, framed tubes, braced tubes, bundled tubes, belt trusses/outriggers, and cantilever systems. The course started with investigations of case studies selected by students, followed by designing alternate or modified structures for the case study projects. Location of the case study projects determined if lateral wind or seismic forces govern the design. Students defined stress and strain of the existing structure based on actual dimensions or, if they were not available, based on code constraints. Comparing the merit of existing and redesigned structures was defined as follows:

- Compute the total structure material of the original design
- Compute the total structure material of the revised design

- Compute the number and cost of joints for both designs
- Compare stress and strain of both designs
- Compare structure costs for both designs

In addition to objective issues, subjective issues were also considered, such as aesthetics, synergy of form and structure, etc.

[11] [2] DEEPA CHANDRASHEKAREN



MASTER OF HISTORIC PRESERVATION

DIRECTOR: Kenneth Breisch, Ph.D.

Because of its diversity of cultures and exciting architectural history, Los Angeles presents students with an ideal laboratory in which to explore new approaches to historic preservation. Potential areas of research include the study of the recent past and the preservation and economic revitalization of communities and cultural landscapes which have been given relatively little attention elsewhere. Ongoing activities at Frank Lloyd Wright's Freeman House and Greene and Greene's Gamble House, both of which are operated by the USC School of Architecture, also provide exciting opportunities for hands-on study of preservation philosophy and cutting-edge conservation technologies.

The primary objective of the Master of Historic Preservation Degree is to impart to students a basic familiarity with the origins and development of the philosophy, theory and practice of the historic preservation movement. This program has been developed so that students will graduate with a broad practical knowledge of the laws, regulations and policies that apply to preservation practice in the United States and the Southern California region. Graduates will also have the ability to apply the appropriate government standards for the documentation, designation, preservation and rehabilitation of a broad range of historic and cultural resources, including structures, districts and landscapes.

Students are expected to have attained an understanding of American and Southern California architectural history and the critical methodological tools necessary for a professional engaged in the investigation, interpretation and evaluation of these built environments. They also will have a basic understanding of the criteria and processes necessary for listing a property in the National Register of Historic Places or as a state or local landmark. They will possess a working knowledge of the fundamental economic strategies, standards and guidelines that apply to the financing and development of historic preservation projects. The typical program length is two years, although students may apply for advanced standing.

AREAS OF SPECIALIZATION

In addition to the core curriculum, students, under the guidance of the program director are encouraged to develop an individual area of concentration through their choice of electives. This concentration may focus on architectural design and rehabilitation, the rehabilitation and preservation of historic and cultural landscapes, or problems associated with building science and technology. Students may also take advantage of the wide range of courses offered in other schools at the university to develop other specialized areas of study.

MASTER OF HISTORIC PRESERVATION THESIS

To complete the degree program, students undertake an independent thesis related to their chosen area of concentration. The objective of this original research is to advance our understanding of the field and nature of historic preservation. The selection of a thesis topic and a three-member faculty committee including a principal critic is required at the end of the second semester of study.

111 JULIUS SCHULMAN AT THE FREEMAN HOUSE
PHOTO BY KEN BREISCH

**MASTER OF LANDSCAPE ARCHITECTURE
FIRST PROFESSIONAL AND
POST-PROFESSIONAL DEGREES**

DIRECTOR: Robert S. Harris, FAIA, DP-ACSA

STATEMENT OF CENTRAL PURPOSE

Reweaving, Remodeling, Transforming
the Urban Landscape

USC offers an international laboratory for the study of place, in an extra-ordinary natural landscape, at the center of an unparalleled multi-cultural region, within the context of a great urban university. Los Angeles opens the extremes and the in-betweens of urban conditions and of landscape architecture possibilities. Thus, the study of landscape architecture at USC has a particular focus on urban place making in relation to three principles:

First, our emphasis is on truly advanced study based on the knowledge and skills to engage complex issues and to undertake ambitious explorations. Graduates are prepared for leadership opportunities in professional practice as well as in higher education. Students entering the program with undergraduate education in non-design disciplines should be prepared not only to develop professional knowledge and skills, but to enjoy and extend such knowledge across disciplines and cultures. Students entering with pre-professional or professional degrees in landscape architecture or architecture should be prepared to enter into extraordinary new trajectories of landscape architecture research and practice.

Second, our emphasis is on urban landscapes, and on the responsibility of design professions to create the qualities and meanings of our urban futures. Landscape planning and design must attend to places and projects at every scale from the garden to the region. Critical contributions must be made to the reclamation of degraded natural systems and places and significant progress must be made towards assuring a next generation of design professionals who know how to design projects that are themselves evocative, and that repair and enhance their contexts... nothing less than this will address the opportunities and challenges of our cities.

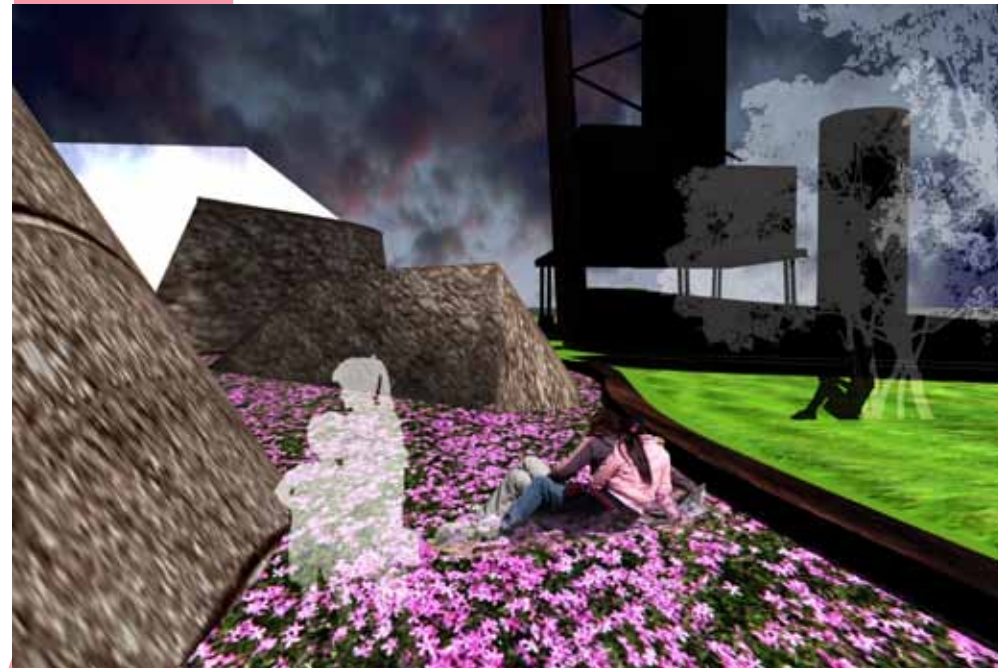
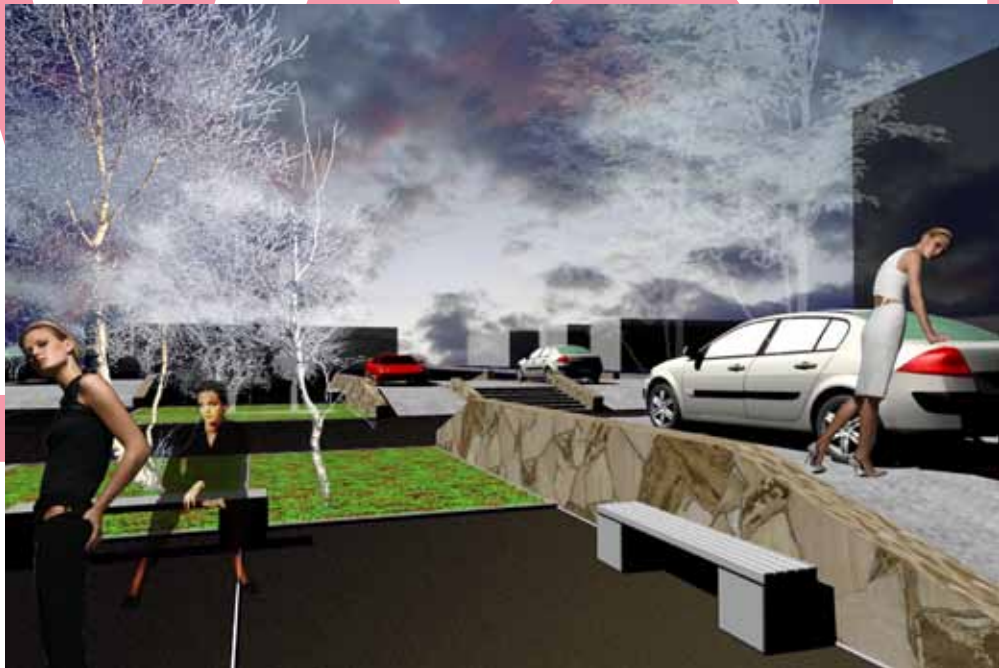
Third, we believe that place making is fundamentally a collaborative responsibility that requires leadership from professionals across the entire domain of planning and design. Thus we have created seamless relationships between programs, students, and faculty engaged in architecture, landscape architecture, preservation, building science and planning studies. In this regard, we emphasize intense, highly identifiable core studies in related disciplines whose boundaries are permeable and overlapping.

DESIGN RESEARCH AND THESIS OPTION

All MLA students are enabled through an independent design research study or thesis to advance new issues and ideas as well as to demonstrate proficiency in the field of landscape architecture. Students select a committee of three advisors including faculty members and other distinguished professionals. These studies occur during the final two semesters of each curriculum.

ACCREDITATION

The Master of Landscape Architecture degree program includes three curricula. Curriculum +3 for students with no prior design education and Curriculum +2 for students admitted with advanced standing have "Candidacy Status" in the process of accreditation by the Landscape Architecture Accreditation Board. Curriculum +1.5 for students with advanced placement is a post-professional study and is not subject to accreditation. Information about landscape architecture education and accreditation in the United States may be found online at www.asia.org/Education



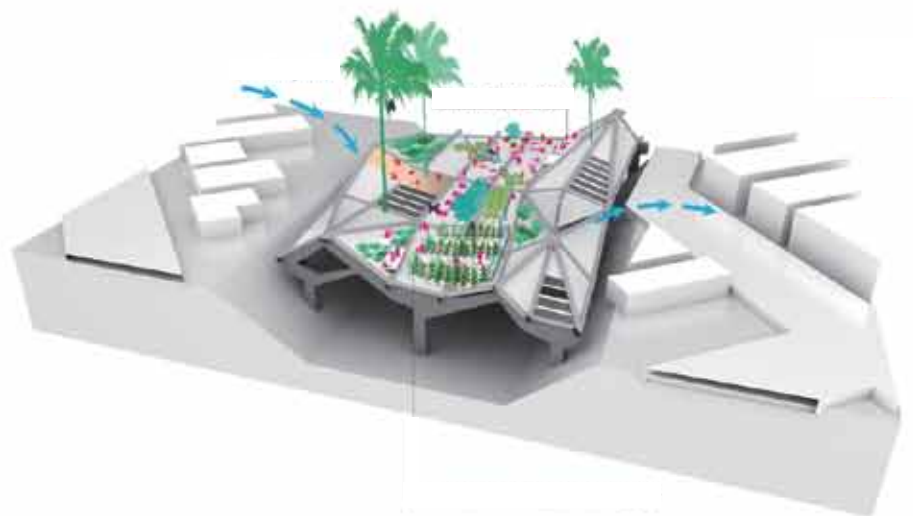
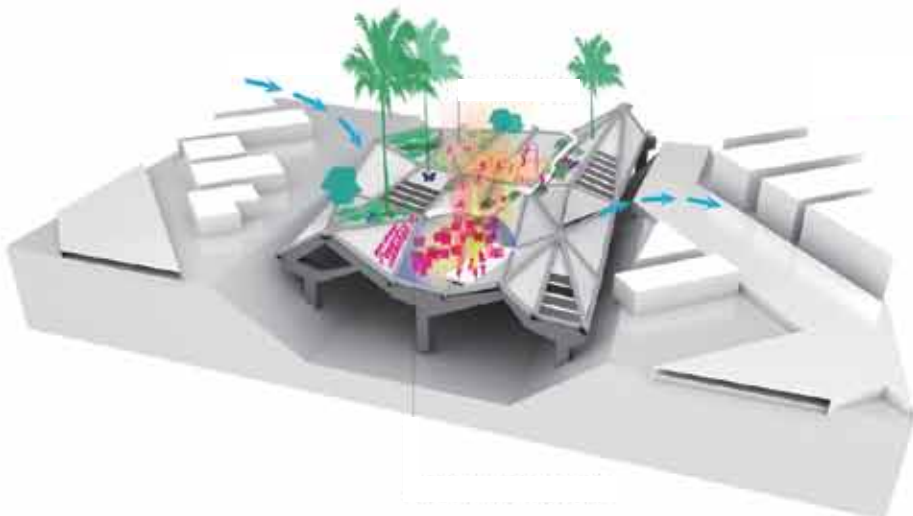
ARCH 542AL
VAGUE TERRAIN: REMAPPING
THE URBAN LANDSCAPE

INSTRUCTOR: Gerdo Aquino

Contemporary cities throughout the United States are exploring their built environment in search of ways to address issues of population growth, environmental pollution, transit, and open space. With an estimated 100,000 people moving into LA Metro area every year for next 10 years (www.laamanac.com) the impact is serious enough for this exploration to take on new directions. To further compound the challenges of urban growth are the limitations placed on the specifics of how new public works projects occur and within whose jurisdiction. Unlike stand alone buildings whose sites often are contained within a block, public infrastructure projects must stretch beyond the perceived political boundaries and strive to connect linkages and destinations. Acting as systems, these public infrastructural projects can take on "vague terrain" such as underutilized sites such as post-industrial lands, excessive Right-of-Way easements, parking lots, alleyways and median strips to which new program such as pedestrian paseos, bike paths, buildings, easements, infrastructure and open space can take shape.

This studio project considered the potential of "vague terrain" in the context of West Hollywood and Los Angeles at the intersection of Santa Monica and LaBrea. A political boundary between the two cities has created a physical landscape of contrasts, contradictions, and a kind of beauty that only a discerning eye can appreciate. The effect of these boundaries on the urban landscape coupled with a comprehensive investigation into a ½ mile radius around this intersection formed the basis of the studio. Issues related to the interconnectedness of urban systems and pedestrian spaces heightened the overall aim of the studio which was meant to reveal the opportunities and constraints "landscapes" have in this context.

I11 I21 XIAOYE ZHANG



ARCH 542BL
44 ACRES: HOLLYWOOD FREEWAY CENTRAL PARK
 INSTRUCTOR: Gerdo Aquino

This studio project considered the notion of landscape infrastructure in the context of the Hollywood Central Park and the recently completed feasibility study (October 2008) of which the following is an excerpt:

Hollywood's Central park will be built over the 101 Freeway from Hollywood Boulevard to Santa Monica Boulevard. A mile in length, it will provide 44 acres of park space in the heart of the historic neighborhood. Like all great neighborhoods, Hollywood's strong and diverse community needs a grand stage for the free and uninhibited practice and evolution of its local culture. However, the current state of the 101 Freeway and the fragmentation it generates inhibits the movement of people and flow of information vital to such an evolution. For a rapidly growing community struggling to reassert its true identity, the proposed park can be the mechanism that reconnects one side of the city to the other, providing a central location for the public interaction and exchange that defines a flourishing community.

It was the intention of the studio to further the potentialities of the proposed Hollywood Freeway Park through

extensive urban research and understanding of the site's varied cultural and ecological histories. A process of mapping, documentation and synthesis (urban research) formed the initial foundation for studio group exploration, followed by three separate team master plans which finally lead to individual detailed designs of specific areas within the master plan. Urban ecological strategies such as water harvesting, use of native plants, wildlife habitat creation, solar, wind, etc. were employed at every scale throughout the semester. Another intention of the studio was to engage individuals directly involved in the initial conception of the park to deepen the students' understanding of the efforts involved in making projects like this a reality.

[11] [21] MENG YANG



ARCH 698BL MLA THESIS, OPTION 1, DIRECTED DESIGN RESEARCH

NSTRUCTOR: Dr. Rachel Berney

Directed Design Research (DDR) is the title given to the independent design exploration that is the final studio-based requirement for the MLA degree. Students are required to identify and explore transcendent issues and principles through the discipline of landscape architecture design.

The distinction between "thesis" and "directed design research" follows the distinction between the primary means of inquiry in the physical and social sciences and the primary means of inquiry in the arts. A "thesis" in the sciences is a proposition that allows a method of study towards a resolution or "proof." Such study allows replication by other persons to validate the findings. Such proof and validation is not characteristic of findings in the arts. Rather, issues and ideas are explored to generate greater insight about qualities. The findings are valuable as they resonate with the experience of other artists and with the public. In either case, serious inquiry requires both an identification of an issue that deserves exploration and a means of study that is capable of developing valuable findings.

Within an overall consideration of urban life, five sets of investigations are fully supported by the faculty and other resources of the University and the region.

- The opportunities to create more supportive urban places
- Habitat; the public realm; open space and the streets; historic places and districts; places of commerce and exchange; amenity and meaning.
- Understanding the integral importance of ecology and technology
- Natural systems and infrastructure; processes and materials for landscape remediation and construction.
- Attention to design methodologies and processes
- Theories and practices of designing; collaborative approaches to project investigation, development and implementation; methods and techniques of simulation and visual communication;
- Attention to issues of theory, history, and criticism
- Methods of historical inquiry, theories of interpretation and criticism; and socio-cultural implications of process and form.

I11 I21 I31 HAN WU

PH.D. IN ARCHITECTURE

CHAIR: Doug Noble, FAIA, Ph.D.

The Ph.D. program at USC admits students of exceptional intelligence, character and commitment. Graduates will add to the knowledge base of the field of architecture while they gain knowledge and experience about the teaching, research and service aspects of academic careers. Graduates will be prepared for leadership positions in academic, research and practice settings.

The USC Doctor of Philosophy (Ph.D.) in Architecture addresses the rapidly growing global demand for leaders in environmental design research. Our highly qualified faculty guide students through a rigorous and highly demanding program of advanced study and original research. The program maintains a commitment to the highest standards of academic achievement. Admitted students are exceptionally well prepared to structure and communicate ideas and to make scholarly contributions to the built environment discipline.

Re-established in 2008, the Ph.D. program is an umbrella degree designed to grow into additional areas of specialization as the graduate program positions appropriate coursework, faculty, and research support. As we originate the program, we will build in the strengths of the previous "Doctor of Building Science" degree program that was established in the School of Architecture in the mid 1960's.

The program is structured around intensive seminars and an individualized program of study. Students will gain a fundamental knowledge base in building science and technology including advanced analytical and research methods. Students are expected to master a defined field of scholarship that constitutes a foundation for critical inquiry required by research. Graduate Certificate programs offer students the opportunity to establish additional areas of expertise. After completion of a core set of required and elective coursework, the program of study culminates in the development of a dissertation of original scholarly research guided by a faculty team. The Doctor of Philosophy is awarded to students who complete a substantial dissertation of original research that adds new knowledge to the field.

The Ph.D. program seeks to address serious challenges and global implications. Admitted doctoral students will join the faculty and continuing students as we investigate topics. Examples of current research interests by the USC Architecture faculty include:

- Architectural Science Education
- Building Information Modeling
- Building Skins
- Cable-Suspended Glass Skins
- Digital Fabrication
- Digital Media
- Fabric Structures
- Historic Structures Technology
- Integrated Architectural Technology
- Lighting / Daylighting / Glare
- Materials and Assemblies
- Performative Architecture
- Seismic Design
- Solar Access
- Sustainability

The Ph.D. program encourages an attitude towards study that USC President Steven B. Sample describes to as "breadth with depth." Students are expected to have a broad education, skills, and experience. A community of scholars from diverse locations and cultures provide a rich setting for learning. We actively seek candidates from around the world, and we encourage our students to participate in our graduate overseas programs.

Ph.D. candidates are colleagues of the faculty and are expected to contribute to and foster the intellectual community of the USC School of Architecture. Candidates will be prepared to function in research, academic and professional environments as university faculty, consultants, professionals, and scientific researchers. Faculty and students are held to the highest standards of academic excellence and environmental ethics that help create the quality of experience expected at one of the world's finest universities.

