# Beijing Olympics 2022

Studio: Fall 2016 – Spring 2017
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Partners: 清华大学 Tsinghua University (Beijing) +
Escola Tècnica Superior d'Arquitectura de Barcelona (ETSAB)

Site: Shengjing Shan District, Beijing

Studio Summary:

The studio will design Olympic venues, including legacy housing and urban villages, for the 2022 Beijing Winter Games amidst a post-industrial district. The Olympic Games have established a modern legacy of imprinting singular, symbolic and lasting physical impressions upon their host cities. The studio will focus on designing clustered, multi-layered, cross-programmed urban organizations for the 2022 Beijing Olympics emphasizing the interaction between water, landscape, building, function, program, sports and lifestyle.

Olympics in Beijing:

Beijing, a city of approximately 21 million people, is a center of political, cultural and economic influence in the world's most populous nation. The city has experienced exceptional growth over the past two decades and has become one of the world's most visited destinations.

The 2008 Beijing Games had a significant impact on the city, delivering a legacy of new world-class sport venues; new public recreational facilities; a new convention center; improved transportation systems; heightened interest and expertise in sport; an increased focus on environmental issues; and greater awareness and inclusion of people with impairments.

The slogan for Beijing's bid, "Joyful Rendezvous upon Pure Ice and Snow," expresses the desire to bring people from China and around the world together for a celebration of winter sports in a spirit of friendship. The word "pure" conveys China's desire to create a cleaner environment.

Beijing's vision for the Games seeks to incorporate winter sports into people's lives, with the ultimate goal of improving overall fitness and health. Beijing 2022 has offered a regional concept intended to develop a winter sports market for more than 300 million people in northern China.

The Games vision also aims to accelerate the development of the Beijing-Zhangjiakou Sport, Culture and Tourism Belt, offering a new impetus for China's economic growth and sustainable development in Beijing and Hebei Province, where the snow sports competitions would take place.

## Olympic Site Concept:

Beijing has proposed a three-zone plan: the Beijing City Zone and two mountain zones: the Yanqing Zone and the Zhangjiakou Zone. The Games concept makes good use of existing venues and infrastructure in Beijing, as well as ongoing development in the mountain resort area east of Zhangjiakou City. New venues in Yanqing are intended to serve legacy goals related to winter sports and tourism. Each zone is compact, with its own Olympic Village and minimal travel times within each zone.

The Beijing City Zone is dual centered: one center is in the Olympic Green from the 2008 Olympic Games, with an Olympic Village, the IBC/MPC and three ice venues in close proximity. Other venues and villages will be in the Shengjing Shan District (**the focus on this studio**).

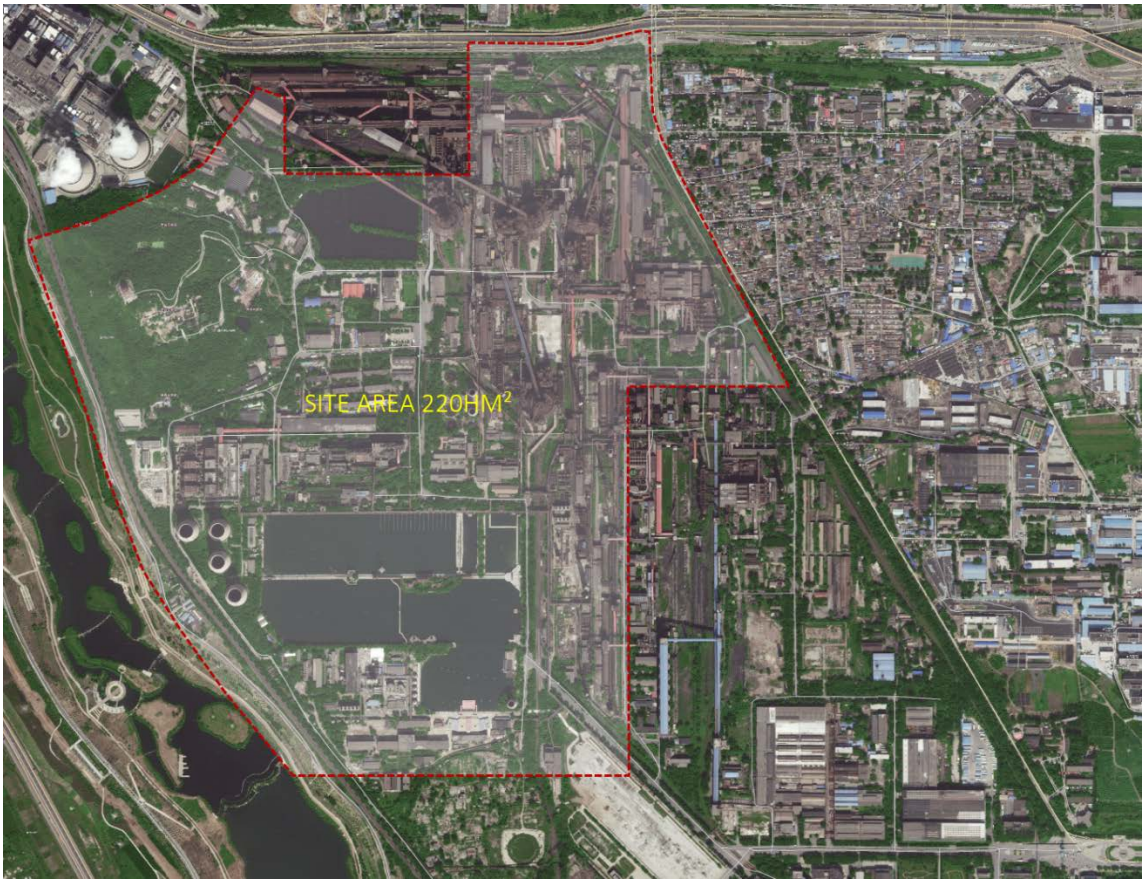
The Yanqing Zone would be approximately 90km northwest of the Beijing Olympic Green and would contain the Alpine skiing and sliding venues.

The Zhangjiakou Zone would be approximately 160km from the Beijing Olympic Green. It would house venues for Nordic combined, ski jumping, biathlon, cross country skiing, freestyle skiing and snowboard.

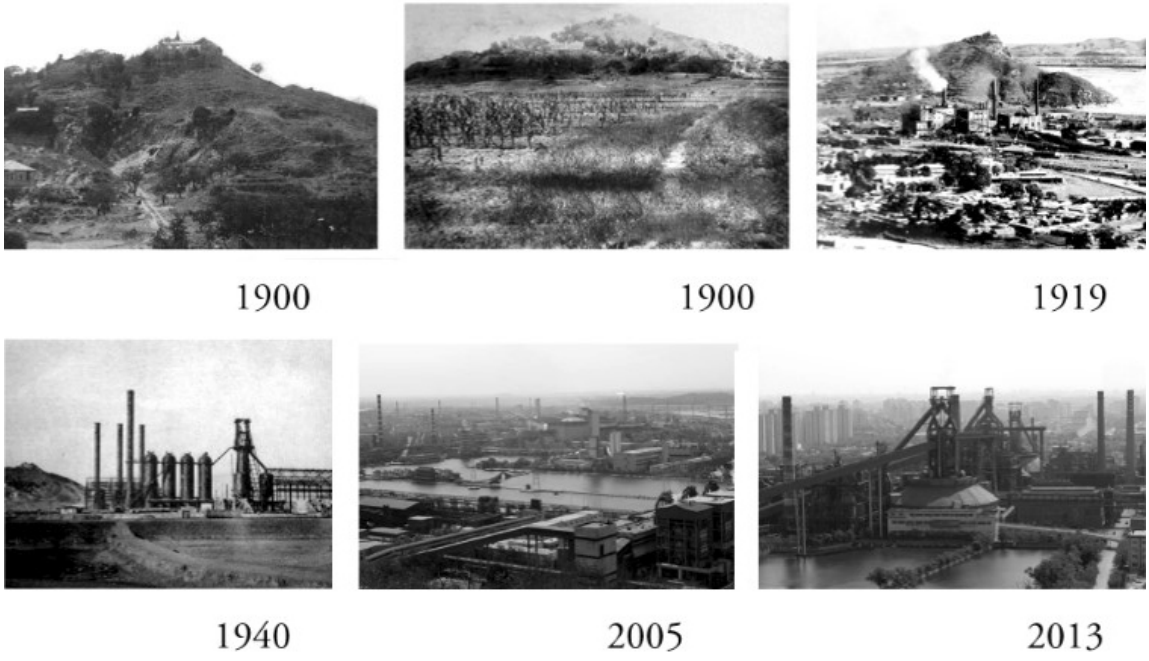
The Zhangjiakou and Yanqing Zones have minimal annual snowfall and for the Games would rely completely on artificial snow.

## Studio Site: Shengjing Shan District, Beijing

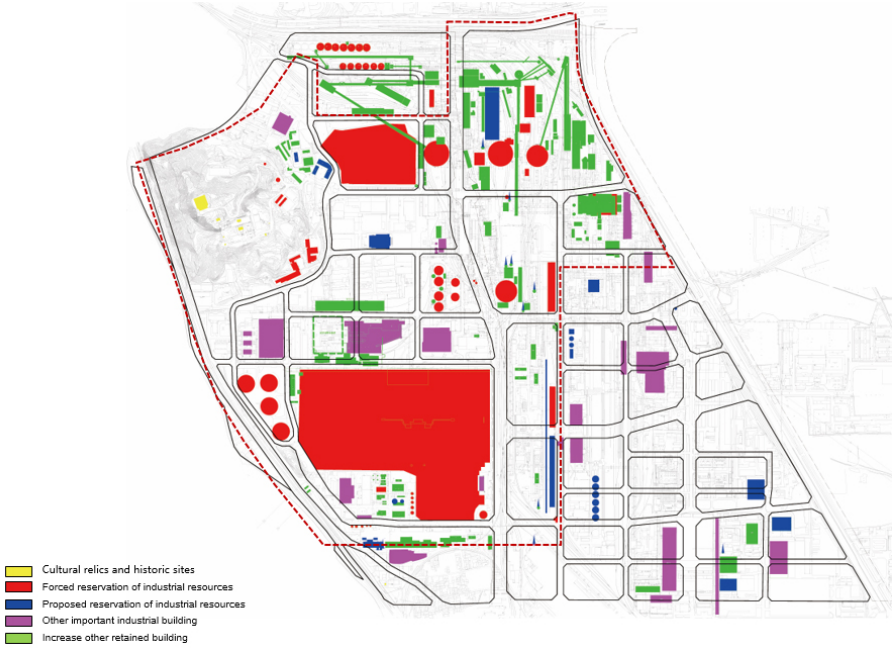
The site for the studio is on postindustrial land recently vacated by China's third largest iron and steel manufacturer, Beijing Capital Iron Works (BCIW). The site is crossed by Chang'an Avenue, and gradually enters into the urban core area. To the West, the site is situated along the banks of the Yongding River.



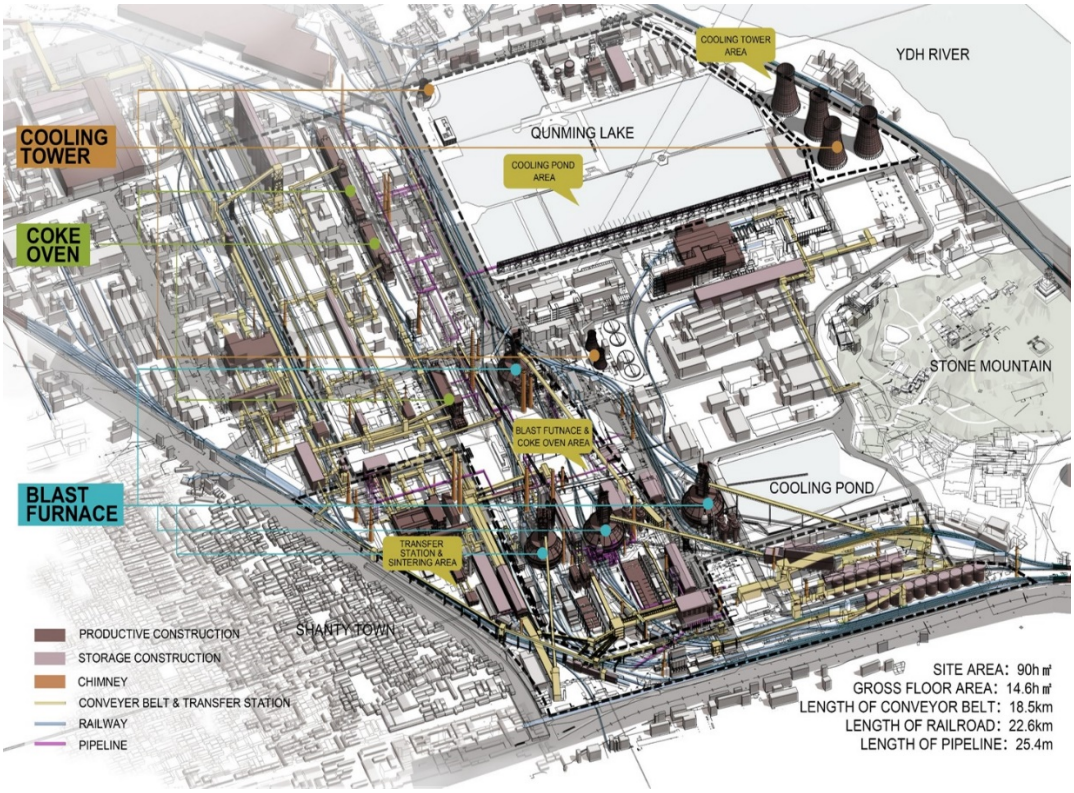

The site is historically significant, and has housed “Famous Mountains and Ancient Temples” in the capital city and its environs from the “Longyan in Shijingshan District” to "Shili Steel City.“



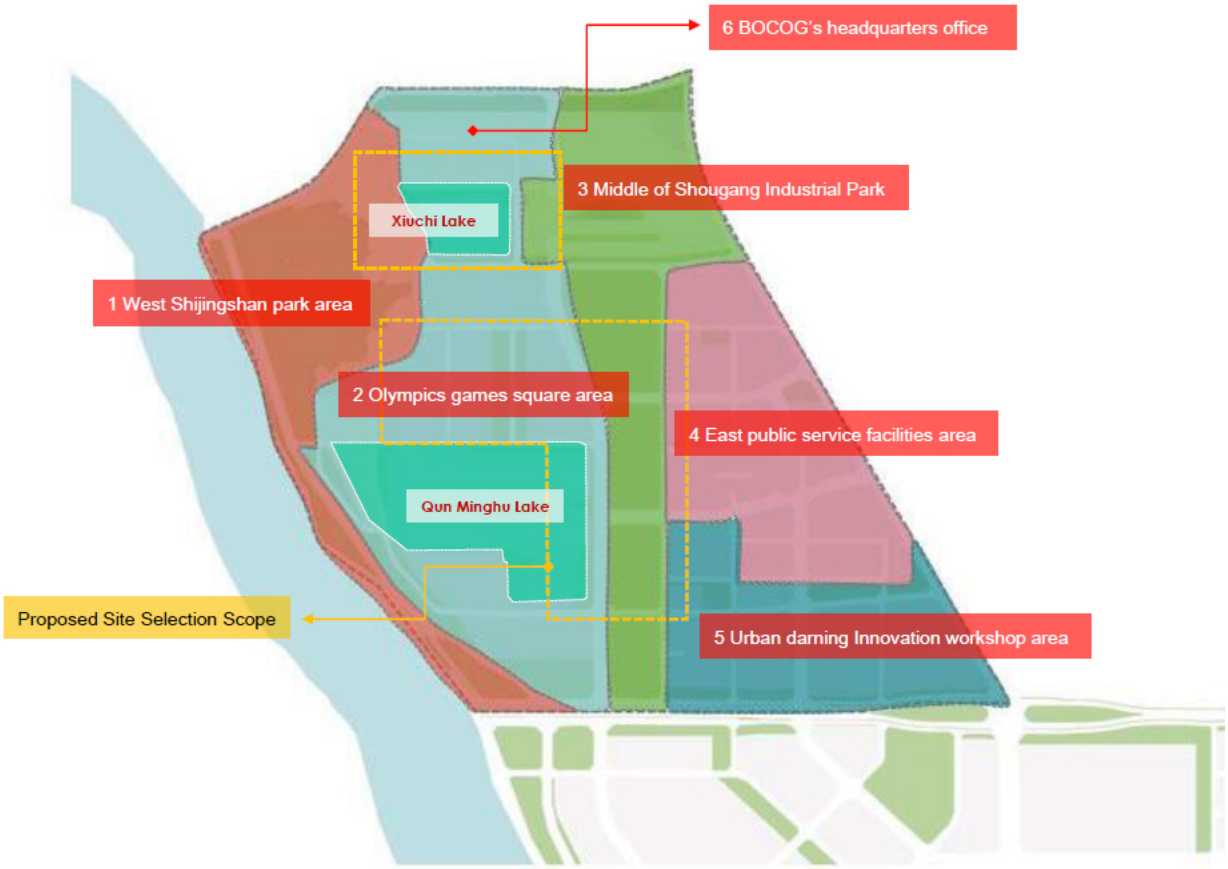
Today, the site is an industrial resource, including 246 documented valuable assets, and cultural relics.




This sophisticated mega-system, which includes buildings, facilities, railroads, conveyer belts, pipelines and industrial chimneys, displays a complete and thorough production process, and it demonstrates linear characteristics of an assembly line. Production process flow is “人" shaped layout.
Raw material —sintering (Jiao Hua) —Iron Making—Steel Making—Steel Rolling.



The studio will focus on two regions of the vast site: the Olympics games square area (labeled "2") and the Middle of Shougang Industrial Park (labeled "3").




## Urbanism in the Absence of Water

Studio proposals will align with development plans for Beijing and the wider region. Specifically, the studio will focus on planning that investigates Olympic programming, urban villages, the flora of the future, and water resourcefulness in a dense, mixed-use, people-oriented, and ecologically-responsive district.

## Architecture and Urbanism in China in Broader Context:

As the world continues to urbanize at an astonishing pace, architects, landscape architects and urban designers must continue to find ways to steer its physical transformation. For the first time in history, the planet is more urban than rural. Existing cities are expanding and new ones are being formed with few historic precedents. In many ways, the contemporary Chinese city is a global model of future urban development. Understanding Chinese urbanization is critical to understanding urbanization of the world.

## Urban China

China's population is almost 1.4 billion, over half live in cities and urban regions. By comparison, the United States' population is only 320 million, but approximately 80% of people live in cities or urbanized areas. Over the past 35 years, China's urban population has exploded from approximately 150 million people in 1978 to over 700 million today. China's growth is fueled by a booming "maker" economy, kicked-off by Deng Xiaoping's "Reform and Opening up" policies in 1978. Since the late 1970's, millions of rural and migrant laborers have steadily left the country side in search of employment opportunities in urban and industrial regions. The world has never experienced this phenomena of rapid urbanization, which continues today at an unprecedented scale and pace. It took American cities decades to accomplish what China is doing in a single generation. Beginning in 2001, the pace of urban growth has been equivalent to building a new Chicago every month for 14 years.

These trends are predicted to continue into the future. China's municipal leader's want 70 percent of the entire population – 900 million people – to be assimilated into urban regions by 2025. This will require moving 200 to 250 million more people into cities in the next 10 years. This strategy is purely economic: since urbanized people spend more dollars (Yuan) than their rural counterparts, the idea is to strengthen the national economy by urbanizing as many domestic "consumers" as possible. This goal will create over 220 cities with over 1 million people. By comparison, Europe has 35 cities with a population over 1 million people, and the United States has only 9 cities with a population over 1 million people. The scale and magnitude of this project is enormous.

# 1. Hybrids: Landscape/Architecture/Infrastructure/Urbanism

Hybrid Landscape/Architecture/Infrastructure/Urbanisms are design ideas and designed realities that, through nested components and scales, catalyze a larger and more visible public benefit to urban communities. Hybrids are designs that:

- are embedded with added value (multifunctionality, imageability, public benefit),
- represent potential prototypes, adaptable for use in numerous locations,
- are locally self-regulated and controlled (i.e. which "unlock" the grid),
- strategically attract investment and/or generate community stability, and
- generate new sustainability practices.

The studio, and this assignment, will focus on the design of Hybrids and the reciprocal integration of the large-scale building and landscape within this framework. The role of landscape and the environment, with all of its emerging questions of social and performance criteria will underpin the studio.

How can new conceptions of the role of the environment and ecological processes reformulate our ideas of urban infrastructure, programmatic relationships, open space networks, social constructs, and site history? What role can public building play as a vital component to this larger urban framework? Through a multi-scalar and multi-directional approach, students will formulate their own synthetic conceptions of Hybrid Landscape and Architecture.

## What is Hybrid Architecture and Landscape Architecture?

Hybrids are characterized by a mix of uses together in the same architecture and landscape architecture. Hybrids integrate different programs which also have different developers (public and/or private), managers and users. Relative to users, use times and program, hybrids can be as diverse as a city.

Personality
The personality of the hybrid is a celebration of complexity, diversity and variety of programs. The hybrid is the crucible for a mixture of different interdependent activities.

Each hybrid is a unique creation, often without previous models. The hybrid building emerges from an innovative idea -- which is resolved against the established combination of usual programs -- and bases its reason for existence on the novelty of an approach and the unexpected mixing of functions.

The hybrid is an opportunist building; it takes advantages of multiple skills. The hybrid building looks for unexpectedness, unpredictably, intimate relationships, contextual coexistence, and is conscious that un-programmed situations are the key to the future.

The hybrid can take on multiple personalities and representations, even apparently contradictory representations inherent in architecture, urban landmarks, landscapes or anonymous spaces/objects.

The landmark hybrid is not subject to indifference. It is meant to impact the observer. It does not go unnoticed, but publicly manifests its skills, its extroverted character and its attractive points. The landmark hybrid is a milestone, an actor in a starring role on the urban stage.

The anonymous hybrid, on the contrary, requires each part of the program to lose its uniqueness. If it holds a public program, aspects of its character will dissolve to become a simple secondary actor on the daily stage of the city.

Sociability

The ideal hybrid feeds on the meeting of the private and public spheres. The intimacy of private life and the sociability of public life find anchors of development in the hybrid building.

The permeability of the hybrid makes it accessible to the shared city; and, certain private uses often function 24 hours a day. This means that activity is constant and is not controlled by private or public rhythms. Another use category is created, a full-time building.

Form

The form/function dialectic relationship of a hybrid can be explicit or implicit: one part of the dialectic might lean towards fragmentation, the other toward integration.

A generic hybrid is an undifferentiated building-container that attempts to generically house a diversity of functions and spaces.

The hybrid building will always fight to unite disparate influences that provide life and energy.

Types

The primitive hybrid, or proto-hybrid, has not reached the highest point of integration among its functions and is seen as a set of types that have yet to be fused. One cannot classify hybrid buildings by types -- the very essence of the hybrid is to exist apart from formal categories.

Processes

The mixture of uses within a hybrid is part of its becoming. Property and land development can be hybridized by means of combining public and private development. Structure can be hybridized based on a mix of material (concrete, steel, etc) solutions. Construction can be hybridized with dry assembled elements with wet joints, or the same can be done with prefabrication and traditional assembly methods. Management can be hybridized, with individual and community multi-properties. Landscapes can be hybridized with contrasting fixed and dynamic materials.

Programs

The mixing of uses in a hybrid building generates potential, and protects weaker uses from stronger uses. Hybrid buildings are organisms with multiple interconnected programs, which are both planned and unplanned activities in a city.

Density

Dense environments with land use limitations are good sites to cultivate hybrid situations. The hybrid

scheme proposes intense environments of cross fertilization, which mix known genotypes and create genetic allies to improve living conditions and revitalize their surrounding environments.

Scale
Hybrids are small "interventionist urbanisms" such as provisional, informal, guerrilla, insurgent, DIY, hands-on, informal, unsolicited, unplanned, participatory, tactical, micro, and open-source architectures. These hybrids are associated with a scale of modesty, ground-up action and a just do it demeanor.

And, hybrids are associated with a certain form of grandeur, splendor and gigantism, because mixing implies size, and superposition demands height or breadth. The taking over of the surface to extend the program takes up land. It also needs a creative impulse and economic confidence, since it produces new situations inadequate for times of indecision.

The scale of a hybrid and its relationship with the environment is measured by the juxtaposition of programmatic parts.

City
The definition of a hybrid includes urban composition, perspective, grid insertion, and strategic dialogue with other urban landmarks and interrelationships with the surrounding public space.

The hybrid goes beyond the domain of architecture and enters the realm of infrastructure and urban planning.

## Precedent Study Notes

A vital goal of studying precedents in architecture is to make exemplary parts of the past part of the present. By identifying and analyzing themes and patterns of prior built (and unbuilt) paradigmatic form, we strive to pursue ideas that could help us generate outstanding architecture today. Precedent analysis is also a vehicle for the discussion of organizational concepts and ineffable ideas through the use of past (or contemporary) example.

A major objective of precedent analysis is to investigate physical and spatial characteristics of buildings, landscapes, cities, or districts within or parts of cities in a way that a "parti" can be understood. A parti is a design decision or series of decisions encompassing a big idea. It is the chief organizing thought or concept behind a design, most often manifest as a clarifying diagram and a simple statement. The parti encapsulates the most salient and essential characteristic of a design.

A major concern of studying and analyzing precedents is to investigate the formal, spatial and material characteristics of a building/landscape/city in such a way as to uncover a parti. To accomplish this, a multiplicity of fundamental characteristics, relationships and ideas might be explored and diagramed/drawn/modeled based upon the original work. Issues available to critically analyze a design include (but are not limited to, and in no particular order):

- **Beauty**: the quality present in a thing that gives intense pleasure or deep satisfaction to the mind, whether arising from sensory manifestations as shape, color, sound, etc., a meaningful design or pattern, or something else;
- **Firmness**: physical strength and endurance secured through structural integrity;
- **Utility**: arrangement of spaces and systems to meet criteria of usefulness;
- **Massing**: bulk, size, expanse, or massiveness, an aggregate and/or whole, and a body of coherent matter;
- **Shape**: the quality of a distinct object in having an external surface or outline of specific form or figure;
- **Morphology**: the form and structure of a building considered as a whole;
- **Plan to Section/Elevation**: the relationships of plan configuration to vertical (2D or 3D) information;
- **Sunlight**: daylight and solar positioning;
- **Circulation**: the transmission or passage from place to place;
- **Part to Whole**: cohesion and/or tension between a determinate form and the combinatory potential of adjoining, separate, overlapping, or hierarchical fragments;
- **Repetition**: to design, create, or perform again and again;
- **Pattern**: a combination of qualities, acts, tendencies, etc., forming a consistent or characteristic arrangement;
- **Symmetry (and Balance)**: the correspondence in size, form, and arrangement of parts on opposite sides of a plane, line, or point; regularity of form or arrangement in terms of like, reciprocal, or corresponding parts;
- **Asymmetry (and Balance)**: not identical on both sides of a central line;
- **Geometry**: a formative idea that embodies the tenets of both plane and solid geometry to determine built form;
- **Additive and/or Subtractive**: formative ideas developed from the process of adding, or aggregating and subtracting built form;
- **Hierarchy**: the physical manifestation of the rank ordering of an attribute or attributes, and the assignment of relative value to a range of characteristics;
- **Processes**: the dynamic growth and change of living systems and/or other sequences.

**Hybrid Case Study project**

In an iterative process with key historic projects we will develop a series of design-based scenarios that leverage specific qualities of the city, and will seek to mine these scenarios for their formal possibilities. Formal and spatial invention will be our goal. Projects will be pushed beyond their logical extremes.

First we will speculate on what might have been. To look back at projects of the past and interrogate them for what they might have been. Through a process of collage and montage (old fashioned, but dependable), we will speculate on how the introduction of difference might have changed these projects. The studio will operate in a "slack space" to allow us freedom from the historical and theoretical significance of the key historic projects. For example, we will ask questions such as: What if Superstudio's Continuous Monument had an interior? And, what if Yona Friedman lived in Vegas (instead of Paris)?

Our speculations will not be supported by any hard evidence, nor will they be able to be proven. They will be imaginary and factually questionable. But we will create coherent and precise (graphic) arguments for our speculations. We will develop a formal language. We will pursue multiple possible scenarios, compiling a catalog of speculations.

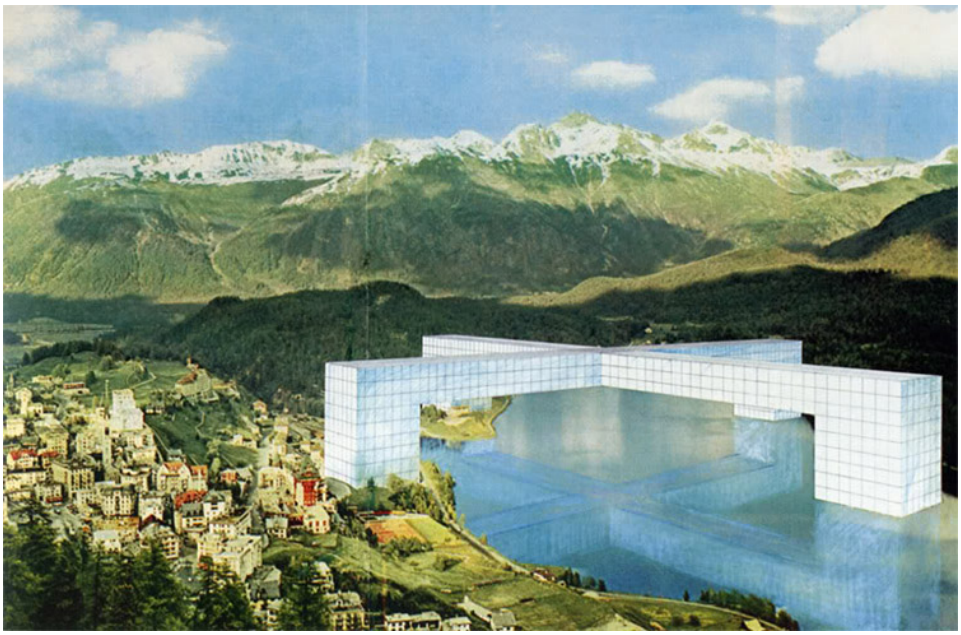
Although we will look carefully at megastructure projects of the recent past, our references will also include the Tower of Babel and the Ponte Vecchio. We will appropriate and hybridize. We will play with megabuilding types like mat buildings, wall buildings, and mound buildings.

With the addition of program, we will imagine new forms of collective associations as promised by Modernism. But, whereas Modernism proposed rationality and singularities to deal with the problems and potentials of the city, we will play with irrationality and multiplicities. We will engage density directly. But heeding the predicted future of the "Generic City" in which cities becomes indistinct from one another, this studio will begin with a contrary hypothesis: we will view globalization as reinforcing differences in patterns of localized urban behavior, formal uniqueness and infrastructural specificity.

With the addition of infrastructure, we will posit that architecture and landscape architecture can be both/and — it can be both about growth and about the environment — through the manipulation of form and the tactical deployment of figural systems.

You will work in pairs, but each person will contribute drawings.

Select one image of an unbuilt project from the list below (or an approved alternate) and analyze it. This is the only information about the project that you need. For example, if you have the following Superstudio Continuous Monument image, this is the entire extent of your knowledge of it. You will invent what you cannot see in the image:



A good way to start is: Ask yourself a series of “What if” questions. For example: What if this Continuous Monument had a section?

Then, invent a section for the Continuous Monument “leg” near the village on the left. Invent a section for the Continuous Monument “leg” that lands in the water on the right. Invent the other two leg sections. Each one can be different, especially as each one has a different relationship with the site. Invent several sections for different parts of the “X” that spans the lake. Think about what might happen under the water line.

As you work, think sectionally. Embed reference forms — like other architectures (embed small buildings from the little village on the left) or other architects. Try really figural shapes. Try programs with extravagant sectional requirements like a scuba diving tank or a theater or a climbing wall. Throw in some “generic” section for some visual relief. Keep going!

Projects to interrogate:

**Walls**
Algiers Obus Plan, Le Corbusier, 1931
Continuous Monument, Superstudio, late 1960s
Continuous Monument, Superstudio, early 1970s
Wall City, Kisho Kurokawa, 1960s
Plug-in-City, Archigram, 1964
Exodus of the Voluntary Prisoners of Architecture, Koolhaas & Zenghelis, 1972
Bamboo Garden at La Villette, Alexandre Chemetoff
The Great Wall of China

**Mats**
Tokyo Bay, Kenzo Tange, 1960
Agricultural City, Kisho Kurokawa, 1960
Venice Hospital, Le Corbusier, 1966
No-Stop City, Archizoom, 1970
Ocean City, Kiyonori Kikutake, 1960s
Ville Spatiale, Yona Friedman, 1960s
Free University, Berlin, Candilas, Josic, Woods, Schiedheim, 1960's
Sponge City, dlandstudio
Yuanmingyuan, Beijing

**Mounds**
Aircraft Carrier Project, Hans Hollein, 1964
Walking City, Archigram, 1964
Artic City, Frei Otto & Kenzo Tange, 1971
Dolphin Embassy, Ant Farm, 1974
Tower of Babel
Woodland Cemetery, Asplund and Lewerentz
Gas Works Park, Richard Haag
Fresh Kills Landfill, James Corner Field Operations

**First drawing, due Friday, Sept 2**
**Second drawing, due Monday, Sept 19**
**Third drawing, due Monday, Sept 26**

## 2. Researching Landscape/Architectural/Urban/Infrastructural Models

Models are a critical part of taking a vision from concept to proposal and ultimately approval as they give an easily understandable form to the concepts that architects, landscape architects and other designers develop.

Vincent de Rijk is a well-known architectural model maker. He studied at the Design Academy Eindhoven and graduated with an industrial design degree. Based in Rotterdam he opened his own workshop in 1987. Since then he has been involved with a number of the most conceptual architectural firms based around the world.

Vincent de Rijk has been responsible for developing a number of new techniques of model making dealing with plastics, ceramics, mixed aggregate castings, foam, wood and metals.

From Vincent de Rijk's website (http://www.vincentderijk.nl/), students will present one architectural model. All analyses should be formatted within the given template so that precedents can be compared across the studio and included as studio referents. Analyses should include:

1. Data for cover page: original architecture project name, author, location, size/scale/materials/process of model, year completed.

2. A description of the original architecture project and a critical description of how/why the model was designed to represent the original project.

3. Images (can be copy/pasted from Vincent de Rijk's website) of the model and images of the original project (diagrams/drawings/images of the built project and/or drawings/diagrams of the unbuilt project).

# 3. Graphic Arguments

## Context

The construction of a Graphic Argument will become the foundation of the "Studio Project" wherein each student is expected to initiate, and convincingly develop all aspects of an architectural project – formal, spatial, experiential, organizational, structural, and technical – and create a clear, full, and persuasive presentation of her or his work. A Studio Project is a comprehensive architectural design project that includes the development of program spaces and relationships, development of structural and environmental systems, building envelope systems, principles of sustainability, life-safety issues, technical construction sections and assemblies, along with experiential drawings and renderings, and a focus on telling a critical project story. Consequently, Graphic Arguments are to focus on the development of a holistic project.

## Graphic Argument

Each student will develop an independent, critical position on the making of landscape and architecture in the world – an individually initiated intentional, programmatic, and situational framework to serve as the basis for their research. Following extensive data-gathering research in a chosen area of inquiry the student will develop an aspiring and compelling conceptual framework toward a Graphic Argument in BOOK FORMAT. This project premise will position the student's intentions in a clear relationship to contemporary discourse. The work of the final deliverable of a book will be intensively personal, informative and iterative.

The Graphic Argument will also be the basis for communication and feedback between student, faculty and advisors.

## Chapter Format within Book

Each student will develop a personalized format for their Graphic Argument book.
Minimally, contents should include:

- Hypothesis (based on Research Topic)
- Conceptual Investigations and Analyses of Hypothesis
- Precedent Research
- Site Research and Proposal
- Documentation of Spatial and Environmental, (etc) Concepts
- 2D/3D Spatial Investigations

## Schedule

### Fall

| | |
|---|---|
| Mon, Aug 22, 2pm | Studio Lottery |
| Wed, Aug 24, 2pm | Kick-off |
| Wed, Sept 2, 2pm | 1. Hybrids (first drawing due) |
| Sat, Sept 3 | depart Chicago for Beijing |
| Sun, Sept 4 | arrive Beijing |
| Mon, Sept 5 | Tsinghua / ETSAB / IIT Workshop |
| Tue, Sept 6 | Tsinghua / ETSAB / IIT Workshop |
| Wed, Sept 7 | Tsinghua / ETSAB / IIT Workshop |
| Thur, Sept 8 | Tsinghua / ETSAB / IIT Workshop |
| Fri, Sept 9 | Tsinghua / ETSAB / IIT Workshop |
| Sat, Sept 10 | depart Beijing |
| Sun, Sept 11 | depart Beijing |
| Mon, Sept 12 | Studio (optional) |
| Mon, Sept 19, 2pm | 1. Hybrids (second drawing due) |
| Mon, Sept 26, 2pm | 1. Hybrids (third drawing due) |
| Oct 10 or 12 | Mid-review |
| Oct 26-Nov 4 | Tsinghua at IIT (to be confirmed) |
| Mon, Nov 14, 2pm | 3. Graphic Arguments |
| Fri, Dec 03, 9am | Fall Semester Final Review |

Final Deliverables

- Presentation quality 3 minute video.
- Presentation quality physical models (scale to be determined).
- Presentation quality Site Plan at a scale necessary to communicate design.
- Presentation quality Sections.
- All of the above research, drawings, images of the models (and project descriptions) will be formatted in a booklet at the end of each semester as "Graphic Arguments" (PDF format).

## Schedule

### Spring

| | |
|---|---|
| Mon, Jan 09, 2pm | Studio Lottery |
| Wed, Jan 11, 2pm | Kick-off |
| March 6 - 10 | Fall Semester Mid-Term Review |
| Mon, April 03 | "Pencils Down"<br>Design Ends, Final Presentation Documentation Begins |
| Fr, April 28, 9am | Studio Final Review |

Final Deliverables

- Presentation quality 3 minute video.
- Presentation quality physical model (scale to be determined).
- Presentation quality Site Plan at a scale necessary to communicate design.
- Presentation quality Floor Plans (one floor plan for every unique floor) to a scale necessary to communicate design.
- Presentation quality Sections to a scale necessary to communicate design.
- Presentation quality renderings of the Superblock project.
- All of the above research, drawings, images of the models (and project descriptions) will be formatted in a booklet at the end of each semester as "Graphic Arguments" (PDF format).
- Open House (year-end exhibition): all students in the studio are required to present their work at Open House. The work will be presented as a booklet and models.

## References

### Films


Manufactured Landscapes, 2006 (Baichwal, Jennifer)

Suzhou River, 2000 (Lou Ye)

Platform, 2000 (Jia Zhangke)

The World, 2004 (Jia Zhangke)

24 City, 2009 (Jia Zhangke)

Still Life, 2006 (Jia Zhangke)

Meishi Street, 2008 (Ou Ning)

A Beautiful New World, 1999 (Shi Runjiu)

Chungking Express, 1994 (Wong Kar-wai)

Beijing Bicycle, 2001 (Xiaoshuai Wang)

The Shower, 1999 (Zhang Yang)

To Live, 1994 (Zhang Yimou)

Raise the Red Lantern, 1991 (Zhang Yimou)


### Urbanism in China, Superblock Readings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Zhu, Jieming. The Transition of China's Urban Development: From Planned-Controlled to Market-Led (Westport: Greenwood Publishing Group, 1999.)

## Ecological Urbanism

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Wines, James and Philip Jodidio (ed). Green Architecture: The Art of Architecture in the Age of Ecology (Cologne, Germany: Taschen, 2000.)

## Urbanism

Banham, Reyner. Megastructures: Urban Futures of the Recent Past (London: Thames and Hudson, 1976.)

Koolhaas, Rem and Hans Ulrich Obrist. Project Japan: Metabolism Talks (Cologne: Taschen, 2011.)

Jie, Zhang, The Cultural Gene of Ancient Chinese Space (Beijing: Tsinghua University Press, 2011) in Chinese

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Shane, David Grahame. Urban Design since 1945 – A Global Perspective (West Sussex, UK: John Wiley and Sons, Ltd., 2011.) Chinese Film:

Zhen, Zang (ed). The Urban Generation: Chinese Cinema and Society at the Turn of the Twenty-first Century (Durham, NC: Duke University Press, 2007).

## Methods & Syllabus

The studio is built on the idea that interdisciplinary collaboration is needed to solve complex problems facing humanity. Engaging stakeholders, users, communities and members of the public in the design process is crucial, as is developing holistic design practices that create robust, long-term solutions. Further, documenting and exhibiting the results of our learning is a top priority. Importantly, the studio will foster systems thinking that aims to reveal patterns through observing, modeling and visualizing complex variables and interdependencies; systems thinking makes tangible the multi-dimensional nature of today's urban challenges. The result of working with these principles will be a rewarding and transformative experience that stretches the boundaries of convention, and grows individual and communal capacities for action. To this end, the studio will emphasize the following practice-based methods:

- Learning in a studio environment where students, faculty, advisors and experts come together to conceptualize, visualize and design.
- Working on real-world challenges with real-world partners, with the potential for global benefits.
- Sharing the findings with the public in meaningful ways.
- Structuring the learning in teams where students, faculty and mentors act as both leaders and followers, sharing their own knowledge and learning from others.
- Assuming a variety of roles on the project and collaborating across boundaries to innovate in design.
- Providing lectures and workshops from local and global leaders that augment overall knowledge and skills and provide critical appraisal and real-time direction and support for project deliverables.
- Receiving feedback from faculty, peers and mentors, to augment a self evaluation process.
- Adopting a "think and do" approach to research combining secondary, primary and applied research methodologies to the design process.
- Following best practices of a real-world studio using design strategy, systems analysis, design briefs, design management and project management tools.

## Syllabus Breakdown

The studio is a combination of short and long-term design-based research projects that connect and overlap throughout the entire year. Charrettes, exhibitions and research trips take place in both semesters. Guest lecturers are also embedded in the curriculum. Government, industry and educational partners support research and design projects in a variety of ways, including participation in events, providing expert guidance, and partnering on the development of projects.

## Schedule (Basic)

This studio will meet three times a week (M/W/F 2 -6pm) in Crown Hall (subject to change). Students will be expected to use time beyond scheduled class time for their field research and design activities. See the studio website for detailed class schedule.

## Course Requirements

1. Complete attendance in all classes is mandatory. Absences must be excused in writing in advance and under special circumstances acceptable to the instructor.

    a. Two unexcused absences will result in the loss of a grade in your grade for the semester.

    b. Three unexcused absences will result in failure of the course. Being accessible to the instructors by working in class is mandatory.

    c. An evaluation of Attendance and Participation is to be made by the instructor based on observation, and feedback from fellow student team members. This will include Attendance and Participation in enrichment activities as required by the course schedule.

    d. Please refrain from listening to or watching non-studio related media during studio meeting times.

    e. Please refrain from non-studio related electronic communications during studio meeting times, i.e. Mobile phone calls, Text Messaging, E-mail, Instant Messaging, Etc.

2. The course will include readings, discussions and assignments. All assignments will be due on time and on designated dates. Late assignments without a valid excuse will lose a letter grade for each day of lateness. Three days of lateness will result in a failure for that assignment.

3. The application of the above criteria can be avoided if the student has very clear and complete communication with the instructors about work completed and excused absences requested. To communicate outside of studio the student should always call or email the instructor directly and well in advance of class time.

4. The primary means of communication will be through IIT e-mail and class websites. Students are required to check regularly for course updates.

## Grading Criteria

The success of this studio depends on students' self-discipline, willingness to learn and active participation in discussions, and of course, the completion of work that is required to be done outside the class time. Students are expected to be at the studio at least 12 hours each week during scheduled class time and for special events, plus an additional 18 hours (minimum) outside of class time. There will be some required seminar time to become familiar with various issues. Students may be assigned to work individually or in teams by the instructors. Every student is committed to his/her group and has shared responsibility to that group. Teamwork is essential for this studio, and your teammates may be asked to rate your effort and participation.

All exercises will be due on time and on designated dates. Deadlines for the submission of required work will be announced and must be met. Students are responsible for checking their IIT email daily for class related announcements. Failure to submit work in a timely manner will result in a reduction of your final grade.

Evaluation of your work involves both criticism and grades. Criticism should be understood by students and faculty as a positive means for learning. In all cases, criticism is directed at a project or a process, not at the student who has produced the project. Specific criteria for each project will be determined independently, but may include clarity of Idea/Theme, quality of design concept, quality of oral Presentation, and quality of graphical presentation. General criteria for evaluation will always apply as follows:

1. Concept: Did the student explore and evaluate a range of possible choices before settling on a particular solution? Did the student test various aspects of the solution? Did the student make enough effort to improve/strengthen the solution? (Concept accounts for approximately 20% of final grade).

2. Craft: Are the ideas correctly and thoroughly communicated? Has the student crafted the drawings and models with care and precision? (Craft accounts for approximately 50% of final grade).

3. Completion: Did the student produce all required drawings and models on time and in the required format? (Completion accounts for approximately 30% of final grade).

Letter grades should be interpreted as follows*:

**A**: Excellent work. Exceeds all criteria. Exhibits insights indicating that the experiences from one phase to the next are cumulative and transferable. Constructively challenges design issues brought forth during the quarter. Demonstrates exceptional enthusiasm and intensity for learning. Demonstrates capacity to be self-critical.

**B**: Above average work. Performance at the level necessary for a graduate degree. Meets all criteria. Good understanding of concepts. Constructively challenges design issues brought forth during the quarter. Shows ability in basic critical thinking.

**C**: Performance below the overall level necessary for a graduate degree. Meets minimum requirements. Indicates some difficulty in understanding the concepts. Exhibits need for improvement in work habits and Critical thinking skills. Insufficient participation.

**D**: Below average work. Does not meet minimum requirements. Indicates serious difficulty in understanding concepts. Probable indication of a lack of commitment to the course.

**E**: Unsatisfactory performance. This grade cannot be used to fulfill a graduate program requirement. If required in a program of study, the course must be repeated. Late, incomplete, failing, or work not submitted.

* Please refer to graduate bulletin for official IIT university grading policies.

*AMERICANS WITH DISABILITIES (ADA): Reasonable accommodations will be made for students with documented disabilities. In order to receive accommodations, students must go through the Center for Disability Resources office. The Center for Disability Resources (CDR) is located in Life Sciences Room 218, telephone 312 567.5744 or disabilities@iit.edu*