

UNIT 25: BUILDING CULTURE: Re-Imagining Manufacture

(This Unit is open to 2nd and 3rd Year M Arch and MS Arch Students.)

Unit Course #: (M. Arch1) 73100 Studio 1.3; 85101 Advanced Studio; 85200 Design Seminar

Semester/ Year: Fall 2022/ Spring 2023 Class Meets M 9:30-12:00/ TH 2:00-6:00

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Sugar Production, Cannabis, and Incarceration, Collage by Ngawang Tenzin.

Q 1. What is the future of work?

In the long 19th century- the access to land, resources, and cheap labor allowed colonial enterprise to accumulate wealth and engage in extractive economies that set in-motion, a capitalist engine that cannot be unplugged. In New York City, the seemingly endless supply of immigrants, the appropriation of land and the abundance of natural resources created a modern metropolis within a century.

The ideals of industrial progress (and its discontents) also generated movements of ground up democratic control of- land and wealth through cooperative structures. Mutual aid societies, labor unions, and other collective undertakings -- often under the leadership of the most disenfranchised members of the workforce challenged

labor practices and advocated for fair wages and better working conditions. The factory was the battleground for social change. Two centuries' years later much has changed. Global supply chains have supplanted small-scale manufacturing and finance capitalism no longer needs the industrial infrastructure and labor force to be situated within the center of the city.

From farm, to factory, to the supply chain-- work has consistently been shaped by what anthropologist Cedric J Robinson has called out as **racialized capitalism**. Racism and capitalism are intertwined. To undo one, you need to undo the other. Past discriminatory practices (dispossession, redlining and urban renewal) are visibly embedded in the geography of New York City. The question of reparation is very slowly on the table as New York State legislates climate action and mandates that 30% of the investment be made toward environmental justice communities. Another facet is the legalization of Marijuana in New York that provides the first business opportunities to "social equity" applicants- namely New York residents with marijuana-related convictions. Both these legislations interest us as we speculate on the future landscapes of production in the City of New York.

Q2. How and where can we accommodate new paradigms of manufacture?

Lodged within the ruins of an industrial era infrastructure in the East New York Industrial Business District (ENY-IBZ) are junk yards, workshops and parking lots filled with school busses and police vans, shelters, and transitional hotels. The landscape appears bleak until you notice the counterpoints of urban care- community gardens, schools, bodegas, public housing, and most importantly.... the large number of underutilized city-owned properties. These 'commons'- poorly articulated and scrappy as they are, have the potential to be reclaimed by a community that is anxious about the threat of displacement as these properties gain value.

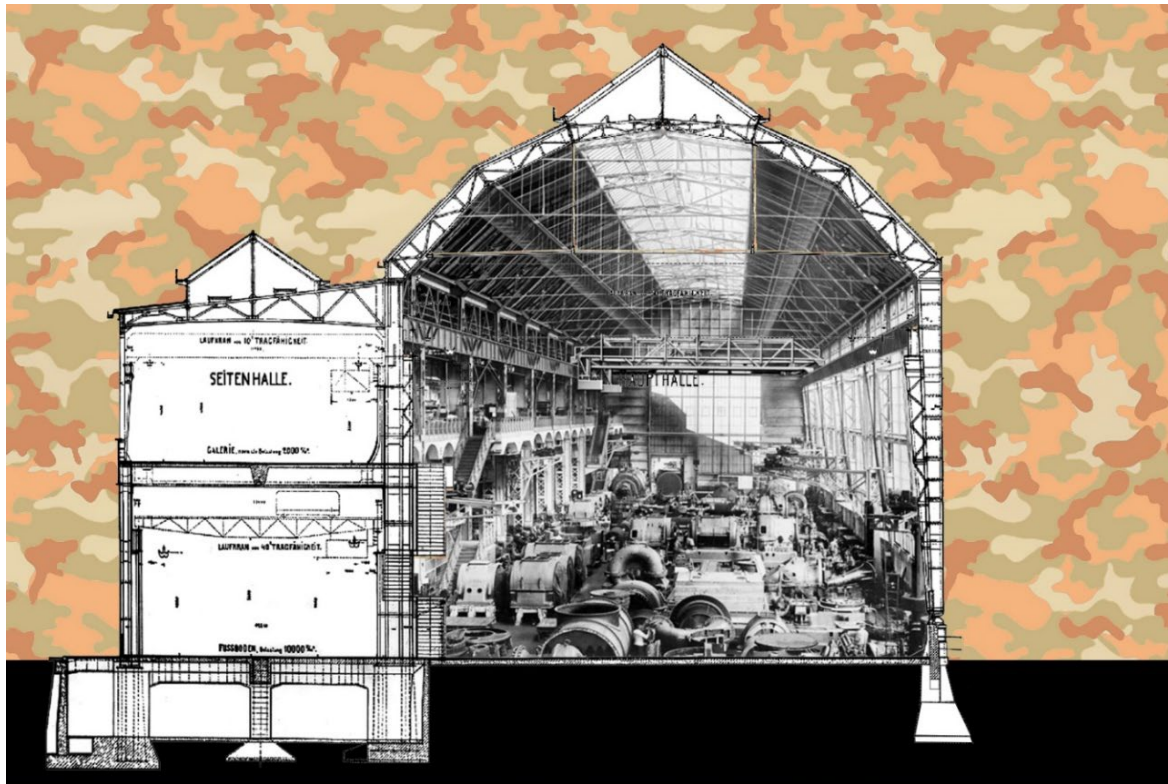
We will work in close collaboration with two main organizations- East New York Community Land Trust <https://www.eastnewyorkclt.org/> and Universe City <https://www.universecity.nyc/>. These two organizations are interested in generating a comprehensive plan for 8+city owned sites within the ENY IBZ to create a synergetic urban work-system that incorporates Food, Education, Waste, Cannabis & Energy Production. They aim to rethink the concept of "manufacturing". While engaged directly with city and state agencies in the negotiation of these lots and the financing of the future-- the organizations espouse a model of development and ownership based in community control and self-governance.

Q 2. What is the future factory?

In 1908, the AEG electrical company hired the architect Peter Behrens to design their turbine factory. This factory built to manufacture steam turbines, fueled a new imagination that celebrated the modern factory and symbolized the exuberance of an era where electrification/power was an important commodity- to be harnessed and celebrated. Peter not only designed the building but was also became the artistic consultant for AEG-designing their electrical products and their promotional advertisements.

A century later, we seek alternatives to our dependence on fossil fuel and re-think our role as designers. We will place the question of the future factory at the center of our research as exemplified by the wholistic role played by Peter Behrens in the AEG factory. Design does not end at the building but rather goes beyond to accommodate the new values and cultural shifts desired by emergent communities.

In this third iteration of Unit 25: Building Culture: Re-imagining Manufacture, we return to Raymond Williams definition of Culture as "a noun of process" as it pertains to the future of work in the city. We will research and speculate on new paradigms of manufacture and cooperative ownership in our post-post-industrial city and consider the agency of design and architecture in shaping the future of East New York. Through the interdisciplinary lens of architecture, urbanism and anthropology, the unit will emphasize a people and place-based approach to architecture and urban systems thinking.



AEG Turbine Factory (1908) Architect Peter Behrens, Collage by Ngawang Tenzin.

Methodology and Course Requirements

The Advanced Unit in Architecture is based on the studio method and is taught collaboratively by three instructors. At appropriate times during the semester, consultants will be invited class for workshops, discussion, and critiques to support specific areas of development within the projects. Students will be expected to work both independently and in teams to develop their skills in thinking, writing, and making. Instructors will present information to direct research methods, representational techniques, and help students to develop modes of critique.

All supplies for models and drawings as well as ink and plotter paper must be purchased by students on an as-needed basis. Class time will be spent in a seminar + studio mode on Mondays followed by workshops + design reviews Thursday afternoons. The design reviews will follow the format of desk crits where students will be engaged individually and in teams by the three instructors. Informal presentations and group discussions will introduce each new chapter. Site visits and engagement with local partners will be scheduled in advance. As direct (in-person) observation of site is crucial to this unit and independent field visits outside scheduled class time are highly encouraged. Presentations of work will be public, either informal class pinups/digital presentations or formal reviews with invited guest critics. At both desk crits and at public presentations, students will present their work both visually and verbally to generate a discussion of the ideas present in the work. Students will be expected to document their work and develop portfolio material throughout the course of the semester and the year, with a final, comprehensive portfolio submission at the end of each semester.

Fall 2020 of Unit 25 is comprised of 4 sequential prompts- arranged as a series of "Chapters" that advance the research agenda while building critical, conceptual, and creative design skills. See the Unit Schedule and design and seminar syllabi for the details of readings, discussions presentations per week per chapter. Although each student

will develop a unique portfolio of work, deliverables for each chapter are uniform across the unit, and will be clearly cited in the project handouts. Students may be asked to work individually or in small groups. Below is a summary of the focus of each chapter.

Chapter 1: MASS PRODUCTION (3 weeks)

Studio Prompt: Explore your relationship with a mass-produced object. Make a 3-minute video.

Seminar Topics: Colonization, Labor, Global Supply Chain, Anthropocene.

Film: The Column, Dir. Adrian Paci

Chapter 2: SITUATING MANUFACTURE (6 Weeks)

Studio Prompt: Study the urbanism of East New York IBZ. Map out infrastructures of food, energy, transport, waste, and people. Visualize closed looped systems and circular economies.

Seminar Topics: Urban Systems, Circular Economies.

Film: Manufactured Landscapes, Dir. Edward Burtynsky

Chapter 3: BEYOND SUPPLY AND DEMAND (2 Weeks)

Studio Prompt: Select a specific site/ block in ENY-IBZ. Develop a series of spatial studies linking the program for specific types of production and distribution nodes within the larger network of systems in existence and future aspirations of the community (Self-sufficiency, Tax credits, Cannabis, Defund the Police, Connected Community Gardens, Solar Power etc.).

Seminar Topics: Reparations, Oral History, Redlining, Community Land Trusts.

Film: Finally Got the News, Dir. Stewart Bird, Gessner, Lichtman

Chapter 4: FUTURE FACTORY (4 Weeks)

Studio Prompt: Explore how new paradigms of manufacture impact the culture of work. Design the block/ the street/ the factory as a series of interlinked production and distribution spaces that build upon the semesters work. Model the cooperatively run future factory.

Seminar Topics: Cooperatives, Feminism (Mierle Ukeles), Aesthetics (Bell Hooks), Culture

Film: American Factory, Dir. Julia Reichert and Steven Bognar

The objective of the Advanced Unit is to simultaneously increase quantitative / qualitative analytical and representational skills while building an understanding of spatial practice. Aesthetic qualities of spatialized design are inherently connected to environmental and social contexts. Assigned readings, site visits, and guests will enable students to conceptually position their design research while providing a foundation for written and verbal presentations as well as portfolio documentation. Students are expected to bring both critical and creative dimensions to the analytical and inventive aspects of their work. This Unit aims to identify wicked problems, avoid solutionism, and embrace indeterminacy. We will continue with this investigation into the Spring 2023 Semester.

SCHEDULE

W1	Th 08.25	LOTTERY, in-person, Aaron Davis Hall, 2pm followed by ranking and assignments. First Unit meeting, including <i>Hour SSA</i> and development of Community Agreement Convocation @ 5:30pm
W2	Mon 08.29 Th 09.01	Chapter 1_Studio + Seminar_PC Chapter 1_Studio_AJ
W3	Mon 09.05 Th 09.08	College Closed (Labor Day), No Classes Chapter 1_Studio SSA Lecture: Ana María León
W4	Mon 09.12 Th 09.15	Chapter 1 + Studio + Seminar_PC Chapter 1_Pin up_AJ workshop SSA Lecture: Gabriel Diaz Montemayor
W5	Mon 09.19 Th 09.22	Chapter 2_Site Visit_PC Chapter 2_Studio
W6	Mon 09.26 Th 09.29	No Classes Chapter 2_Studio + Seminar (Classes follow a Monday Schedule)_AJ workshop
W7	Mon 10.03 Th 10.06	Chapter 2_Studio + Seminar + PC Workshop 1_PC Chapter 2_Studio_AJ (CCNY Grad Open House) SSA Lecture: C.J. Alvarez
W8	Mon 10.10 Th 10.13	College Closed (Columbus/Indigenous Peoples' Day); No Classes Chapter 2_Studio_AJ SSA Lecture: Sarah Lynn Lopez
W9	Mon 10.17 Th 10.20	Chapter 2_Studio + Seminar Chapter 2_AJ workshop SSA Lecture: Paul Farber
W10	Mon 10.24 Th 10.27	Chapter 2_Studio + Seminar Chapter 2_Midterm Review SSA Lecture: William Brinkman-Clark
W11	Mon 10.31 Th 11.03	Chapter 3_Studio + Seminar Chapter 3_Studio SSA Lecture: Miguel Rábago
W12	Mon 11.07 Th 11.10	Chapter 3_Studio + Seminar Chapter 3_Studio SSA Lecture: Loreta Castro and Gabriela Carillo
W13	Mon 11.14 Th 11.17	Chapter 4_Studio + Seminar Chapter 4_Studio_AJ workshop SSA Lecture: Arturo Ortiz
W14	Mon 11.21 Th 11.24	Chapter 3+ 4_Pin Up College Closed (Thanksgiving); no class
W15	Mon 11.28 Th 12.01	Chapter 4_Seminar +Studio Chapter 4_Studio_AJ
W16	Mon 12.05	Chapter 4_Studio + Seminar

FINAL REVIEWS, Week of Dec 7-13

Learning Objectives

The learning objectives of the Unit in Architecture are developed from the above educational goals and include the actions and activities through which these specific skills and concepts are conveyed to the student.

- I. Visual communication is enhanced through the critical use of the tools of representation, including drawing (digital and manual), physical modeling, digital modeling, and spatial and digital analysis, as well as through the layout of portfolio's, drawings, and digital presentations.
- II. Building systems (human, environmental and structural), their interrelationships within the built environment, their relationship to site systems and their participation within the broader systems of the city, are investigated across multiple scales and studied in the context of humanitarian, engineered and technological processes.
- III. Critical thinking is enhanced through the use and development of both visual tools and written text for the development of comprehensive research, precise thinking, thoughtful and ethical analyses, and the intelligent establishment of criteria for the evaluation of design decisions.
- IV. Professional design and space planning practice standards are met through the preparation of students for effective participation in the professional practice of architecture. This includes skills required for site design, building design, technical documentation, and material detailing and specification, as well as an understanding of construction documentation and project management practices.
- V. Leadership in the positioning of architecture in the twenty-first century is attained by addressing the specific role of the architect in leading multi-disciplinary collaborative practices in order to advocate for more ecologically viable, resilient, and equitable cities. The challenges of the climate emergency and global urbanism are addressed, along with the need for research and the development of design and planning strategies for the adaptation of urban centers to meet these and other challenges.

Guest Consultants

Throughout the semester, guest lecturers will be invited to visit the Unit, make presentations of their work, and lead "field" trips, real or virtual, as well as engage in informal discussions with the Unit members about their design research. Guests are selected by the overlap of their work or research with that of the Unit themes, projects, and site.

Course Expectations:

- That students will develop a high level of independent thought and rigor and a willingness to go beyond both basic project requirements and their own perceived limits and abilities.
- That students will successfully complete all project requirements. No make-up or postponed project submissions will be accepted except in the case of medical emergencies or other extraordinary circumstances. Excused absences and project delays must be officially cleared by professor in advance to be considered valid.

Community Agreement:

- During the first full studio meeting, the professor will make time for an *Hour SSA* session for a supportive open discussion among students.
- Studio members will work *together* to create a community agreement for interacting together over the semester. Definition: "A consensus on what every person in our group needs from each other and commits to each other in order to feel safe, supported, open, productive and trusting... so that we can do our best work." <https://www.nationalequityproject.org/tools/developing-community-agreements>

- *Hour SSA* will be repeated at the middle of the semester.

Methods of Assessment:

Each of the 4 chapters will be graded separately and weighted according to the following criteria:

- Attendance and participation in class discussions: 10%
- Seminar response and writing: 20%
- Project development in response to semester schedule: 50%
- Project presentation, completion, and resolution: 20%

Key areas of Grading Assessment:

Studio performance & work habits: Ability to respond to studio criticism & discourse in a consistent & clear manner throughout the course of the semester as demonstrated in the evolution and development of design work.

Clarity of representation & mastery of media: Ability to utilize both digital and manual drawing and model-making techniques to represent architectural ideas precisely and creatively.

Design: Ability to prepare a comprehensive program for an architectural project that includes such tasks as: creative concept; assessment of context; an analysis of site conditions (including people and movements).

Research: Understanding of the theoretical and applied research methodologies and practices used during the design process.

Reading Responses and Discussions: Ability to communicate your understanding of assigned readings and participate in the class discussions.

Integrated evaluations and decision-making process: Ability to demonstrate the skills associated with making integrated decisions across multiple systems and variables in the proposal for a design project. This demonstration includes problem identification, setting evaluative criteria, analyzing solutions, and predicting the effectiveness of implementation.

Attendance: Consistent level of preparation and on-time presence for each class and scheduled evening lectures.

Portfolio: Completion of portfolio as directed by unit leader and attendance at all scheduled portfolio related events.

Grading Criteria:

- A (+/-)** Work meets all requirements and exceeds them. Presentations are virtually flawless, complete, and finely detailed. Work exhibits professional, "museum quality" level of craft. Student has developed an individual design process that shows a high level of independent thought and rigor. Work shows evidence of intense ambition and effort to go beyond expectations, and beyond the student's own perceived limits of their abilities.
- B (+/-)** Work meets all requirements. Presentations are complete and finely detailed. Work exhibits professional level of craft. Student has developed an individual design process that shows a high level of independent thought and rigor.
- C (+/-)** Work meets minimum requirements. Deadlines are missed. While presentations may be somewhat

complete, student has struggled to develop an individual design process and/or is lacking in craft or design resolution.

F Work is below minimum requirements. Student does not develop adequate design process, and/or does not finish work.

INC Grades of “incomplete” are not given under any circumstances unless there is evidence of a medical or personal emergency. In such cases, instructor and student develop a contract to complete work by a specified date, as per CCNY policy. Classes and/or work missed due to illness must be explained with a physician’s note.

Notes:

C is the lowest passing grade for M. Arch I and M.S. Arch students. No C- or D grades may be given to graduate students.

Working in teams does not guarantee the same grade for each team member; grades are based on a range of criteria for each individual student.

For more information on grading guidelines and other CCNY policies and procedures, consult the current CCNY academic bulletins: <https://www.ccnycuny.edu/registrar/bulletins>

Office Hours:

Each studio/unit faculty member schedules regular office hours over the semester. If a student needs to speak in private with a studio/unit critic, they should ask or email in advance to request a specific meeting time. Students may seek office hour appointments to discuss any matters of concern including personal, private matters and general inquiries about course related work, grading, assessment and content.

Probation & Dismissal: for program specific information related to grades, academic standing, probation and dismissal, please see your program academic advisor:

Graduate: Hannah Borgeson hborgeson@ccny.cuny.edu

Studio Culture:

Working collaboratively and respectfully on studio assignments, with and alongside others, is an expectation in studio. Studio culture is an important part of an architectural education, and it extends to expectations for Faculty and the School’s Administration as well. Please see the Spitzer School of Architecture Studio Culture Policy, which can be accessed on the SSA website here: <https://ssa.ccnycuny.edu/about/policies/>.

Absence & Lateness:

Arriving more than ten minutes late to class will constitute an absence. Two unexcused absences will result in a whole letter grade deduction from a final grade; more than four will result in a failing grade. It is expected that all students will participate in all scheduled working, midterm and final reviews and contribute constructively to the discussions.

Absences due to Religious Observances:

Students who will miss any class sessions, exams, presentations, trips, or the like due to a religious observance should notify the instructor at the beginning of the semester so that appropriate adjustments for observance needs can be implemented. This could include an opportunity to make up any examination, study, or work requirement that is missed because of an absence due to a religious observance on any particular day or days.

Readings & Journals:

Students are expected to keep a journal or sketchbook throughout the duration of studio to document their thought process & take notes of any texts, books, terms or references that are mentioned by either the studio

critic or fellow classmates and to selectively follow up on these and any other assigned readings before the next class.

Academic Integrity:

As a student you are expected to conduct yourself in a manner that reflects the ethical ideas of the profession of architecture. Any act of academic dishonesty not only raises questions about an individual's fitness to practice architecture, but also demeans the academic environment in which it occurred. Giving or receiving aid in examinations, and plagiarism are a violation of an assumed trust between the school and the student.

Plagiarism, i.e. the presentation as one's own work of words, drawings, ideas and opinions of someone else, is as serious an instance of academic dishonesty in this context as cheating on examinations. The submission of any piece of work (written, drawn, built, or photocopied) is assumed by the school to guarantee that the thoughts and expressions in it are literally the student's own, executed by the student. All assignments must be the student's original work. Any copying, even short excerpts, from another book, article, or Internet source, published or unpublished, without proper attribution will result in automatic failure of the entire course.

The CCNY Academic Integrity Policy: <https://www.ccnycuny.edu/about/integrity>

For citations, the Chicago Manual of Style is recommended:
http://www.chicagomanualofstyle.org/tools_citationguide.html

AccessAbility Center (Student Disability Services):

The AccessAbility center (AAC) facilitates equal access and coordinates reasonable accommodations, academic adjustments, and support services for City College students with disabilities while preserving the integrity of academic standards. Students who have self-identified with AAC to receive accommodations should inform the instructor at the beginning of the semester. (North Academic Center 1/218; 212-650-5913 or 212-650-6910 for TTY/TTD). For further information, go to <http://www.ccnycuny.edu/accessability/> or email disabilityservices@ccny.cuny.edu

Health And Wellness Support:

City College's Office of Health and Wellness Services offers free and confidential counseling. Contact: Health and Wellness Services, Marshak Science Building, room J-15: counseling@ccny.cuny.edu.

Gender Based Violence Resources

City College has resources to support you if you have experienced sexual violence, intimate partner/domestic violence, gender-based discrimination, harassment or stalking. For confidential support, you can contact the Student Psychological Counselor: Confidential Advocate at (212) 650-8905 or the Gender Resources Program at (212) 650-8222. If you would like to report sexual misconduct, you can contact the Chief Diversity Officer and Title IX Coordinator, Diana Cuozzo, at 212-650- 7330 or dcuozzo@ccny.cuny.edu. If there is an emergency on campus, you can call Public Safety at 212-650-777 and off campus call 911. <https://www.ccnycuny.edu/affirmativeaction>

Library:

The school's library is a shared resource that is necessary supplement to all research and design work. Please direct questions to the library staff or the Architecture Librarian Nilda Sanchez-Rodriguez: nsanchez@ccny.cuny.edu

NAAB (National Architectural Accrediting Board)

The National Architectural Accrediting Board (NAAB) is the sole agency authorized to accredit US professional degree programs in architecture. Since most state registration boards in the United States require any applicant for licensure to have graduated from a NAAB-accredited program, obtaining such a degree is an essential aspect of preparing for the professional practice of architecture. While graduation from a NAAB-accredited program does not assure registration, the accrediting process is intended to verify that each accredited program substantially meets those standards that, as a whole, comprise an appropriate education for an architect.

More specifically, the NAAB requires an accredited program to produce graduates who: are competent in a range of intellectual, spatial, technical, and interpersonal skills; understand the historical, socio-cultural, and environmental context of architecture; are able to solve architectural design problems, including the integration of technical systems and health and safety requirements; and comprehend architects' roles and responsibilities in society.

Students should consult the NAAB website www.naab.org for additional information regarding student performance criteria and all other conditions for accreditation.