Despite its timeless condition, Architecture is always rooted in the contemporary. It is precisely in this double agency, where the new and the old merge in a complex whole defined by a set of relations that go beyond the physical.

Nowadays, digital technology is undeniably modifying some assumptions of what Architecture is supposed to be. Rather than the physical spaces themselves, what has radically changed is how we use them and how they relate to each other and to the city: digital platforms are expanding the limits of the house, connecting domestic spaces with the urban environment. Thanks to this new digital landscape, Architecture is becoming networked, and the home as well, inviting thus architects to rethink fundamental disciplinary notions such as limit, typology or program.

Due to the actual transient social patterns, the classic dichotomies between public-private, collective-individual, night-day spaces...-or the division of the city between areas of living from areas of leisure and production- that characterized a great part of the architectural discourse of the twentieth century, have lost their connotation and do not respond anymore to how we use and think of Architecture.

In our cities, uses and functions merge more and more, both in the urban and the domestic sphere. Houses and workplaces have become increasingly closer to one another. The number of people working from home is rising along with the number of citizens that use their homes as productive spaces thanks to digital technologies. Current digital sharing economy platforms allow people not only to work from home, but also to market their houses and domestic services online with ease, turning the private, public and accessible.

Under this context, our perception of the city and its Architecture differs, more and more, from the paradigms of the last decades. While milestones such as 1978’s book Delirious New York, shows a city defined by a set of big envelope buildings on a grid, each enclosing a world in themselves. Today Architecture cannot be
understood detached from an interconnected reality, where buildings, more than isolated entities, are part of a larger system of common spaces and services that link the micro with the macro, having consequences on the political, the economical and the environmental at large.

This increasing mix among interiors and exteriors, public and private spheres, allows us to think of the world as a continuous interior or following Sloterdijk’s image as a ‘grand interior’, an endless domestic landscape defined by spaces, objects and technologies, where the public space is being redefined, moving from the archetype of the street -as the paradigm of the common- to a more complex situation where public and private merge all along the city -from the exterior to its interior-. In this scenario, the home is also becoming part of this public realm.

In Core I, we will approach the discipline from this contemporary context, understanding Architecture in its networked condition and the shift of public space. We will address the course looking to our actual and close reality, taking the everyday life of the city of New York as a starting point and base for an architectural proposal. We will look at buildings and their urban context, understanding the quotidian as a platform for a deeper research that will allow us to comprehend the complexity of the built realm, its actual functioning and requirements in relation to economic, climatic, environmental, social and political issues. And we will design Architectures that answer to those realities: transgressing, empowering, complementing, … existing networked spaces. We will produce Architecture from the urban towards the detail, from the drawing towards the construction, and during that path we will always foster graphical, formal and material experimentation as an intrinsic part of the design process.

**TASKS**

The course will be divided in three main exercises, each of them will be focused on a specific scale and will use a specific architectural representation technique. Those restraints will allow us to approach the complexity of our close reality and design on it in a simple manner. Each exercise will be analytical and at the same time critical and propositive.

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Framework
With a length of 13 miles, Broadway is the oldest street crossing north-south the island of Manhattan. It runs through a diverse compendium of realities, making the observation of this particular street a suggestive exercise that allows to unveil the complexity of the whole urban structure and, ultimately, to understand Architecture in its relational nature.

Broadway acts here as an element which allows to draw together a whole set of realities that permits a cross-reading, from the object to the urban scale. To understand the Architecture of the city means also to select those aspects and elements that define it. In the drawing, the architect has the best tool for performing this exercise of abstraction. Drawing obliges to select the precise features that identify elements in different scales from details to urban fabric, representing and emphasizing them and their relationships. Thus, representation is not an objective tool, as it always relies on different perspectives, that allow to unveil sometimes unperceivable realities and, at the same time, raise critical positions towards architecture and the city.

Tasks
Through the observation and research of a particular area of Broadway, produce a set of drawings using black lines that express the Architecture of the Avenue. Each group will be assigned a fragment of that street, in order to draw the whole. The drawings have to capture the physicality of the city as well as as other unphysical elements that are essential to the context. The outcome has to offer enough graphical information to be able to understand its nature. All the elements that are not perceivable but essential to the city, have to be speculated and designed accordingly. Look, draw, research and design:

- enclosures
- buildings
- materiality and construction of its buildings
- underground spaces
- infrastructures
- water supply
- light
- color
- everyday life objects
- history
- social data
- air pollution
- vegetation
- types of actions and movements
- timings and sequences
- more...

Expectations
The student is expected to understand a physical reality speculating about the visible and the invisible, and is expected to translate it into an architectural language. The work has to show a control of classical architectural representation techniques: plan, elevation, section and axonometry. The type of representation must be chosen according to the information that has to be communicat-
REFERENCES EXERCISE 1
(b&w drawings)

Walter Marchetti - Observation of the Movements of a Fly

Herbert Bayer and Fritz Benedict - Green Mound and Marble Garden

Sarah Wigglesworth and Jeremy Till - Increasing disorder in a dining table

Ruohong Wu - Chinese Games

Pedro Pitarch - Archipielago
REFERENCES EXERCISE 1
(b&w drawings)

Enric Miralles - Inestable

James Stirling - Competition design for a museum for the Northrhine-Westphalia art collection

Bernard Tschumi - The Manhattan Transcripts
BROADWAY STORIES
Exercise 2

Framework
Understanding Architecture in its networked condition means to understand the city as a complex whole, where the public space is more than the space between buildings (recalling the famous description of the street by Aldo Van Eyck), but also part of buildings, a part of the built realm. Architecture as a system means understanding streets, buildings and infrastructures as a single entity.

In that sense, La Nuova Topografia di Roma (1748) by Giambattista Nolli, a plan where enclosed public spaces were represented as open civic spaces -groundfloors- in continuity with the street, can be seen from the present as an early attempt to represent the complexity of the city beyond the dichotomy street-building.

Here the term 'public' refers to its Latin origin ‘populus’, meaning people, for or from the people. A public space emerges when a space is opened to the people, no matter if it is privately or publicly owned, indoors or outdoors, overground or underground,... It is a shared space that can be appropriated temporarily for the individual or the collective benefit.

New York has an old tradition of this type of space. At the end of the XIX century the city was filled with public spaces that used to occupy roof tops. With the inclusion of the elevator in buildings and the consequent increase of their height, suddenly the views and the easy accessibility that was offered by these new infrastructures, made the last floor an attractive place to be. Open theaters, ice skate rinks, restaurants, and other leisure spaces used to occupy these open floors turning the roof tops in civic spaces, compensating the lack of comfort in the streets and the lack of public squares in Manhattan. At that time, the public was not reduced to ground zero.

Nowadays, with the emergence of digital technologies, even previously private spaces can be easily offered to citizens through online platforms. Cases, such as the popular Coachsurfing or Airbnb, allow us to see the rise of these new accessible architectures. From people offering their cupboards as shared storage spaces, to people opening their living rooms as temporary restaurants, we have a contemporary landscape of public spaces that go beyond the street and the traditional city services, entering the domestic sphere. The urban and the domestic are merging through this new systemic tendency, defining a city built from fragments that can be occupied and used on demand. In front of the actual reality, a lot of questions emerge: What happens when the idea of public/shared/collective space is rapidly merging with commercial enterprises? Can it still be considered a space for the people and from the people at large? Which should be the role of the Government? How to avoid exclusion? How could this collective networked spatial reality operate for the commonwealth (from an economical, environmental, political or social perspective)?

Tasks
Again, we will take Broadway and its surrounding buildings as our area of study, in order to analyze it and detect those spaces that can be classified as public.

Based on your findings, design an architectural system, unveiling a set of public spaces that can operate together as part of a network. Select those spaces accurately and establish a relation. They can be linked through different types of relations: similarity, opposition, complementary, operability, …

Understanding the functioning of your spatial system, establish a critical position and design a new space (or a set of them) able to redefine the preexistent. The new Architecture can empower, compete, transgress, compensate, erase,... the actual operability of those spatial fragments in the city. Produce a set of color masses drawings to express the narrative that define your system, describing the relation –physical, economical, political,... - between those spaces and the city at large. Build a model or set of models of the interior of your spaces to be photographed in order to explain your design. The scale and the materiality of those models have to be chosen in coherence with the project. Consider that those models are built to be photographed, they can be fragmented, as theatrical scenarios. Work with light, color, materiality,... in order to communicate the atmosphere of your space. Build a collective model of Broadway placing your project.

Expectations
The student is expected to be able to analyze the city and its contemporary reality, and to raise a critical and coherent position in relation to the actual condition of public/common/collective space through the design of a new space or set of spaces. The student is expected to design, experiment and control space values as form, proportion, scale, light, color and materiality. Through the set of color drawings, the student is expected to show in an adequate way the narrative and critical position behind the existing spatial system and the new Architecture. The type of representation (plan, section, detail, axonometric,…) must be chosen according to the information that has to be communicated. Drawings have to be properly composed and show an adequate use of color masses. The models must show precision and delicacy, executing in a detailed and accurate manner the interior of each space. The photographs of the models have to be properly produced, showing a correct selection of the scenario, the viewpoint, the perspective, the use of light and color. Design speculation and drawing and model experimentation is encouraged. Both, drawings and models, have to be as simple as possible and at the same time have to express as much information as possible. The student is expected to be able to sum up in few drawings, models and photographs of models the whole complexity of the project.

Deliverables
A collective model of Broadway (material and scale to be determined), each group has to deliver its own fragment. Also, a set of 5 photographs of your interior spaces models and a set of 5 color drawings, using masses of color (no black color). Both set of drawings and the set of photographs have to be printed on Heavyweight Bond white paper, 24”x24”.

Timeframe
September 20th – October 30th
REFERENCES EXERCISE 2
(color drawings)

Lina Bo Bardi - Casa al Mare

54N4E & Piovene Fabi – Velodromo Maspes-Vigorelli

Piovene Fabi – Parckdesign

Bureau Spectacular – Exploded Programs

MOS – Corridor House
REFERENCES EXERCISE 2
(model photography)

54N4E & Piovene Fabi – Velodromo Maspes-Vigorelli

Josef Schulz - Form #14

Piovene Fabi – Le Ali Ritrovate dell’Hotel de Galliffet

Thomas Demand - Stove
Framework
A mock up, a fragment of a 1:1 construction, is an Architecture tool that allows us to experiment with construction. It pretends to be real, yet it remains fictional due to the impossibility to contain the whole. It is a simulacrum: a piece of Architecture in a state of limbo, between reality and fiction. In this state of limbo imagination emerges, constituting a subtle and contradictory entity that embeds both the most radical forms of a reality still to be unfolded, and, simultaneously, extremely volatile materials prone to disappear. And precisely, there lays its radical power: in the way it shows the possibility of an alternative reality. In a world where construction systems are able to redefine global economies and ecological attitudes, a mock up emerges as a critical device for Architecture that allows us to reflect beyond the built realm.

Tasks
Understanding the radicality of mock ups, experiment with future materiality, color, form, construction systems... Build a mockup or a set of 1:1 constructions of your design, choosing materials that are coherent with your project argument, and that have a low impact on our environment. Be aware of their origin and system of production. Consider possible afterlifes, reuses and recycle procedures. In addition to the 1:1 construction, redo Exercise 2 deliveries taking into consideration Mid Term Review comments. Produce also a short moving image using Exercise 2 photographs, showing the atmosphere of your space with that clip with subtle spacial movements (changes of light, shadows, air movement, ...).

Expectations
Through the 1:1 construction, the student is expected to design and experiment with materiality and technical requirements. The outcome has to show experimentation and evolution, as well as environmental awareness. The student is also expected to be able to respond properly to Mid Term Review comments, understanding how to redo, evolve and push forward the project in an adequate and critical manner.

Deliverables
Constructions 1:1 of fragments of the design. Take 5 photographs of those constructions and print them on Heavyweight Bond white paper, 24”x24”. Print again the set of 5 photographs of your models and 5 color drawings. Deliver the moving image clip (30 sec, max 10MB, HD). Collect in a booklet all the relevant material produced during the project, that might complement the previous deliveries.

Timeframe
November 6th – December 2nd
REFERENCES EXERCISE 3
(1:1 construction)

- Gego - Reticularea
- Anne Holtrop – Barbar/Batara
- Júlia Spinola - Mandarina rueda
- Junya Ishigami – House and a Restaurant
SCHEDULE

Week 1
September 2nd – 8th
W. CORE I and exe 1 Introduction  
F. Tutorials exe 1

Week 2
September 9th – 15th
M. Tutorials exe 1  
W. Tutorials exe 1  
F. Tutorials exe 1

Week 3
September 16th – 22nd
M. Tutorials exe 1 + Collective Review  
W. Tutorials exe 1  
F. Submission Pin Up exe 1 + Introduction exe 2 + Lecture Fran Leadon

SATURDAY 21st Day trip along Broadway

Week 4
September 23rd – 29th
M. Tutorials exe 2 + Lecture Júlia Ramírez  
W. Tutorials exe 2  
F. Tutorials exe 2

Week 5
September 30th – October 6th
M. Tutorials exe 2  
W. Tutorials exe 2  
F. + Tutorials exe 2

SATURDAY 5th Workshop by Michael Vahrenwald with ADR

Week 6
October 7th – 13th
M. Tutorials exe 2 with MV  
W. Tutorials exe 2 + Lecture Laura Kurgan  
F. Tutorials exe 2 + Collective Review with MV

Week 7
October 14th – 20th
M. Tutorials exe 2  
W. Tutorials exe 2  
F. Tutorials exe 2

Week 8
October 21st – 27th
M. Tutorials exe 2 + OPEN HOUSE  
W. Tutorials exe 2  
F. Tutorials exe 2

Week 9
October 28th – November 3rd
M. Tutorials exe 2  
W. MID REVIEW  
F. MID REVIEW

Week 10
November 4th – November 10th
W. Introduction exe 3 + Lecture Sara de Ubieta  
F. Tutorials exe 3 + Lecture Thomas Thwaites

Week 11
November 11th – November 17th
M. Tutorials exe 3  
W. Tutorials exe 3  
F. Tutorials exe 3 + Collective Review

Week 12
November 18th – November 24th
M. Tutorials exe 3  
W. Tutorials exe 3  
F. Tutorials exe 3

Week 13
November 25th – December 1st
M. Tutorials exe 3  
W. Tutorials exe 3

Week 14
December 2nd – December 8th
M. FINAL REVIEW  
T. FINAL REVIEW

GRADING

The submission of all exercises is compulsory to pass the course. Class attendance is also mandatory. Any absence must be adequately justified. Any student nonattending to more than 3 classes won’t be able to be graded.

Two assessments will be made during the course. After the mid-review, the student will receive an orientation assessment of the evolution done up to that moment. This intermediate grade must be considered a provisional assessment, a useful tool to understand the virtues and defects of the work carried out until then. It is a moment of reflection in order do know how to improve.

To assess the exercises, the coherence of the student’s response to the demands of the exercise, the virtue and adequacy of the proposal made, the correction of its graphic and material representation will be taken into account. Exercises submitted after the delivery designated date, will not be evaluated.

Apart from the final outcome of each exercise, the final grade will assess the student’s effort and evolution during the course as well as their critical attitude. Active attitude will also be valued, such as participation in classroom discussions, collaboration with classroom colleagues, expansion of the contents of the course with own research, attendance at conferences and alike.

In relation to grading, see more in the following link: https://www.arch.columbia.edu/grades
READINGS

GENERAL READINGS


Crary, J. 24/7: Late Capitalism and the Ends of Sleep. Verso, 2014.


Harvey, D. Rebel Cities: From the Right to the City to the Urban Revolution. Verso, 2012.


Latour, B. The Berlin Key or How to Do Words with Things. Routledge, 2017.

Marazzi, C. Capital and Affects. Semiotext(e), 2011.


ABOUT BROADWAY


**SUPPLIES**

**Utrecht:** 21 E 13th St  
General art supply, canvas, plaster, paper, paint, brushes

**Janoff's:** 2870 Broadway  
White board, paint, metal, piano wire, wood, foam core, cutting supplies

**Compleat Sculptor:** 90 Vandam St  
Plaster, resin, blackener, metal, rockite, blue foam, casting information, wax, clay

**Canal Plastics:** 345 Canal St  
Acrylic sheets, tubes, cubes, mylar, mirrored paper

**Canal Rubber:** 329 Canal St  
Rubber textures

**Metalliferous:** 34 West 46th Street, 3rd Floor  
Soldering / metal supplies

**The Home Depot:** 40 W 23rd St  
Tools, screws, nuts, bolts, lumber, rope, paint, screen

**Space Surplus Metals:** 325 Church St  
Aluminum, brass, copper, steel

**McMaster-Carr Supply Company:** 473 Ridge Rd

**T&T Plastic Land:** 315 Church Street

**AJO Ace Home & Lumber Depot:** 610 Columbus Ave  
Lumber

**Metropolitan Lumber Midtown:** 617 11th Avenue  
Tools, materials -open 7 days-

**Prince Lumber Co.:** 404 West 15th Street

**Industrial Plastics:** West Orange, NJ

**Pearl River Mart:** 477 Broadway  
Fabric, paper, boxes, random other materials

**University Hardwares:** 2905 Broadway  
Rockite, paint, screws, nuts, bolts, tools, rope

**FABRICATION LAB**

https://www.arch.columbia.edu/research/facilities/2-making-at-gsapp