ARCHITECTURE AS A LEVER OF TRANSFORMATION
THE SPATIAL CITY - A METROPOLITAN BUILDING IN PARIS

Yona Friedman, Extension to the Georges Pompidou Center, Paris, 2008.
New Babylon_Constant, "Grand Secteur Jaune", 1967
UNIT BRIEF

As forms of work, consumption, transportation and entertainment evolve, so to do our conceptions of living together.

Architecture has to accompany, and even anticipate, these developments. In its first year, Intermediate 16 will explore architecture's ability to re-invent – to make new spaces that emerge alongside new urban objects, and in turn produce new processes of citymaking.

Students will investigate the transformation and resilience of particular territories – abandoned urban areas through an approach of regeneration in programmatic, social, urban and architectural terms.

Guided by our studies of interactions between programme, diagram and architecture, we will engage with a spatial strategy that formalises both Louis Kahn's notion of 'spaces which serve and are served' and Rem Koolhaas' 'stable and unstable spaces' in order to question the potential of programme and elaborate on an architectural figure – a simplified representation of a concept that expresses architectural intentions.

As a response to the transformations of ways of life and the mutations of spatial and built morphologies, projects will test the idea of hybridisation via a reflection on new metropolitan buildings.

These plural, multi-functional buildings, which seem to exist partway between large buildings and urban quarters, superpose and condense varied uses, blur scale and scope and create new hierarchies, producing a new form of urbanism.

They are more like open processes than finished objects. The students will first analyse existing metropolitan buildings and then explore this idea in their own projects.

Like the New Babylon imagined by Constant as a sort of ‘social city’ that brings people together, students will work on a building to provide a variety of programmes that are both reflective of specific temporal requirements and powerful generators of use and atmosphere.

Designs will reflect on modularity, taking account of societal developments and new aspects of the city. At the same time, projects will create a variety of spaces and atmospheres to enable conditions for encounters and collective living, questioning current forms of public space while also developing new contexts for social exchange (from the solitary individual to the collective).

By allowing the unpredictable, projects (much like Constant's city) will recreate ‘dynamic labyrinths’ – impromptu spaces and places for movement.
UNIT WORK

A/ The site: PARIS - REINVENTING PARIS

Intermediate Unit 16 will work on a site in Paris, place d'Italie in the 13th arrondissement. The site is part of the Call for Innovative Urban Projects, “REINVENTING PARIS” with the intention of using innovation to achieve efficiency and urban quality.

It is about building knowledge, combining visions, mobilising energy and gathering resources to build the most relevant and innovative projects, in tune with today's demands and the plan for Paris.

Students are invited to respond to this approach to innovation that aims to be as open as possible to stimulate the imagination, to unleash creativity and the emergence of new urban objects and new processes for designing the city.

As a world-leading metropolis in constant interaction with other cities around the globe, urban innovation is an essential part of Paris.

Since 2001, the city has led numerous urban regenerations and developments of new districts. The 13th arrondissement where our site is located is a very relevant example of this urban revitalization.

Urban context

Located on Avenue d'Italie, next to one of the largest shopping malls in Paris—Italie 2—the proposed site is a vast public esplanade (190m *15m) covering more than 2500 m2.

It benefits from the exceptional flows generated by the Place d'Italie in the heart of the 13th arrondissement.

The 13th is one of the major arrondissements in Paris, as in recent years it has demonstrated a remarkable capacity for transformation with the urban development which accompanied the Grande Bibliothèque de France project.

The site is in the heart of the vast «Italie 13» urban operation conducted in the 1970s with the construction of some thirty tower blocks in the sector between the Butte-aux-Cailles and the Rue Nationale and between the Boulevard Vincent-Auriol and the Porte d'Italie.

It is on the border of the 13th arrondissement’s Asian quarter.
At the end of the 1980s a real estate complex crowned with a multicoloured campanile was constructed around the Place d'Italie by architect Kenzo Tange, originally containing the Grand Ecran Italie cinema complex at the front of the Italie 2 shopping mall.

At the same time, the site is next to the vast Paris Rive Gauche operation, an urban development scheme which affects the whole eastern side of the 13th arrondissement. Its founding principles are aimed at establishing links and continuities between the quarters of the 13th and the Seine, in a sector of Paris historically traversed by major infrastructure (rail lines and the Gare d'Austerlitz).

In this context students will discover and experience an unusual, contemporary piece of the city, constructed on the principles of the “Open Block”, which has the unusual structural aspect of covering over existing rail lines.

The gradual covering-over of rail lines is now well advanced, and has made it possible to establish links between existing quarters, generating a new topography, new urban entities and programmes for housing, offices and public buildings around a network of spaces and gardens.
Site Visit - Trip to PARIS

The site is characterised by the proximity of remarkable buildings: Dominique Perrault's Grand Bibliothèque – Renzo Piano's Pathé Foundation, Jacob and MacFarlane's Docks building, Le Corbusier's Cité du Refuge and the Massena Paris Rive Gauche quarter.

The site visit at the beginning of Intermediate Unit 16 will be an opportunity to travel to Paris to visit these buildings and personally meet the architects who designed them (Renzo Piano, Jacob & MacFarlane, etc).

During this trip students will have a workshop on the urban transformations of the 13th arrondissement and will visit the Yona Friedman exhibition Architecture Mobile- Spatial City.

Reading:
- Collage city- Colin Rowe Fred Koeller Edition Supplementaires Centre Georges Pompidou
“Society is changing very rapidly in our time. The most important trend from the point of view of the urbanist is the need for recreation, the use of free time. The reason for the existence of towns is the struggle against boredom. Parallel to these new changes the technical advances (communication and production) are no less revolutionary. If the trend to recreation represents a search, so the new techniques open a door for even the most eccentric solutions. Any attempt at a static solution would be unwise. We propose a mobile urbanism which would search for techniques allowing the construction of large units within which an infinite flexibility is required; techniques allowing the provision of supplies (water, energy, sewage disposal) capable of rapid alteration and reutilization; techniques using elements, inexpensive, simple to erect, easy to transport, reusable. The means of urban circulation should be communal; individual vehicles should stay out of town and provide for inter-urban circulation. The public centers (halls, markets) should be changeable and replaceable like the houses. These conditions assure that a town or a quarter can change its form if its inhabitants want it. Planning becomes bearable, because it is not definitive, and the possibility of correction or experimentation is still here.”

Friedman, Yona and Aujame, Roger: Mobile Architecture; in Architectural Design, no.9; 1960.
B/ Spatial Urbanism

A metropolitan building in Paris

In Intermediate Unit 16, we believe in Architecture's ability to transform spaces. Students will analyse the work of Yona Friedman in Paris, which seek to modify Haussmann's city through « Spatial Urbanism » which is three-dimensional and aims to liberate ground space and introduce the notion of movement.

Yona Friedman's Spatial City, developed above Paris, aims to raise and superimpose different inhabitant uses, creating a framework on piles in which users can organise their living spaces freely.

Following on from Yona Friedman's vision, Intermediate Unite 16 invites students to design a structuring metropolitan building, floating above the Avenue d'Italie, a bridge-building or inhabited footbridge which straddles the site's empty esplanade as an aerial structure which will contain a plurality of superimposed usages.

This federating bridge-building, a new Parisian urban object, will have the ambition of creating a strong social and urban dynamic.

This plural and multifunctional building, will provide a variety of programmes combining different functions – housing, offices, hotel, play area, cultural activities, school, creative and temporary commercial outlets (like pop-up stores), restaurants, sports areas, suspended planted promenades, vertical gardens, suspended streets - in continuity with the public space.

Each student will elaborate a personal reflection on the programmes they wish to develop in their project, supplying arguments on the use-values they propose.
**Spatial sequences or “dynamic labyrinth”**.

In response to the exceptional configuration of the site, stretched out along a lively urban avenue, students will reflect on the spatial sequence of uses they propose, and on the concept of a “dynamic labyrinth” associated with a promenade-walk which integrates the notion of movement into the project.

Using drawings and models, students will be led to work on the continuity of the public space within the building, with belvedere staircases, ramps and suspended promenades giving a spectacular view of the city.

Students will illustrate this imaginary construction with functional diagrams and connecting schemes.

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**A Laboratory of spaces**

Students are invited to design their project as a laboratory of spaces and atmospheres with fields of encounter and impromptu spaces.

The metropolitan building has to express the plurality of its functions in order to reinforce its urban presence.

Along with the students, we shall experiment with the notion of the “active platform”:

The platform will have to play on horizontality, accentuating the linearity of the project.

In the active platform there will be a maximum of animation: interactive exchanges around commercial premises, the animation of sporting activities, a dynamic around staircases and restaurants: the project will put a spotlight on the activity which takes place in the facility, so as to amplify the urban dynamic and exchanges with the Avenue d'Italie.
In contrast, the upper part of the building will contain more domestic uses, such as student accommodation, hotels and artists’ studios. Students will be able to experiment with the notions of modularity, in order to take account of society's evolutions, a new era in the city and alternative uses.

Reading:
Utopies Réalisables - Yona Friedman
L'Architecture Mobile/ Ed Casterman – Yona Friedman
Transmission/Reception – Yona Friedman – Camille Henrot Ed Kamel Mennour
The trompe l'oeil Universe – Yona Friedman CCA KitakyUshu
Pierre Restany- Le livre rouge de la Révolution Picturale- Ed Appolinaire- Milan 1968
The dilution of Architecture – Yona Friedman-Manuel Orazzi - Ed Park Books Archizoom
Constant- Une Retrospective-Musé Picasso-Antibes 2001
New Babylon- Constant- Art et Utopie- Ed Cercle d'Art -1997

Technical Studies –Only for the third years

The design of the Métropolitain building, as a bridge-building suspended above the city, will be an opportunity for third-year students to incorporate structural and constructive reflection in their project, and to think about adequate structural systems, inspired by works of great significance.

Reading and Reference:
Pier Luigi Nervi Buildings.

C/ Intermediate Unit 16 Process

The project develops according to a multiple time scheme:

The Content:
Analysis of the site

At first, students will work on an overall reflection on the site; they will model the territory in order to grasp its imaginary aspect, as well as geographical, historical, social and cultural issues. Students will produce structural plans which retranscribe the urban morphology, people and traffic flows, scales, density and the historical evolution of the 13th arrondissement. This analysis of the site will be both thematic and sensory: students are encouraged to make the most of the riches of the Parisian urban atmosphere and retranscribe it into their analysis, using abstract or figurative collages and photo-montages.

References:
Plug In City – Archigram 1964
Hellytown- 1926  Piero Portaluppi
Agglomération sous une coupole – David Georges Emmerich
New Babylon -Constant
Les cités du Futur - Fantaisies architecturales -Iakov Tchernikov -1933
The Wall Atlas

At the beginning of their project, we will ask each student to choose a strong reference image which will constitute their “reflection hypothesis” and which will enable them to nourish their imagination and define their initial operational concepts. All the students’ images will constitute an Atlas for our Unit, which will serve as an intuitive basis for initial research, and which will be displayed on the studio walls.

The Atlas Images of Unit 16 will work as active agents in the ongoing process of conception. Their function “recalls the earlier concept of the image as something that is never static but constantly in motion.” Images “form a virtually endless repertoire of playing cards, which can be reshuffled over and over again and partake in a genuinely experimental architecture, a process more interested in questions than answers.”

Philippe Ursprung “Cabinet de Curiosités”

Reading:

The architectural figure:

Initial intuitions will be formalised using free models on different scales and various materials (paper, cardboard, wood, metal, etc), which will serve as a basis for defining the project’s orientations. Students will have to elaborate a simplified representation of their concepts that expresses their first architectural intentions.
This figure is an important stage for students in their research concerning the form of their building.

Metropolitan Building References

Each student will have to choose a complex public building and analyse its spatial organisation in plans and sections, through diagrammatic concepts which formalise the notions of “spaces which serve and are served” (Louis Kahn), “stable and unstable spaces” (Rem Koolhaas), Horizontal and vertical connexions, voids and masses, Structural system, Spatial sequences and trajectories of movement, Spaces of encounters and exchanges or « Event fields », and inside-outside relations.

The students will choose a building in Paris or Tokyo and will discover it during the unit trip.

Reading:
Diagram Diaries - Peter Eisenman - (Universe Architecture Series)
SMLXL- Rem Koolhas

Some examples of Metropolitan Buildings could be :
The Philharmonie de Paris- La Villette- Jean Nouvel
Centre Pompidou- Paris- Renzo Piano/ Richard Rogers
National French Library - Dominique Perrault
Tokyo Institute of Technology - Kazuo Shinohara
Fussa City Hall - Riken Yamamoto
Sendai Mediatheque - Toyo Ito
The 21st Century Museum - SANAA

Project Development
Programmatic innovations

Architecture has both a social and a human role. Architecture's vocation is to be at the service of society, to invent new spaces for new uses, to reach the greatest possible number and transform the world.
Our Intermediate Unit envisages a building as the expression of specific temporal needs, and thus as a pretext for amplifying uses and inventing atmospheres.
The programmatic innovations include the production of spaces for social encounters (events fields), new functional juxtapositions or superpositions.
These are designed to re-invent forms and functions and enable freedoms in conceiving new spaces.
Each student will elaborate a personal reflection on the programmes they wish to develop in their project, supplying arguments on the use-values they propose. All these superimposed, juxtaposed uses will be prioritised in the project and sequenced through a dynamic architectural process and movement trajectories. Students are invited to imagine spaces which would be programmed for non-specific function and to make a critical analogy between their chosen reference building and their own project through the same analytical grid.

Each student’s proposal will pay particular attention to the notions mentioned above and will formalise these concepts using 2D and 3D drawings (axonometries, plans, perspective sections) which will be re-used in their portfolio.

After reviewing all different components of the metropolitan building design, the unit will be focused on a more detailed conception of the internal spaces, their specific atmosphere and a more precise definition of the materiality and the skin of the building.

Reading:
-The Manhattan Transcripts 1976-1981 Bernard Tschumi
-Architecture and Freedom? Programmatic Innovation in the Work of Koolhaas/OMA Kim Dovey and Scott Dickson
UNIT TRIP

At the end of the first term students of Intermediate Unit 16 will travel to Japan (Tokyo and Osaka) for 10 days to visit some relevant buildings from Toyo Ito, Sejima, Tadao Ando, Kazuo Shinohara, Kisho Kurokawa, Kazunari Sakamoto, Riken Yamamoto, Itsuko Hasegawa, Hiroshi Hara and Kenzo Tange.

Reading:
- The sens of space in Japan: Vivre, penser, bâtir, Augusin Berque and Maurice Sauzet, 1999.
- The new japanese architecture, Naomi Pollock and Yuki Sumner, 2010.
- Project Japan, Metabolism Talks, Rem Koolhas and Hans Ulrich Obrist, Taschen.

Tama Art University library - Toyo Ito
Kanazawa museum - SANAA
Prada Boutique - Herzog et De Meuron
Fussa City Hall - Riken Yamamoto
Sendaï mediatheque - Toyo Ito
Gifu-Kitagata Apartments - Sejima
UNIT TUTORS

**Salwa Mikou and Selma Mikou** founded Mikou Studio in 2006 in Paris. Well-known as emerging women architects in France, this year they have been nominated for the Arcvision Prize for women in architecture by the jury led by Martha Thorne. They studied architecture at Paris-Belleville School of Architecture, and graduated in Architecture and Urbanism in 2000. From 2000 to 2005 they were project managers at international practices, namely Ateliers Jean Nouvel (Salwa) and Renzo Piano (Selma), in charge of international projects. Mikou Studio has won competitions in France, Morocco and London and has delivered several educational and leisure facilities, Feng Shui swimming pool in Issy-les-Moulineaux (2015), Zero Energy school in Saint Ouen (2014), Jean Lurcat high school in Saint Denis (2013), Georges Valbon ludotheque in Bobigny (2012), Bailly school complex in Saint Denis (2009), Urban regeneration of Massy Centre (300 housings and retails 2017). Some ongoing projects are: the Housing tower in Bordeaux (2018), Balsaneo Sport complex in Chateauroux (2019), Regeneration of Hackney Arches in London (2018)

In 2014, MikouStudio was selected to take part to the Moroccan pavilion at the Venice Biennale, directed by Rem Koolhaas on the theme “Fundamentals – Absorbing Modernity 1914-2014”. The Moroccan pavilion offered an exhibition which made a parallel between an historical trajectory and a prospective, speculative vision of the desert habitat, particularly in the region of the Western Sahara. The chosen site deals with the transformation of disused mining works located at Boucraa in the Sahara, making it into an inhabited territory.

READING LIST

**Books on Paris:**
- Paris- Londres- Sous la direction de Jean Louis Cohen et Dana Arnold Infolio

**Books on Architecture/Urbanism**
- Archilab's urban experiments : radical architecture, art and the city : [exhibition organized by the Mori art museum and the FRAC Centre, Orléans, in association with The Yomiuriil Shimbun, and presented at the Mori art museum, Tokyo, 21 December 2004 to 13 March 2005] London : Thames & Hudson, 2004. BRAYER, Marie-Ange, MIGAYROU, Frédéric, NANJO, Fumio
- La cité à travers l'histoire - Lewis Mumford- Paris : Seuil, cop. 1964. (Esprit)
- Utopies Réalisables - Yona Friedman
- L'Architecture Mobile/ Ed Casterman – Yona Friedman
- Transmission/Reception –Yona Friedman – Camille Henrot Ed Kamel Mennour
- The trompe l'œil Universe – Yona Friedman CCA KitakyUshu
- Le livre rouge de la Révolution Picturale- Ed Appolinaire- Milan 1968 -Pierre Restany-
- Constant- Une Retrospective-Musée Picasso-Antibes 2001
- New Babylon- Constant- Art et Utopie- Ed Cercle d'Art -1997
- The Seduction of Place: The History and Future of Cities By Joseph Rykwert
- Apprendre à Voir l'Architecture, France : - Bruno Zevi. (1959), Les Éditions de Minuit
- Urbanisme, utopies et réalités, Paris (France), Choay, F. (1979) : Éditions du Seuil
- Collage city- Colin Rowe Fred Koeller Edition Supplementaires Centre Georges Pompidou
- Autobiographie Scientifique – Aldo Rossi Edition Parenthèses
- Architecture de la ville –Aldo Rossi 1966- Edition Folio
- Space, Time, Architecture, Sigfried Giedion, 1941
- La société du spectacle -Guy Debord
- Manuel d'instruction pour le Vaisseau spatial Terre- Buckminster Fuller_Lars Muller Publishers

**Books on Phenomenology:**
- L'oeil et l'Esprit – By Merleau-Ponty
- La poétique de l'Espace – By Gaston Bachelard

**Books on Programme/Diagrams**
- Instigations -Engaging architecture landscape and the city, GSD075 Harvard University – Edited by Mohsen Mostafavi and Peter Christensen - Lars Muller Publishers
- Floating Images- Eduardo Souto De Moura –Wall Atlas - Lars Muller Publishers
- Diagram Diaries - Peter Eisenman - (Universe Architecture Series)
- The Manhattan Transcripts 1976-1981 Bernard Tschumi
- Architecture and Freedom? Programmatic Innovation in the Work of Koolhaas/OMA Kim Dovey and Scott Dickson
  Journal of Architectural Education (1984-)
  Vol. 56, No. 1 (Sep., 2002), pp. 4-13

**Books on Structure:**

**Books on Japan:**
- The sens of space in Japan: Vivre, penser, bâtir, Augusin Berque and Maurice Sauzet, 1999.
- The new japanese architecture, Naomi Pollock and Yuki Sumner , 2010.
- Project Japan, Metabolism Talks, Rem Koolhas and Hans Ulrich Obrist, Taschen.