

THE CONTEMPORARY PROJECT

Design to fit the human spirit

5th Edition

Barcelona 2019

Organized by:

Cercle d'Arquitectura Research Group

Departament de Projectes Arquitectònics

Escola Tècnica Superior d'Arquitectura de Barcelona

Universitat Politècnica de Catalunya

Oriol Bohigas ETSAB Library

In collaboration with:

Fundació Mies van der Rohe. Barcelona

Ajuntament de Barcelona. Direcció d'Arquitectura Urbana i Patrimoni, Ecologia Urbana

College of Architecture and Urban Planning

Tongji University of Shanghai

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MBArch ETSAB UPC

Barcelona 2019-2020

FROM LARGE SCALE TO CONTEMPORARY PROJECT · 25 YEARS

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5th Edition

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Cercle d'Arquitectura Research Group

Departament de Projectes Arquitectònics. ETSAB UPC

Cercle d'Arquitectura coordinates the Contemporary Project degree

It's open to share Research by Design with different Institutions

Fundació Mies van der Rohe. Barcelona

Fundació Mies van der Rohe is a partner of The Contemporary Project

It opens the EU Architecture Prize archives for research

It opens the MvDR Pavilion for some special events

Ajuntament de Barcelona

Direcció d'Arquitectura Urbana i Patrimoni, Ecologia Urbana

City Council of Barcelona is a collaborator of The Contemporary Project

It proposes locations and current issues for design and research

Oriol Bohigas ETSAB Library

The Library of ETSAB School of Architecture participates in teaching

It gives new tools for research through books, archives and documents

DMD - Dual Master Degree, Barcelona-Shanghai [optional]

The Contemporary Project MArch is part of the Dual Master Degree (DMD) programme between CAUP_Tongji University and ETSAB_UPC since 2015.

PhD's Program [optional]

The Contemporary Project master's degree enables students who obtain a good mark to enrol in a doctoral programme.

Frontpage: La Pedrera, by Antoni Gaudí and Josep Maria Jujol

Backpage: Street lamp in Passeig de Gràcia, by Pere Falqués

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The research is an attitude of nonconformity, of wanting to know, of betting on knowledge as a generator of value, and, therefore, applied to any field it's welcome.

La recerca és una actitud d'inconformisme, de voler conèixer, d'apostar pel coneixement com a generador de valor, i, per tant, aplicada a qualsevol àmbit és benvinguda.

Antoni Esteve

President de la Fundació Catalana per a la Recerca

“La recerca és una actitud d'inconformisme”, El Punt/Avui, 13 d'abril de 2013

And it will be necessary to fight now when the artistic avant-garde begins to translate into urban design. Since we do not have contemporary art museums, at least we will have public spaces and “contemporary” monuments.

I caldrà batallar ara quan l'avantguarda artística comença a traduir-se en disseny urbà. Ja que no tenim museus d'art contemporani, al menys tindrem espais públics i monuments “contemporanis”.

Oriol Bohigas

“No hi ha res pitjor que la gent de bé quan l'erra”, Avui, 7 de juny de 1983

Elogi de la modernitat. Arcadia, 2015

- * It joins: Architecture, city and project | Architecture, environment and technology
- ** It joins: Master's Thesis | All Scales of the Project

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Design to fit the human spirit

This is an international master's degree, taught in English, where the students come from the five continents. This makes their backgrounds very different, which is a stimulus that helps us to have a global and local vision of architecture.

The aim of this international master is to think about the present and future of contemporary architecture and urban design, and to discuss about what is being done right now and why. We need to understand current times and to decide which are the tasks we have to do to improve our environments in both, emotional -artistic- and functional, paying special attention to reality. Of course, in order to understand the present and to design the future, we also need to know the past.

Not far in the past, in early modern times, architecture had to be new plant building to accommodate the millions of new inhabitants in which the population multiplied. Without context. In abstract. However, nowadays we have to deal with the built city and the existing buildings. This is the new context and we have to work in a much more realistic way. A kind of situationism. The old rationalist point of view must be replaced by a new and much more anthropological point of view. Now we have to make communities. Now we have to join avant-garde and tradition. Now architecture must reflect history, climates, landscapes and cultures.

Tradition. Our image of the world is the result of a cultural inheritance received. The ways of life, of working, of building and thinking of the different cultures condition what we are. Our memories and our references are the basis of our architecture. They are rooted images which define our identities. In Barcelona, capital of Catalunya, former tradition starts with Romanesque and Gothic architecture.

Modern times. We are part of mass society and industrial revolution. In Barcelona, the early modern tradition started with the rear façades of Eixample and Modernisme, especially Gaudí and Jujol. As it happened in Chicago and New York. Not much later, modern architects used the machine's metaphor and the assembly line's metaphor to design for millions of people. Cities were made like machines and architects took the functional point of view. They erased history and the existing buildings using their tabula rasa criteria.

Current times. Belonging to a postmodern, postindustrial, technological and digital era, we are called to rectify the mistakes of Modernity and improve our environments. We have to reconquer for people the space occupied by machines, mainly cars. We have to focus our cities on the public space. We have to mix work, living, leisure and transportation to save time, get proximity and build identity. We have to improve and rethink mobility. We have to adapt buildings to new purposes. Postmodernism demands to connect modern positions with local traditions and history. This is a continuous return that closes a contemporary circle.

Story of an evolution

This year, 2019-2020, The Contemporary Project Master reaches 25 years, after living a long process of evolution. Nowadays, the main objectives of The Contemporary Project are to teach to design better and to teach to do research. In order to design better, it is necessary to take into account the diversity of the requirements that affect the project, even beyond the useful life of the building already built.

1994 The Large Scale. Architecture of the new environments. This master started at the CCCB - Centre de Cultura Contemporània de Barcelona. In the beginning, the main objective was to take advantage of the knowledge and all the activity developed during the period of the democratic transition that culminated in the celebration of the Barcelona Olympic Games. At this time, the city was completely transformed by the concept of compact city.

2005 Architecture and Mass Society. Years later, this master joined the official Master's Degree programme in the Department of Architectural Projects, which gave access to the PhD programme. The objectives were similar, based on the effort made by Barcelona to situate itself in the context of contemporary architecture, facing Realism against Rationalism. Unlike the previous programme, the same value was given here to all the scales of the project and it was decided that all scales should be started at the same time. Place, architecture and materiality had to be thought about simultaneously.

In this context, three international summer workshops were taught in English in the Mediterranean Cities Programme cycle. One in Istanbul 2010, another in Barcelona 2011 and the third one in Genova 2012. Consequently, in 2013, our line began to be taught in English, knowing how important it was to open the master to all continents.

2015 The Contemporary Project. When all the lines were integrated into a single Master's degree, the MBArch, it was decided that our line in English would be interdepartmental, with subjects taught from all departments.

The School of Barcelona has grown up with the city and has served as a tool to think about its morphology and to plan it. The Modern Barcelona, which was born with the demolition of the walls and the construction of the Eixample, has been thought about continuously, but it has had to be built through events that allow for a large-scale economic investment. These are the four main events.

1841 Demolition of the walls: The old city of Barcelona was imprisoned by walls, it was forbidden to demolish them and to build outside. The doctor and hygienist Pere Felip Monlau denounced the situation and wrote an article entitled “A terra les muralles” (Torn down the walls) to analyse the advantages of demolishing the medieval walls. As a consequence, Ildefons Cerdà designed the grid of l’Eixample to build the new city of Barcelona.

1888 Barcelona Universal Exposition: The city council took advantage of this event to demolish La Ciutadella and turn it into an urban park (the citadel was an old military fort built to control the citizens). This event served to make known Modernisme and the architecture of Gaudí as an avant-garde style. According to Le Corbusier and Bruno Zevi, Gaudí was the first modern architect. In this atmosphere it is where Picasso was formed and where he invented Cubism.

1929 Barcelona International Exposition: The city council took advantage of this second World’s Fair, dedicated to electrification, to transform the mountain of Montjuïc into a second urban park. The incipient Catalan rationalism was not represented on the site, although it was already being built in the city. This event was a claim for the arrival of the international avant-garde, such as the German Pavilion by Mies. Not much later the Pla Macià was made by GATCPAC and Le Corbusier.

1992 Barcelona Olympic Games: The city council took advantage of this event to renew the city and improve infrastructures. Since the city was already built, architects had to make the most of the existing, with the criteria of Realism raised by Grup R, contemporary of Team X. Public space was enhanced and became an artistic discipline, such as it had been done not long ago by Joan Miró.

We are now generating new knowledge and making new proposals to improve Barcelona and the whole of Catalunya on all scales. We need to provide new meaning to our architecture and make our country much more efficient and sustainable. We are rethinking Barcelona and Catalunya to take advantage of future events.

Most students enrolled in The Contemporary Project do it to specialise, acquire mastery in architectural design and increase their field of knowledge. In this master, we consider very important that students think about our time and that they position themselves among the different approaches to contemporary architecture and the city. That they discover what the tasks are that need to be done. In our case, in a generic way and without prejudices, we position ourselves against iconic architecture and position ourselves in favour of the context. We ask students to make city.

The students acquire theoretical knowledge to expand their perspective and think about current issues. To increase their critical capacity. In parallel, they put into practice this knowledge through multiple design projects where they learn to think, with their hands, about the contemporary culture.

There are several subjects where projects are done, specifically in workshops. But we also ask to do projects directly linked to the Master Thesis (dissertation). This links directly theoretical reflection to design process. Thought to action.

Think-Do | Do-Think

Learn to do research

Some students have the intention of doing a PhD thesis. Because of this and because we consider it much more pedagogical, all the subjects are focused on research. For us, this is the hallmark of advanced studies.

In general, design exercises are preparatory to face a Master's Thesis, where students must demonstrate their research skills around design. In some subjects, students write articles, so that they train in writing. Students have to learn to figure out a clear idea about what they want to say, put titles, write well and make footnotes. With this practice they will be perfectly able to complete their Master's Thesis.

Once they face the Master's Thesis, students have to do a new project that raises some question. They have to learn to choose a research topic linked to their project and they have to learn to structure research well through a good index.

For the development of the Thesis we make a series of intermediate corrections in Jury format so that students get used to correctly explaining their work, developing a discourse and defending it.

Research-Design | Design-Research

The Master's Thesis will be developed through the Research by Design methodology. This means we start from the premise of doing research through the project, or just using the project as a tool of research. This procedure places us in a different scenario from the standard one, where theory and practice are frequently presented as independent ways. By researching / designing, the participants get a holistic vision, and intellectual and practical tools, not only able to create architecture and theoretical thoughts: new paradigms could be created, and sprouted, by our common intellectual adventure.

The project helps to do research

The research helps to improve the project

It may be easier to understand, for example, if we compare it with medicine. There is a type of medical research more linked to the past, which makes the history of medicine. But there is another type of medical research, more linked to the problems and illnesses of the present, that makes advances in medicine and improves health. In some way, Research by Design should be useful to improve the health of our buildings, neighbourhoods and cities. *"If a doctorate is the highest level of teaching, what the professor explains must also correspond to the limits of his knowledge. That is, it must be located nearest to what he does not know"*. Eduard Bru



Other research tools

Research by Design method can be reinforced by other methodologies which are also useful for dealing with your topics. All them can be combined along the different processes of creation and research.

Inductive method. This method is speculative. It is based on testing possibilities. Very often the reality must be transformed through the introduction of new forms and materials to understand how it looks and works. New situations must be created. In terms of project, you have to introduce new shapes and check how the environment reacts. In terms of research, you have to formulate hypothesis to create new scenarios that right now do not exist. Sometimes the most daring and courageous solution ends up being the easiest when you develop the project and research.

Deductive method. This method is based on the analysis and knowledge of reality and existing conditions. In terms of project, it consists in redrawing the site at different scales, making maps of the different layers, drawing sections, sketches and perspectives. Through drawing you can detect the most important features and conflicts, like architectural barriers, lack of activities, deficits of space, etc. You also have to take photographs, talk with people and with neighbourhood groups. In terms of research, you have to collect all the information and existing theory about the topic you are studying and analyse it. This method consists, ultimately, on knowing reality, detecting conflicts and turning them into opportunities.

Comparative method. This method is based on morphological criteria. It consists on the search for examples to compare them. Searching different case studies and theoretical references you will be able to create a system of references to analyse shapes, objects, forms and theories morphologically.

Case Studies. From bibliographic sources, you have to make a selection of case studies related to the project and research topic. Once the first selection of examples has been done, it is necessary to analyse and compare them morphologically, discarding some and preserving others. Comparative analysis should allow you to discover the laws of the form and the project strategies.

Theoretical references. From bibliographic sources, you also have to discover the theoretical references related to the project and research topic. That is, we have to look for those texts of architects that deal with the issue or the topic of research and help us build our own story. These texts must be perfectly referenced and cited in our thesis.

CAUP_Tongji University and ETSAB_UPC signed their agreement on carrying out the dual master degree programme between the two schools in 2015. The aim of the double master degree is to create a platform for an integrated, international academic programme in architecture studies.

Supported by Tongji-UPC DMD, MArch students at CAUP-Tongji enjoy the opportunity to familiarise themselves first-hand with one of the most cultural dynamic regions of the world, and they will have the chance to participate in academic projects designed to be interdisciplinary.

DMD is a two-year system programme. Tongji Students stay in Shanghai for the 1st year and come to Barcelona for the 2nd year. ETSAB students study in Barcelona for the 1st year, and will study in Tongji for the 2nd year. After successful completion of the complete programme at both universities, the students receive the degrees of both universities, “Master of Architecture” of CAUP_Tongji University and “Master’s degree in Advanced Studies in Architecture-Barcelona” of ETSAB_UPC.

DMD Partner Institutions:

CAUP_TONGJI

College of Architecture and Urban Planning

Tongji University, Shanghai, China

Master in Architecture

ETSAB_UPC

Escola Tècnica Superior d’Arquitectura de Barcelona

Universitat Politècnica de Catalunya · Barcelona Tech

MArch_The Contemporary Project

The Fundació Mies van der Rohe also participates in the agreement. It was set up in 1983 by the Barcelona City Hall with the initial purpose of reconstructing the German Pavilion, designed by Ludwig Mies van der Rohe and Lilly Reich for the 1929 Barcelona International Exhibition. Besides conserving and disseminating knowledge about the Mies van der Rohe Pavilion, the Fundació fosters debate on and awareness of themes related to contemporary architecture and urban planning. Outstanding among its activities is the organisation, jointly with the European Commission, of the European Union Prize for Contemporary Architecture – Mies van der Rohe Award, one of the most prestigious of all European architecture prizes.

Fundació Mies van der Rohe. Barcelona

Management Director

Anna Ramos

Fundació Mies van der Rohe joins in the academic world through this collaboration agreement with the Escola Tècnica Superior d'Arquitectura de Barcelona (ETSAB-UPC) and the Tongji University of Shanghai (CAUP-Tongji) for which the broad archive of the European Union Prize for Contemporary Architecture – Mies van der Rohe Award becomes the protagonist of the “Contemporary Architectural Issues” research course of ETSAB’s Contemporary Project MBArch.

This collaboration is based on the use of all the data provided by the archive of more than 3000 nominated projects throughout all the editions of the Prize (typology, promoters, age and origin of the architects, location, etc.) in order to detect trends, emphasise problems, relate features or generate debate around contemporary architecture issues. The European Atlas of Contemporary Architecture published by the Foundation in 2016 and the online archive eumiesaward.com become fundamental resources for students enrolled in this research.

In addition, the Foundation collaborates in joint activities such as a presentation about the EUMiesAward Prize archive, a visit to the Foundation’s offices and archive, a presentation on the process of conception of the awards exhibitions, a visit to architects studios awarded and shortlisted to the EUMiesAward or the presentation and final jury of the research Works.

The subject “Contemporary Architectural Issues” is open to all students with a priority for those who attend the dual program with Tongji. The professor in charge is chosen together by Fundació Mies van der Rohe and ETSAB’s Contemporary Project MBArch.

The ETSAB is a member of the Fundació Mies van der Rohe’s Board of Trustees and both participate in the common goal of disseminating and generating debate on topics of contemporary architecture and urban planning through this subject and other collaborations.

Now that learning to cook has become a televised and cultural hit, we should remember that learning to do architecture is also a way of learning to know how to enjoy life: to make life and the environment better than those around us. The pleasure of cooking is being prepared in the elaboration process, but the final object lies in the pleasure of tasting. In the gastronomy there is place for everything, like in architecture. In the end the most important thing is enjoyment. And from good ingredients ensure a good result, if the job is well done. With ETSAB years ago I have the pleasure of choosing and supplying what I think could be the best ingredients for a good architectural dish. My immersion in multiple urban themes allows me to sense what could be a matter of careful preparation. Since I know that the ETSAB has excellent cook teachers, it allows me to dream of some exquisite results. And these always exceed my culinary expectations. Wonder is given when in the cooking process, teachers and students are able to achieve not only the best possible spherification -only wit is necessary in this case-, but also the best croquettes or the best potatoes omelet possible. This is one of my little pleasures in the already long collaborations with the University: we provide urban ingredients, they cook them and they offer us magnificent meals.

Hopefully we can continue collaborating in university banquets for many years. We feel immensely fed and stimulated. Finally, as Babette said in Gabriel Axel's film based on a novel by Karen Blixen (*Babette's Feast*): "We, the artists - architects - just want to offer the best of what we are able to do."

Like ETSAB do year after year.

Bon Appetit.

UPC Libraries are committed to enhancing student information literacy and offers a wide range of activities and materials to equip students with the skills they need to be thoughtful and efficient users of information. Particularly, Oriol Bohigas ETSAB Library is devoted to promote the use of information sources and to help develop informational skills amongst students of all ETSAB degrees.

Within the ETSAB ‘Information Literacy Plan’, the Library offers training sessions on 3 topics considered key for the students so that they can take full advantages of the master subjects. Integrated in the “Contemporary issues” subject, the Library provides tips and skills on the following modules:

- Module 1: Sources of information. Including databases on architecture, comprehensive indexing databases, catalogues and academic search engines
- Module 2 Mendeley and bibliographic software: Get to know how to use Mendeley create your library, import and export records and create a bibliography using your text processor. [October 7 | M1+M2]
- Module 3 Research publication and evaluation: Including tips on where to publish, how to write a scientific paper and publication process in academic journals [December 2 | M3]

Moreover, full assistance is provided to the students and to all the university community through the Bibliotècnica webpage (bibliotecnica.upc.edu) and training materials on how to retrieve and use information are available online at <https://bibliotecnica.upc.edu/en/formacio>

Contemporary Project collaboration goals:

To provide the suitable procedures, concepts and values to solve problems related to research, selection, organization, analysis and communication of the information. This means learning how to manage the information, modify it and communicate it in whatever form.

Skills developed by the student:

- Identify and state your own information needs
- Locate and select the suitable sources of information
- Perform efficient search queries
- Critically evaluate the quality of the information retrieved
- Understand the scientific communication cycle
- Identify the main parts of a scientific paper

The Master's Degree is divided into 11 subjects. Three core subjects organised along the year as a continuous Workshop that gives identity to the master. Two obligatory subjects that reinforce the research tools and methodologies. Five optional subjects that contribute to discuss about the meaning of the Contemporary Culture through design and research.

CORE SUBJECTS**1S The Contemporary Workshop**

It joins: Architecture, city and project

It joins: Architecture, environment and technology

Xavi Llobet

Credits: 10 [5+5]

1S Architecture, Theory and Criticism

Eduard Bru

Credits: 5

2S Master's Thesis Workshop

It joins: Master's Thesis

It joins: All scales of the project

Eduard Bru and Xavi Llobet

Credits: 20 [15+5]

OBLIGATORY SUBJECT**1S Contemporary Architectural Issues**

Fundació Mies van der Rohe, Barcelona

Oriol Bohigas ETSAB Library

Cèlia Marín and Jordi Oliveras

Credits: 5

Attendance

Attendance of all courses and satisfactory marks in all tests and design projects is required in order to obtain the degree of “Master in The Contemporary Project” conferred by the Universitat Politècnica de Catalunya.

Number of credits to choose = 60 ECTS

OPTIONAL SUBJECTS**1S New Representations. New Conceptions**

Isabel Zaragoza | Jesús Esquinas

Credits: 5

1S Reshaping the City by the Public Space

Miquel Corominas

Credits: 5

2S Architectural Project and Thought

Alessandro Scarnato

Credits: 5

2S Urban Project. Ideas and Praxis

Carles Crosas and Eulàlia Gómez

Credits: 5

2S Materiality and Project

Oriol Pons

Credits: 5

1st SEMESTER: PRACTICE _INITIATION TO RESEARCH

	Monday	Tuesday	Wednesday
14:30	Contemporary Architectural Issues Mies Bcn	New Representations New Conceptions	Reshaping the City by the Public Space
15:30			
16:30	Cèlia Marín Jordi Oliveras	Isabel Zaragoza Jesús Esquinas	[visits] Miquel Corominas
17:30	WORKSHOP Architecture, City & Project Xavi LLobet	WORKSHOP Architecture, Env. & Technology Xavi LLobet	WORKSHOP Architecture, Theory & Criticism Eduard Bru
18:30			
19:30			

2nd SEMESTER: RESEARCH BY DESIGN _STRATEGIC VIEWS

	Monday	Tuesday	Wednesday
14:30	Architectural Project & Thought Alessandro Scarnato	Urban Project Ideas & Praxis Carles Crosas Eulàlia Gómez	Materiality & Project Oriol Pons
15:30			
16:30			
17:30	WORKSHOP Master's Thesis Xavi Llobet	WORKSHOP Master's Thesis Xavi Llobet	WORKSHOP All Scales of the Project Eduard Bru
18:30			
19:30			

September 25 [MBArch presentation]

- Week 1. September 30, 1, 2
- Week 2. October 7, 8, 9
- Week 3. October 14, 15, 16
- Week 4. October 21, 22, 23
- Week 5. October 28, 29, 30
- Week 6. November 4, 5, 6
- Week 7. November 11, 12, 13
- Week 8. November 18, 19, 20
- Week 9. November 25, 26, 27
- Week 10. December 2, 3, 4
- Week 11. December 9, 10, 11
- Week 12. December 16, 17

Christmas

January 20, 21, 22 [optional for deliveries]

FIRST SEMESTER

The Contemporary Workshop

[It joins: Architecture, city and project]

[It Joins: Architecture, environment and technology]

Department of Architectural Design

Xavi Llobet

Credits: 10

Intentions

The aim of this workshop is to understand the project as a tool of research. We'll focus the attention on the transformation of cities, where a continuous fight between the invasive force of the globalization and the persistent resistance of multiple identities is supported. We consider the public space as the focal center of the community, which brings together social life and all the conflicts of the city from the symbolic, morphological and functional points of view.

Changes are part of the real dynamic of our cities, cultures and landscapes, and we are called to find opportunities, better than problems, to improve the real environment and make our cities much more liveable than they are now. We'll talk about big cultures, big infrastructures and big cities, but not forgetting "the small is the new big".

Exercise: The living city, an opportunity for the public space

The main target of this exercise is to focus the attention on the public space to "improve the health of our communities", emotionally and functionally. First of all, you must discover an urban conflict and turn it in an opportunity for the public space. Once the strategy of the project is defined, you have to identify an architectural issue to write a memory and to open a way of research. Optionally, in the second semester you can continue this project to do your master's thesis.

This year we are going to work on the recovery of the Infanta's Channel, a former agriculture irrigation infrastructure of 17 km length, build in 1819 to feed Barcelona. Nowadays, this infrastructure is erased by the growth of the city and becomes a piece of archaeology. The idea is to transform this old infrastructure in a new metropolitan Blue way – Green way. A sequence of public spaces.

Cartographic tools

AMB Cartography Geoportal <https://geoportalcartografia.amb.cat>

ICC Cartografía Topográfica <http://www.icgc.cat>

Instamaps Xarxa Hidràulica del Canal de la Infanta <https://www.instamaps.cat>

- September Presentation
- October 1. First step: Site selection and first proposal
Find an urban conflict, analyze the existing situation from the point of view of the public space and define the strategies to make a proposal of transformation. The conception of the project must improve the public space with buildings: recycling, demolishing, constructing.
Use artistic means and criteria.
First delivery: models and portfolio [notebook]
- November 2. Second step. Development of the project (or several projects)
Make models, plans, sections and elevations to understand well the spaces and volumes. Propose a program according to the site and building. Include materiality from the beginning.
Consider the project as a metaphor.
Second delivery: models and portfolio [notebook]
- December 3. Third step. Editing and writing of a short memory of the project
Make a list of possible issues to be researched by your project. Choose a topic of research according to your project. Explain the main ideas and strategies you have used to solve the problems and conflicts you found.
Remember: the program and functions are oriented to the needs of the body, and the arts are oriented to the needs of the spirit.
Third delivery: models and portfolio [notebook]
- January Final presentation*
Layout of plans and discourse
Delivery of the full project including photos of models
Paper and digital | Upload the pdf on Atenea
Final delivery with external Jury

Evaluation criteria

- 40% Main ideas: conception, creativity, story
30% Development: technology, program, distribution
30% Representation: drawings, collages, models, texts, layouts

* Who has a good project can use it for the Master's Thesis

Intentions

It is wanted to make a first semester more practical, based on the project, and a second more theoretical, based on research. A dissertation, that starts off the own project, it continues it and theorises and generalises with the intention to create ways, tools, of approach to the project.

Exercises

Along this subject, we'll make projectual approaches to Barcelona realities. The project will be interrogated from various points of view that will generate six exercises, not necessarily connected. They all pursue the following objectives:

- To destroy the tradition reductively rationalist
- Extreme attention to the program, physical and metaphysical
- To use Barcelona as a main workshop to work

The delivered projects may be used to do the dissertations, placing the thought that informs the project in an intellectually articulated formulation. That fills the project in a precise frame of thought and a high level of discursive transmissibility.

Beside you will do theory, then, you will review, and improve, your practice based on one or more of the previous fractal approaches.

Therefore, we'll do some presentations of master's thesis related to the project, as well the project itself, as it corresponds to the most intelligent use of the theory.

Packs of 2 sessions

1 Theoretical class and statement of the exercise

2. Public presentation and discussion of the exercise

- Week 1. About realism and contextualism in the School of Barcelona
Exercise 1: add a tower to Església de Sarrià
- Week 2. Exercise 1: discussion
- Week 3. Situationism, architecture and literature
Exercise 2: fill holes in Carrer Pelai in Barcelona
- Week 4. Exercise 2: discussion
- Week 5. About contents, containers and objects: J.R. Sierra, E. Torres, André Maison
Exercise 3: build in an Antonio López
- Week 6. Exercise 3: discussion
- Week 7. 4 own works / 4 methods
Exercise 4: build for David LaChapelle
- Week 8. Exercise 4: discussion
- Week 9. From Realism to Surrealism. Disruptions. Hotel Gaudí
Exercise 5: add a stair-bridge for Sagrada Família
- Week 10. Exercise 5: discussion
- Week 11. Baroqueisms: Viaplana, Miralles, Elías Torres
Exercise 6: finish the Catedral de Tortosa | Ekaterinburg
- Week 12. Exercise 6: discussion

Contemporary Architectural Issues

Department of Theory and History of Architecture

With the support of Fundació Mies van der Rohe, Barcelona

With the support of Oriol Bohigas ETSAB Library

Celia Marín and Jordi Oliveras

ECTS: 5

Intentions

The aim of the course is to establish some methodological and theoretical principles to sustain the academic research production generated from the database of the European Union Prize for Contemporary Architecture - Mies van der Rohe Award.

We can look back to the times of the modern architecture movement and the CIAM meetings and through them, their writings and their work, we can understand and see which were their concerns or the architectural topics of the 20s and 30s.

The society of the beginning of the 20th century confronted the rise of the metropolis, the hygienist problems, the rights of the workers at the same time that they discuss problems of form and functionality, the resign of any kind of ornamentation at all and the discovery of the benefits of mass production. All the modern architect's decisions or ideas were transformed into manifestos and widespread through architecture magazines. But when we confront contemporary architecture one of the things that we can quickly realise is that there is not an international style that formally defines all the productions of today. That if talking about style was absurd in 1923, today nevertheless is ridicule. But undeniably we can see on internet sites, on magazines and at the streets of our cities tendencies and ideas that seem to have a common root, maybe not formally (materials, shape, technologies) but in essence they are talking about the same issues.

Are we still worrying about the minimum house? or we are more focused in the different ways that somebody needs a shelter, from students' dorms to elderly people's houses? Do we still think that technology is our best friend and mass production is the best way? or on the contrary we are trying to recover traditional techniques and face a low-tech construction? New and bigger is better or do we live in the era of restoration, refurbishment and recycling? Was Rem Koolhaas right when he said that preservation is overcoming us? Maybe it is even better, because all those things and more are happening at the same time...

Syllabus

First assignment: Elaboration of a bibliography

Students will have access to a list of subjects on contemporary architecture. Students in pairs should elaborate a bibliography containing books, articles, essays and researches, as well as examples of architecture. Submission: Mendeley folder, pdf file with the printed and commented version of the bibliography. (October 15)

Second assignment: Readings on contemporary architecture.

Following the book by Alexandra Lange “Writing about architecture” students in pairs will chose one article from a series provided through Atenea and analyze its structure, key points, and the work of the author. Submission: pdf file with the analysis plus class review and discussion. (November 5)

Course assignment: Writing on contemporary architecture

Each student should choose a subject on contemporary European architecture, we strongly encourage you to find a subject that could be developed into a Master Thesis. At the end of the course the student should have written a brief essay on the subject.

November 15: Subject selected

November 19: Starting Bibliography

December 3: First Review (first readings and impressions)

December 17: Second Review - First Draft

January 21: Final paper.

Evaluation criteria

15% Participation at class and dues

15% First Assignment

15% Second Assignment

55% Course assignment

Research and documentation resources (in collaboration with the Library)

1- Documentation and bibliography management

2- Publishing in a scientific journal

Bibliography

ECO, Umberto, Caterina Mongiat FARINA, Geoff FARINA, and Francesco ERSPAMER: How to Write a Thesis. MIT Press, 2015.

New Representations. New Conceptions

Department of Architectural Representation

Isabel Zaragoza and Jesús Esquinas

Credits: 5

Intentions

The main objective is to improve the creative drawing skills through practice, reflection and the learning of a new way of “looking”. One of the threads will be the review of outstanding graphic documents of the creative process, where the student will find references from other disciplines to dialogues with documents from architects who have drawing as a tool for creation.

Within the framework of the “The Contemporary Project” specialization, which aims to “distil the Catalan and Barcelona architectural experience”, the studio aims to promote the development of creativity through drawing as a knowledge tool.

The successful experience of Enric Miralles, not only has left us an interesting legacy of architectural works in Barcelona, but also a uniquely creative graphic production that connects with an entire world of references from different disciplines, like the exceptional architectures and drawings of Gaudí or Jujol.

The studio will focus on the development, research and / or rediscovery of useful graphic representation tools to enrich the content and visual richness of the projects, through case studies of the fertile Catalan panorama of different architectural and artistic movements. Using an active methodology, shared inside and outside the classroom (visits, team research, thematic and cross-sectional classes, presentations, debates, assemblies in the classroom, etc.), and the development of individual and collective graphical exercises; will lead to learning a new way of “looking”, Therefore, the student will rediscover references and suggestive patterns, expected and unexpected connections that enrich the cases studied and make them extremely attractive. As a result, it will empower the creative drawing skills of the students.

Bibliography

MIRALLES, Enric, and others: Enric Miralles: Mixed Talks. Architectural monographs Nº 40. London: Academy editions, 1995

PALLASMAA, Juhani: The Thinking Hand. Existential and Embodied Wisdom in Architecture. Chichester, UK: John Wiley and Sons Ltd., 2009

- Week 1 Presentations. Introductory drawing practice
Introduction practice 1 (graphic research by teams)
- Week 2 Lecture 1: “Hidden intertwined thoughts”
Visit: Gaudi’s drawing archive (“càtedra Gaudi”)
- Week 3 Pecha Kucha presentations practice 1
Critical representation
- Week 4 Lecture 2: “...through the eyes of”
Final presentations practice 1 by teams
Introduction practice 2 (assemblage practice)
- Week 5 Visit: Santa Caterina Market. Contour drawing practice
Exhibition Enric Miralles Foundation
- Week 6 Lecture 3: “Sospecha de estiercol”
Practice 2 in progress. Desk critics
- Week 7 Visit: Palau Güell & exhibition “Jujol drawings”
- Week 8 Lecture 4: “Blurring boundaries between representation and project”
Practice 2 in progress. Desk critics
- Week 9 Visit: Cripta Güell / Igualada Cemetery. Contour colour drawing practice
- Week 10 Final presentations practice 2 by teams
Critical representations, pin up & mounting practice 2
- Week 11 Lecture 5: “Concerning distracted gazes”
Final presentations practice 2 by teams
Introduction practice 3 (synthesis detail practice)
- Week 12 Practice 3 in progress
Pin up, mounting & Final review practice 3

Reshaping the City by the Public Space

Department of City Planning

Miquel Corominas

Credits: 5

Intentions

The image of the city is, in most cases, the image of its public space

This course aims to show the value of public space in the renovation project of the city. The public space is the social and functional space par excellence of the city.

The streets, squares and parks give structure to buildings, facilities and community facilities of the city. The city project layout incorporates the city public spaces, but when the initial offer is low or in highly dense areas of the urban fabric, a greater allocation of public spaces is required. In other cases, it is necessary to improve or adapt the existing public space to new social and functional needs.

The public space in the reform of the city of Barcelona 1981_2011

The course uses the city of Barcelona and its growth forms as reference. The object of study are the public space projects in the city between 1980 and 2011. It is a set of very significant projects about public space, published and internationally awarded. The recent renown of the city, from both professional and academics points of view, is mainly due to these type of interventions. A comprehensive set of institutional publications includes the projects done in this period of time. This is a set of equity value projects, although 25 more years may still be needed for people to appreciate them enough. The main objective of the course is that students, analyse, visit, understand these public spaces recently developed in Barcelona.

Bibliography

BUSQUETS, Joan: Barcelona: The Urban Evolution of a Compact City. Boston, Harvard University: Nicolodi, 2005. First edition in Catalan, 1992

SOLÀ-MORALES, Manuel: Ten lessons on Barcelona: urbanistic episodes that have made the modern city. Barcelona: Col·legi d'Arquitectes de Catalunya, Actar, 2008

RIBA: Royal Gold Medal from RIBA to Barcelona. The Journal of Architecture. Volume 4. Autumn 1999. page. 229

The course is organised with a set of classes and visits distributed to 66% and 33%, and is complemented with the realization of a comparative analysis of public spaces.

- Week 1 Urban formation and evolution of the city of Barcelona.
Forms of urban growth
- Week 2 The public space of the city.
Streets, squares, parks, gardens, itineraries
- Week 3 The elements of the public space project
Position, concept, scale, layout (structure), activities, perimeter, permeability, technology, identity, urbanization as heritage
- Week 4 Introduction to the public spaces of Barcelona 1981_2010
Period 1981-1994. The social space, the hard squares
Period 1994-2000. Green in the city, the urban landscape
Period 2000-2010. Ecology of free spaces
- The intervention in the forms of urban growth
- Week 5 El Casc Antic
Visit 1 Casc Antic
- Week 6 L'Eixample
Visit 2 Eixample
- Week 7 Suburban growth
- Week 8 Drawing of alignments
Visit 3 Gràcia and Prosperitat
- Week 9 Polygons and unitary ordinations
The marginal urbanization
- Week 10 The large-scale intervention in the city
The reform of the Port
Open Barcelona to the Sea: The seafront.
- Week 11 The Rondes of Barcelona
- Week 12 The space of the big infrastructures
Visit 4 Port and Maritime promenades

Evaluation criteria

The comparative analysis of 8 public spaces allows to evaluate the acquired knowledge.

- Week 1. February 3, 4, 5
- Week 2. February 10, 11, 12
- Week 3. February 17, 18, 19
- Week 4. February 24, 25, 26
- Week 5. March 2, 3, 4
- Week 6. March 9, 10, 11
- Week 7. March 16, 17, 18
- Week 8. March 23, 24, 25
- Week 9. March 30, 31, 1

Easter

- Week 10. April 14, 15
- Week 11. April 20, 21, 22
- Week 12. April 27, 28, 29
- Week 13. May 4, 5, 6
- Week 14. May 11, 12, 13
- Week 15. May 18, 19, 20
- Week 16. May 25, 26, 27

SECOND SEMESTER

Master Thesis Workshop

[It joins: Master Thesis]

[It joins: All scales of the project]

Department of Architectural Design

Eduard Bru and Xavi Llobet

Credits: 20

Intentions

To face the Master Thesis, it's necessary to face two tasks: you have to make both, a project and a research work that are related. By experience, we cannot request both at the same time, because then, the project does not advance and in the end the Master's Thesis becomes a theoretical research work. So, we start with the project.

Master's Thesis: Once you face the Master's Thesis, they have to select a project coming from the first semester or make a new project that raises some question. It's important to learn to choose a research topic linked to your project. To develop the thesis, you have to find some case studies related with your topic and some theoretical references to expand the scope of research and deepen knowledge. It's also important to learn to structure well your research through a good index. The index is like the thesis draft. Index and thesis are like two scales of the same job. Changing the index, changes the thesis.

Throughout the work process, the team of tutors make a series of intermediate Juries to unify criteria and to train students to defend their work and ideas. Once the classes have finished, students still have a couple of months to complete their work and prepare their final presentations.

The final presentation is the culminating moment of the year, where students have to demonstrate their design and research skills, as well as their skills for graphic and verbal communication to expose and defend their ideas. The Juries will evaluate the chosen topic, the quality of the project, the structure of the thesis, the writing and the oral defence.

PhD's Thesis [optional]: Finishing The Contemporary Project master, students who are interested can apply for a PhD's program in the Architectural Design department. The PhD's Thesis is a very special document that marks a before and after in the academic and professional career. The students acquire full capability to do research and opens a new window to look at the world. The researcher chooses a point of view to look at the reality that will surely accompany them forever.

Syllabus

February	<p>1. First step: Project. Choose and develop a project. You have two options: a) continue one of the projects done in the first semester; b) make a new project located in your own city (of birth, residence or vacations) or in Barcelona. Find a research topic that is related to the project. First Jury</p>
March	<p>2. Second step: Project and Theory. You must look for case studies, theoretical references and give structure to your job. We consider the elaboration of the Index very important, which for us is equivalent to the sketch or ideogram of the whole Thesis. Second Jury</p>
April	<p>3. Third step: Theory. Development of the theoretical part. You have to organise the material you have found, write the abstract, introduction, chapters, citations, footnotes, conclusion, bibliography, credits of images, etc. Third Jury</p>
May	<p>4. Fourth step: Edition. In the end of the process you have to edit the thesis as a book, decide the size, format (mainly vertical A4), cover, font type, images, layout, etc.</p>
July	1st Call
October	2nd Call

Final presentation or Defence*

Delivery of 1 printed copy in paper to Secretary

Delivery of 5 printed copies in paper and 1 DVD or Pendrive to DPA

Upload the pdf on Atenea

Evaluation Criteria

- 40% Idea of the thesis: project and research topic
- 30% Development of the thesis: index, hypothesis, chapters, conclusions
- 30% Representation of the thesis: writing, drawings, graphic design

* You have to check all dates on MBArch's Website

Architectural Project and Thought

Department of Theory and History of Architecture

Alessandro Scarnato

Credits: 5

Intentions

Convenient ambiguities: materiality as a flexible playground for architecture.

Every action of architecture is an action on the materiality of a site. We will always act on some material territoriality (regardless of its size) and we will do it with some material tools (structures and technologies). We propose to look at the apparent and irreconcilable struggle between ideas and matter under to light generated by the combination of complexity, unorthodoxy, disciplinary secularism and ludic awareness. During the course, technical and material considerations are, therefore, integrated with others of a social, urban and ecological nature, within the framework of a more sustainable vision of the reality of our cities and landscape, seen as a story that never reaches a defined ending and to which the project does nothing but add another layer.

The subject is structured through four types of work: the lectures; the visits; the media; the exercises. The idea of architectural heritage will not be studied in a conventional way, since we want to develop the participant's skills in terms of architectural intelligence, rather than provide some specific technical knowledge on the topic. In order to do so, we will explore four fundamental concepts particularly important for the general theory of architecture and beyond: past; future; destruction; construction. For in many aspects of human life, the balance between past and future, destruction and construction is crucial in order to understand and, maybe, take control of the dynamics of reality around us.

As far as the exercises, participants will be asked to prepare a final project. The work will be developed individually or, depending on the subject, in small teams of 2 people. The project will be a kind of resume of the reflections led during the course and it will be developed in four steps + one. Each step will correspond to one of the four mentioned concepts and the team will work on some of the sites already under work from the others subjects of the master. Therefore, there will be a strong interaction among the subjects in order to optimise resources and maximise results. These four intermediate steps will be previous to the final exercise, that will be a proposal for a specific site in the area of Barcelona.

First block, PAST:

- Theoretical lecture: the notion of heritage.
- Movie: Alejandro Amenábar, *The Others*, 2001.
- Visit: Ciutat Vella, the old center of Barcelona.
- Architectural lecture: Carlo Scarpa in Verona; the old Sassi in Matera
- First exercise: topic and location.

Second block, FUTURE:

- Theoretical lecture: how the Future arrived in our lives.
- Movie: Stanley Kubrick 2001, *A Space Odyssey*, 1969.
- Visit: the former power station in Sant Adrià (*Les tres xemeneies*).
- Architectural lecture: Boullé and the visionary ideas of Enlightenment
- Second exercise: topic and location.

Third block, DESTRUCTION:

- Theoretical lecture: big disasters in history.
- Movie: Peter Greenaway, *The Belly Of An Architect*, 1987.
- Visit: the area of the Sants railway station in Barcelona.
- Architectural lecture: Hiroshima, WTC New York, Chernobyl.
- Third exercise: topic and location.

Forth block, CONSTRUCTION:

- Theoretical lecture: the never ending overlap of time and material.
 - Movie: Michelangelo Antonioni, *The Passenger*, 1975.
 - Visit: the park of Plaça de Les Glòries and the “22@” District.
 - Architectural lecture: to build is an endless task; old buildings still alive
 - Forth exercise: topic and location.
- Final presentation. Other professors from the Master will be invited.

Bibliography

- BENJAMIN, Walter: “The destructive character”. In *Reflections: essays, aphorisms, autobiographical writings*. New York: Harcourt Brace Jovanovich, 1978
- POCH, Arcadi; Daniela Poch (Ed.): *Urban creativity experience. Creative experiences in contemporary cities*. Madrid: Lemo Editorial, 2013
- WOLFE, Tom: *From Bauhaus to our house*. NY: Farrar, Straus & Giroux, 1981

Urban Project. Ideas and Praxis

Department of City planning

Carles Crosas and Eulàlia Gómez

Credits: 5

Intentions

During the 1980s, Barcelona led the urban debate on the so-called ‘urban project’ as a design strategy focusing on proximity to architecture, public space and infrastructure. On one hand, with the outstanding theorization of Professor Manuel de Solà-Morales (UR-Revista), and on the other, with a number of successful mid-scale urban transformations that illustrated an internationally renowned practice. Since then, new approaches and new paradigms have appeared on scene, in Barcelona and abroad, composing all together an interesting design practice that is the core of this course.

Urban Project can be defined as an instrument of mediation between the city and architecture, and at the same time, constitutes a way of acting and doing research. A design tool that is different either from the conventional planning or the macro-architecture, and that is driven to conceiving projects for operative fragments of the city well-delimited in space and time. The urban project reformulates the architecture of elements and public space in order to generate a new and more efficient urbanity characterised by its greater “clarity and emotion”.

The course starts with a theoretical block in which the evolution of the idea of Urban Project is critically reviewed through the analysis some projects, mainly in Europe, that will be analysed and compared in order to understand dominant paradigms, main strategies and significant design solutions regarding ecology, infrastructure, activities, public buildings, mixticity.... The ensemble of the analysis will provide knowledge and tools for a design-oriented practice.

Two workshop experiences of an intermediate scale will enhance the learning during the course. Both site projects will be located in Viladecans, a small municipality (65 993 inhabitants, 20,4 km²) at a 20’ distance from Sants Estació.

Bibliography

AAVV: Barcelona Metropolis. Barcelona: AMB, 2014.

Online at: <http://www.amb.cat/web/territori/urbanisme/pdu/metropolis-barcelona>

PARCERISA, Josep; Carles CROSAS (ed.): Barcelona links, Barcelona: LUB, 2013

First practice: A new-old central area alongside the territorial road

The area of intervention is a fragment facing the 'Avinguda de la Generalitat' in Viladecans, between the 'Carretera de la Vila' (translatable to village road) and the 'Carrer de l'Agricultura' (translatable to agriculture street). The duality characterises, thus, the place: not only in the names of the limits of the area of intervention but specially in what happens on both sides of the street. To the northwest, the town has grown up to the street; to the southeast, industrial uses have been finding accommodation since the late 70's.

The proposal will provide a new layout and façade to the metropolitan avenue and will consider the proper the scale of the intervention in order to turn the existing misused 10 hectares into a new-mixed urban site full of complexity.

Each group of students (2-3) will elaborate a proposal that will be discussed weekly in class. The delivery of the exercise is scheduled for Tuesday, April 9.

Second practice: Reshaping la Rambla

The attention will be transferred to a traditional central place in Viladecans, paradoxically with physical dimensions similar to those of the first project. The transformation of Rambla de Modolell is an ongoing project that the municipality is facing in the months to come.

The improvement of the transversal links, the redefinition of the permeable grounds and green areas, the rearrangement of the terraces of bars and restaurants, of street furniture and the strategy in the location of the kiosks will be taken into consideration in the redesign of this public space. The aim of this practice is to define guidelines and proposals that will be later used as a basis for the process of citizen participation. Methodology and a specific assignment will be defined at the beginning of this second practice with a deadline on Tuesday, May 19.

Evaluation criteria

The evaluation is ongoing and the results of every assignment will be graded as follows: 60% first and 40% the second. Assignments will be elaborated in groups of 2 or 3 students but individual contribution will be also evaluated.

Materiality and Project

Department of Architectural Technology

Oriol Pons

Credits: 5

Intentions

Within architecture, both project process and finished work can be enriched with its own materiality. For example, if material is chosen at the beginning of the work conception process, the following design process can explore and enhance the material properties and thus improve the final result. Also, we architects can optimise our project taking into account the techniques and building processes of the materials that will make it a reality. Even these material aspects can have a more active role by influencing the decision making during design.

In this sense, this course aims to deepen in how architectural works can draw on the chromatic, light, mechanical, tactile, thermal properties, etc., of each material. And also go into detail on how the work can be improved from considering its own technique and construction. This improving process will consider technical aspects as well as economic, environmental and social.

Among the different materials available to us architects, this course will focus on rediscovering the possibilities of traditional, commonly used and more experimental materials. There will be short lectures, exercises, workshops and possibly visits. These activities will cover different design strategies from detailing, modelling and building real-size prototypes. So we will resume the work that our ancestors did in this sense and their vernacular construction, but with a reinvented goal: to move towards a more sustainable architecture for a better future of our society.

Bibliography

HEBEL, Dirk, Marta WISNIEWSKA, and Felix HEISEL: *Building from Waste: Recovered Materials in Architecture and Construction*. Basel: Birkhauser, 2014
RIERA, Òscar, Fabian LLONCH, George RANALLI: *Sagrada Familia: Gaudí's unfinished masterpiece: geometry, construction and site*. China: Oscar Riera, 2014
BURRY, M & J: *Prototyping for architects*. London: Thames & Hudson, 2016

- Week 1 Introduction.
Presentation of contents, program and calendar.
Introductory exercise and debate.

Block 1. Waste-based architecture

- Week 2 General lecture about building from waste.
First exercise presentation and first proposals.
- Week 3 Specific lecture about a specific case study.
Working on the first exercise.
- Week 4 Brief students' presentation of their first exercise results.
General lecture on the construction of architectural structures.
Second exercise presentation and first proposals.

Block 2. Architectural structures

- Week 5 Specific lecture about a stone structure architecture example.
Working on the second exercise and structural models.
- Week 6 Specific lecture about a reinforced concrete structure architecture example.
Working on the second exercise and structural models.
- Week 7 Specific lecture about a steel structure architecture example.
Working on the second exercise drawings, booklet and model.
- Week 8 Specific lecture about a timber structure architecture specific case study.
Working on the second exercise drawings, booklet and model.
- Week 9 Working on the second exercise drawings, booklet and model

Block 3. Prototypes & Mock-up

- Week 10 Brief students' presentation of their second exercise results.
General lecture on prototypes and mock-up.
Third exercise presentation.
- Week 11 Specific lecture or visit according to the students' learning process.
Working on the third exercise design and prototype.
- W 12-15 Specific activity &/or third exercise.
- Week 16 Students' presentation of their second and third exercises as a final project.
Whole class debate about each presentation.

First semester

- Week 2. October 7
Òscar Berbel p. 50
- Week 3. October 14
Aran Castellà p. 51

Second semester

- Week 2. February 10
Nataliya Tokmacheva p.52
- Week 3. February 17
Andre Sashko p.53
- Week 4. February 24
Ester Nacenta p.54
- Week 5. March 2
Aquiles González p.55
- Week 6. March 9
Ferran Signes p.56
- Week 7. March 16
Carlos Vega p.57
- Week 8. March 23
Toni Gironès p.58
- Week 9. March 30
Eva Jiménez p.59

LECTURES

List of lectures

Coordinator: Xavi Llobet

[Mondays]

Along the year, included in the workshops, a series of lectures about researches will be done. This is to have a large scope of Master's Thesis and PhD Thesis explained by their own authors, which will work as a set of examples of research jobs.

MASTER'S THESIS

Òscar Berbel	The Megastructure revival as a device for urban infrastructure's renewal
Aran Castellà	Barcelona's Harbour: a composite scenario
Andre Sashko	Post Mass: The world after Mass Society
Nataliya Tokmacheva	Broken Avant-Garde Movement. Reinterpretation of Russian Avant-Garde. Ideas in Contemporary Architecture
Carlos Vega	Decoding Craftsmanship of reused Materials

PhD'S THESIS

- Toni Gironés Spontaneous architectures, reflections on constants
in architecture: the Cap de Creus peninsula,
a topography in time
- Eva Jiménez The column in Mies van der Rohe.
The lexicon of the steel
- Ester Nacenta Art and craft in the work of Albert Viaplana:
last quarter of 20th century
- Ferran Signes Travesseres of Barcelona.
Viability of the North Travessera

RESEARCH PRINCETON UNIVERSITY

- Aquiles González Raventós In praise of a letter

I began the Dual master degree in Barcelona with the idea of doing the exchange in China so as to enrich myself with a new and unique experience, immerse in a completely different country and culture. The purpose of this exchange abroad was because of my curiosity to learn and understand a totally different perspective to develop architecture compared with the Western approach.

The topic of the thesis took many months to be fixed due to the number of interests I had and the different issues I wanted to talk about. Most of the theoretical research was done based on the project design I realised in Barcelona, which I carried on developing along the next year in Shanghai. Therefore, the topic for the thesis arose at first from a design which involved itself many references and theoretical principles which needed to be analysed and compared between them. Throughout the second semester in Barcelona I did most of the research, looking for examples and reading several journals and books to set the base for the knowledge I needed to develop my own approach about the statements I wanted to reflect on the thesis.

During my stage Shanghai, most of the references and information I needed were mostly collected. In the second Master's year, the first thing I did was to set a clear scientific research methodology. In this research methodology I clarified a problem statement and all the steps I was going to follow to achieve a conclusion regarding the thesis topic, ending with a project design to exemplified it. Barcelona's and Tongji's University approach are completely different but complementary. In Barcelona, the topic for the thesis has to arise from a problematic discovered through a design analysis combined with the research to develop the design. On the other hand, in China, the thesis research is basically theoretical, where the poetics commonly used in our field are not practical to face their research methodology. Nevertheless, many specialised professors are assigned to the students according to their thesis.

Finally, the thesis research encompasses a wide compendium of knowledge which needs to be synthesised and connected because of the mutual relations and influences between them, in this way It's possible to discover new aspects and unknown information which is useful to enhance the thesis statements and personal contributions. In fact, this is one of the thesis aims, to enable the personal critic spirit to comment and discuss other people's works and words in order to provide another point of view and understanding about those concepts which need to be reconsidered and come to the surface again.

Barcelona's Harbor: a composite scenario

El port de Barcelona: un escenari compost

Master's Thesis 2016 | October 14, 2019

Aran Castellà

Even if it sounds hard, it doesn't matter so much -what- you do. In fact, in my opinion it is more relevant -how -you do it and, even more, -why-? I remember clearly when I had to pick out the topic for my Master's final project from a list provided by the teacher and he said something like "it will be all about your approach, not about the topic".

Since then, I thought that Barcelona's harbour would be an appropriate subject to try out my intuitions about this still unknown place for me, having no clue of how I would approach it yet. I felt quickly attracted by the complexity that surrounds a harbour: motion, water, boats, cranes, trains, exchange, entropy... and it connected with concepts that I used to work in other projects like floating and nomad spaces. But the most relevant thing to make a decision was to be aware that in a few years, a part from this harbour would be given to the city because of its supposedly obsolescence. I wanted to prove that there are other ways to understand this place and to reuse this infrastructure in the city's benefit which are not making a tabula rasa by erasing this post-industrial landscape and killing its properties.

To have answered myself -what- and -why- before knowing -how- was absolutely helpful to afterwards design the methodology. The first task was to build up an own opinion about this place, as wide and multi-layered as possible. To travel back on time in order to compare it with the current situation: I collected old postcards to create visual matrix, I walked and filmed all along the harbour, I observed it from different perspectives and I also compared old cartographies. It was a way to reveal the harbour's identity, to find out which are the ingrained actions giving character to this place and which not; to understand its mutations.

After all, to be able to re-understand what a harbor is: a scenario composite by two parts. The first half is earth-based, defined and stable; but the other part is water-based, floating and constantly in a changing configuration. In between, where exchange happens, the harbour's border is the only place that keeps both parts features.

Having realized that the water layer is a continuous plot that connects any part from a city which is in direct contact to a harbor, I focused the second part from the work on developing floating shared programs which can work in the constellation that connects all the harbor-cities forming an imaginary archipelago made-up from all this world wide pieces.

Broken Avant-Garde Movement. Reinterpretation of Russian Avant-Garde. Ideas in Contemporary Architecture

Master's Thesis 2017 | February 10, 2020

Nataliya Tokmacheva

In the modern architecture of Russia, there is a shortage of morphological ideas associated with the loss of identity. Is it possible to revive the architecture of the avant-garde of the 1920s in order to find a vector for the further development of the Russian architectural movement?

The study was based on theoretical, analytical and comparative methods.

A theoretical material was collected on the origins of the formation of avant-garde movement in the Soviet Union and the influence of art on the appearance and the development of style. Were analysed the conditions in which the avant-garde movement was developed and was sharply broken. Also was implemented an analysis of the projects and constructed buildings of avant-garde masters and leading modern architects, whose projects remind of stylistic of the Soviet avant-garde architecture.

At the same time theoretical part includes the study about the importance of Public Spaces, Transportation and Underground Facilities in Soviet Union and also the Morphology and Typology in Avant-Garde.

The research includes analysis of the problem of unused railway station's squares and in more details the analysis of abandoned construction site in front of the Paveletsky railway station in the city centre of Moscow.

The research plays the main role in the project, because when you know the problem you can propose the solution; when you know the history of the country, the city and the place you can find a lot of ideas and inspiration for a unique and remarkable design; when you know the historically formed importance of huge public spaces and public buildings you can propose suitable urban ideas and appropriate morphology. Being curious and respectful to the history and specifics of the country, the city and the site – is a key and essential element of developing interesting and successful project.

The result of the study is the project of reconstruction of Paveletskaya Square in Moscow. The proposal could become a combination of the national heritage of the past and the possible vector of further development of the architecture of Russia.

Post Mass: The world after mass society

Master's Thesis 2017 | February 17, 2020

Andre Sashko

The XXI century is the age of glorification of mass ideology. Each of us inevitably faces this ideology in everyday life, without even realizing this fact. Starting with psychology of every individual and finishing with development of the cities, everything is governed by the laws of the “mass” paradigm. We live in the world, which is shaped by this paradigm. But what lies behind the essence of it? Can we still define ourselves as individuals, or have we just turned into the mass product of the XXI century? Are we aware of our individual involvement in the creation of this world or do we just blindly follow someone’s scenario?

Through the chain of interactions of different aspects and systems, “POST MASS” offers to look at the existing reality from a different angle. Extracting the individual from the global context, by means of definition of their authentic identity, this work proposes an alternative vision of the world, where the individual becomes the key element of its creation.

In an architectural dissertation context, a double aim can be clearly recognised: going in-depth on a certain topic (in my case in the work of Albert Viaplana) and at the same time, improve in the knowledge of Architecture. As a matter of fact, we could state that the figure of Albert Viaplana allows to accomplish these goals.

In one hand, there are not much publications available about Viaplana, and the few that can be found are mostly out of print and characterised by superficiality or partiality that do not help understanding completely his work. On the other hand, the relevant role that Viaplana had in Barcelona's environment must be taken into account; we cannot ignore the design and construction of relevant projects in relevant spots of the city and his contribution as an architect to the transformational process that took place in Barcelona in the 80s and 90s.

But, on top of that, my choice for the dissertation topic was also driven by my collaboration on the Viaplana's Atelier from 1998 to 2012. That close relationship gave me the key to analyse the architectural concepts and strategies that define Viaplana. However, that was also the most difficult challenge I got: I had to take distance and perspective so as not to be biased in my analysis. A deep and exhaustive research in public sources was compulsory and I had to dive in public archives and catalogued myself several documents that were unknown and almost lost in the archives.

My dissertation was not about completing the inventory of the works of the architect; it was an approximation, the first step to approach to more detailed studies about Albert Viaplana's work. The document is original and contains unpublished data from public sources, but is not the definitive one. This dissertation just pretends to lift the black veil that covers Albert Viaplana's figure.

In praise of a letter

Elogio de una carta

Research Princeton University 2020 | March 2, 2020

Aquiles González Raventós

This presentation has to be with an old personal concern about the moment that Architecture starts to exist as a scientific and artistic discipline. To think when it was the first time of anything is a good exercise to put in perspective the evolution of any production of the human being.

During my research for my PhD I was in Rome researching about the origins of some buildings in the Renaissance period. Reviewing some old books in the Vatican libraries I found one small publication, modest in appearance but later I discover fascinate in contents. This book was a monograph on Raffaello Sanzio of Vincenzo Golzio* edited in 1936 in the Vatican domain. What I discovered is what I would like to share with you and propose for the discussion and reflection. In the unique annex of the book there was the literal reproduction of a letter that Raffaello sent to Leo X, the first Medici Pope. It is important also to imagine the context of that letter and the relation of the Pope with the artist. Rome was at that period, 1514, a volcanic society struggling to consolidate itself in the hills of Rome and beyond the Aurelian Walls. There were wars and collusions where the condottieri, mercenaries of the time, were fighting to obtain territories and goods, as well as papal bulls.

A first aspect to point out is to understand how in a general environment of uncertainty and doubts it is possible to develop the maximum creativity intensity. Isn't this suggestive?

In this letter, Raffaello explained the rules that were to be followed by the magistri viarum in the reconstruction of Rome. We do not forget that after Bramante's death the Pope named Raffaello to take in charge the reconstruction of the city. The magistri viarum used to take any kind of architectural elements to build the new buildings that many cardinals needed to stay close to the Pope, the later Curia. That system at the end will make to disappear the old city. Our artist stops that strategy.

And last but not least. He defined for the first time the fundamentals for the orthogonal representation in architecture, i.e. the separation of plan, section and elevation offering with this a vital instrument for architectural invention that will come later. The concept of scale was introduced for the first time allowing the architects to have a precise tool for the first time to design its buildings and cities.

* Vincenzo Golzio, *Raffaello nei documenti, nelle testimonianze dei contemporanei e nelle letterature del suo secolo*. (Ciudad del Vaticano, Peltrinelli 1936)

The origin of this thesis starts, in parallel, from a project experience and from the reading of a theoretical reflection. The experience takes place in the “Portes de Collserola” competition, where the team formed by Xavi Llobet, Eva Jiménez and Antoni Ferran -with whom I collaborated- proposes recognizing the cross direction as a resource to organise and structure the connection between the different portes (doors), as well as a structuring element of the different areas of the Eixample's periphery. The reflection, I found it in the book “Ten Lessons on Barcelona”, where Manuel Solà-Morales talks about the missed opportunity of doing a travessera that structures the periphery at the time of projecting the Rondes of Barcelona.

The thesis is based on the hypothesis that the crossing element has always been present in Barcelona, both in physical realizations (material layers) and in theoretical proposals (intangible layers), and it is proposed to study the existing travesseres in Barcelona to assess the feasibility of doing a North Travessera on the Rear-Eixample.

The thesis is structured in seven chapters. In the first chapter, the meaning of the word “travessera” has been analysed as a structuring element, with the intention of finding the essential that characterises it, trying to extrapolate its meaning to other situations. We were interested in the implication of the travessera in the generation of urban structures and its relation with the textile metaphor, which is essential for the understanding of formal structures of a certain complexity. In the following three chapters it has been analysed the existing or projected travesseres of Barcelona (Ciutat Vella, Eixample and Rere-Eixample), each one with its own scale and morphological structure, each one with their own project, management and execution strategies.

Finally, as a conclusion, in the last three chapters we have looked for the existence of material vestiges that make possible the execution of this North Travessera, which is still non-existent, and we have been able to confirm its viability through a series of conceptual proposals that have allowed us to see how the city responds, most of which are derived or improved from the proposal for the Portes de Collserola competition.

In addition, from the theoretical point of view, we have been able to detect, through the succession of plans, the moment before the disappearance of the proposal of North Travessera of the planning of Barcelona. It's a moment that coincides with the need to define a new situation where the execution of Les Rondes was possible.

Decoding Craftsmanship of reused Materials

Master's Thesis 2019 | DMD Barcelona - Shanghai | March 16, 2020

Carlos Vega

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This study attempts to highlight the possibilities and ideas regarding the topic of reused materials, especially the techniques and craftsmanship that could be possibly implemented into new design projects. The research tries to form a new strategic approach, chiefly by underlining the role and importance of craftsmanship in comparison to frequently used mass-produced and standardised elements that lack connection with the context of the place in which they are embedded.

The dissertation is composed of two parts, theoretical, based on a comparative approach, and then followed by a design proposal. Through an extensive analysis of several case studies related to reused materials in Asia and Europe, the thesis aims to eventually create a manual that could establish general guidelines for future interventions. The comparison is drawn between European architects, studying how they apply reused materials in the past periods, among them, Catalan ones as Josep María Jujol and Enric Miralles but also in contemporary architecture in China, considering well-known figures as Wang Shu or Liu Jiakun, famous for the practice of reused materials.

The extensive analysis can help to establish several guidelines and an abacus with various techniques related to reused materials to comprehend better their role in future projects. Nowadays, scholars tackle the topic of reused materials particularly by analysing the projects themselves, but there are little studies and insufficient in-depth knowledge related to the design techniques to fully implement such strategies into newly made projects. The craftsmanship of reused materials in this dissertation is analysed by three different lenses: the materials, the history and memory, and the experience, generating a diagram of interconnections among the case studies and highlighting the elements that should be taken into consideration in future interventions. Beside to comparative approach, literature review, discourse analysis, site visits, and own observations were also conducted.

The final results are used as guidelines for the application of reused material in a hypothetical project in Barcelona proposed by the author. The design proposal of the project located in the site of a former venue of Barcelona Olympic Games aims to give a new life to the Archery pavilion designed by the Catalan architect Enric Miralles in 1992, that currently is left aside and forgotten by the history.

Spontaneous architectures, reflections on constants in architecture: the Cap de Creus peninsula, a topography in time

Arquitectures espontànies, reflexions sobre constants en arquitectura: la península del Cap de Creus, una topografia en el temps

PhD's Thesis 2016 | March 23, 2020

Toni Gironès

The thesis focuses on a specific case study and a specific geography: the Cap de Creus peninsula and its approximately 10.000 Ha of Earth's surface. Understood as a topography in time somewhere between the natural dynamics and human interventions, this geography has been systematically intervened very strongly and specifically, when our species has seen the need to build a sum of large areas of horizontal plane to cultivate in a previous very rugged topography and a powerful boundary condition in the meeting of the pre-Pyrenees to the Mediterranean Sea.

The construction of this great agricultural infrastructure has materialized only with the local stone, creating a whole system of conditions attached to the livability and different types and solutions that speak of the most essential architecture is derived.

The object of the thesis track, measure, record, discover and compare a reality that you do not have full awareness of its size and scope. Mainly using the drawing as a tool to build and display a face partially hidden for many years and expectant, tells of a territory materialized in a series of times, present at the time, but always with hope and future option. Asking and reflecting on different parts of the work on the constant linked to specific functional requirements for the architecture, geography thesis goes to the territory to conclude demonstrating, as different spontaneous associations between different architectural elements that are part of this great anthropization and natural systems have built certain enclaves of Cap de Creus, paradoxically, the current society is playing as a geography linked to a natural landscape.

An intense link with the site since I was a child, the fascination and attraction that I always had for this area and a permanent and continuous experience of the phenomenon related to the natural environment, have led me to ask myself the same questions: who?, how?, when?, why there is so much intensity and density? They are questions that, probably, the majority of the population who observes and live in this place also ask to themselves.

For me, it is almost an obsession and, mostly, after the impact produced by the great fire of 1986, which revealed the scale of the terraced topography that was hidden behind the scrubland, there is always the same need: to check the place and, helped by the drawing, to build and be aware of this reality.

The column in Mies van der Rohe. The lexicon of the steel

El pilar en Mies van der Rohe. El lèxic de l'acer

PhD's Thesis 2012 | March 30, 2020

Eva Jiménez

The thesis focuses on the column in Mies as architectural element through which we can explain all his work. The development of a chronological table that organises the work by Mies according to the shape of the column reveals us the existence of three distinct periods, each of which corresponds to the development of a different column.

A FIRST PERIOD corresponds to the study of the star column of small riveted profiles, where I set up a parallelism between the work of Mies, Alfred Grenander's, architect of Siemens, and Peter Behrens', architect of AEG. David Sharpe and George Danforth explained to me, that when Mies was in Europe, he used the existing technology of small riveted profiles. I studied the construction handbooks published then, and I could appreciate that Mies removed some structural elements to turn the structure into lines and planes, following artistic criteria coming from De Stijl.

A SECOND PERIOD corresponds to the study of the grey column, which Mies uses at the United States, where he met the architecture of great welded steel profiles used by Albert Kahn, the Henry Ford's architect. I knew about this thanks to the architect Carlos Salinas. He talked to me about an article published by Grant Hildebrand in Architectural Record. The article explained how Mies got obsessed with the industrial architecture by Albert Kahn. His first buildings at IIT are almost identical to those by Kahn, with small variations, starting a process that will end with the Crown Hall.

A THIRD PERIOD corresponds to the study of the star column built with double-T profiles and the incorporation of the waffle slab structure which Mies develops from its relationship with Konrad Wachsmann, professor at IIT and architect of the US Air Force. I knew about this relationship thanks to the comments by the professor Iñaki Ábalos during the professor Llobet's thesis defence in ETSAB. Ábalos said that Wachsmann had been professor in the IIT, in the basement of the Crown Hall, and I thought this data could be key for my research.


With this point of view, one of the main subjects considered in my doctoral thesis was the structural transfers between Mies and other architects like Behrens, Kahn and Wachsmann. Mies incorporated the existing and the new structures designed by Kahn and Wachsmann into his work, but not literally. He added some variations in order to apply his architectural language, directly related to De Stijl.

This PhD thesis won the UPC Extraordinary Doctorate Award 2011-2012.


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