FORMS FOR LIVING
POLITICS OF COLLECTIVE HOUSING IN CERDÀ’S BARCELONA BLOCK

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UNIT BRIEF
FORMS FOR LIVING
A NETWORK OF HOME-SWAPPING IN HAVANA GRID

Designed to disseminate an even distribution of blocks across a potentially homogeneous and infinite city territory, Il-defons Cerdà’s grid for Barcelona is both the epitome of modern urbanisation and the perfect tool for private wealth generation. Despite this grid was conceived open to all citizens as a continuous efficient circulation, it always served as a device for implementing biopolitical codes and a flawless matrix for capital surplus investment in domestic property. Today, as large-scale investment of global financial corporations increasingly dominates the real estate market, ordinary citizens (particularly within younger demographics) cannot access affordable housing. The post-Covid-19 economic deceleration will worsen this situation, and therefore as architects we must consider alternative models of inhabitation, such as co-operative, self-built and resilient residences. To explore such ideas, each student will develop a project for one of the 113.3x113.3 square-metre Barcelona blocks in order to speculate on new forms for living for future generations.

This year, EXP8 will investigate architectural forms in two ways: first, as social structures that are able to survive in the ever-changing, contemporary city through networks of shared interests, association, co-operation, and care; and second, as urban artifacts that can articulate these relations in meaningful ways. Additionally, understood as design processes for urban consolidation and densification in contrast to the endless expansion of the city, these forms for living will infiltrate and be inserted into the existing grid. The unit is also interested in processes and actions that grant inhabitants agency and trust in decisions on planning, new programmatic possibilities, and construction processes. Investigations into local materials (ceramics, wood, clay) and sustainable construction methodologies, as well as creative explorations of traditional crafts aligned with experiences in Mediterranean culture, will be considered to foster sensorial gratification and social engagement.

UNIT TUTORS

Unit 8 tutors are Francisco González de Canales and Nuria Álvarez Lombardero, who are cofounders of Canales & Lombardero (canales-lombardero.com) and Politics of Fabrication. Francisco studied architecture and theory at ETSA Seville, ETSA Barcelona and Harvard University, and worked for Foster + Partners and Rafael Moneo. He has lectured in England, Chile, Mexico, Spain and the US. Among his recent publications are First Works, Experiments with Life Itself, Rafael Moneo: A Theoretical Reflection through the Professional Practice and Rafael Moneo: Building, Teaching and Writing. Nuria studied architecture and urbanism at ETSA Madrid and the Architectural Association and worked for Machado & Silvetti Associates. She has previously taught at the University of Cambridge, Bartlett, TEC Monterrey and University of Seville. Her work on gender studies in architecture and urban typologies has been widely published, as her award-winning book Arquitectas: Redefining the Practice. Both hold a PhD and are coauthors of Politics and digital fabrication: an ongoing debate (2017) and have been teaching Intermediate Unit 8 since 2009.
UNIT WORK

In Inter Unit 8, we believe that architects’ work is fundamentally intellectual. This does not mean that architects should not master certain techniques to articulate their own ideas properly, but these techniques have to be subordinated to intellectual and conceptual preoccupations which guide them. Following this principle, EXP 8 proposes an intermediate year work based on a compelling argument related to critical questions able to direct design work throughout different stages. Thus, unit work will be phased throughout the year following a learning process to understand the complex mediation between sociopolitical, cultural and urban and most importantly, architecture matters while acquiring different technical tools and skills.

This academic year, the unit work will be focus on designing a range of proposals for a 113,3 x 113,3 metres housing block within Barcelona urban grid. Each block proposal will be supported by rigorous investigations developed through four main briefs distributed along the three terms (see schedule & next pages). A prolific production of drawings, images, collages, videos, texts and material tests will be encouraged, but only in relation to precise and sophisticate individual arguments.

DESIGN PORTFOLIOS & BOOKLETS

The unit design work developed throughout this academic year will be summarized in a main digital portfolio, which will prove the ability to consistently relate theoretical enquiries with design solutions. Besides drawings, photographs and collages describing individual proposals and their design process, this portfolio will contain four flip-page booklets or documentaries summarising main researches. The first booklet will condense an individual investigation on formal relations, including relevant block case studies, design iterations and photographic studies of model spatial findings. The second one will be a specific investigation on a sustainable material possibility, taking into account local sources and processes of construction. Third one will include an investigation on Barcelona city, its grid and urban fabric, that will help to find and describe a specific site. And finally, the fourth one will be a report on housing, local people needs and forms of living. These two later pieces of research will be conducted with online resources (readings, photographs, virtual media, digital maps news, urban plans & so on) and possibly during a unit trip, if COVID situation allows it.

In addition, some high resolution drawings and collages will be created, mostly in the third term, to clearly represent the spaces generated in each individual proposal. These drawings will demonstrate a certain level of detail on housing spaces and material solutions of block design. As the unit has a major focus on materiality, drawings will be complemented by some key models describing experimentations at different scales that will be filmed and photographed.

The laying out and online presentation of portfolios and booklets is seriously considered within the unit, as they are a fundamental part to communicate individual arguments and ideas. For that, there will be different individual portfolio reviews at the end of each term. Laying out and online presentation of portfolios and booklets is seriously considered within the unit, as they are a fundamental part to communicate individual arguments and ideas. For editing, there will be inductions on some necessary software (see workshops section in next pages), but basic knowledge on software like Rhino or Autocad for architectural drawings, Photoshop and In-Design for laying out images and portfolio pages will be welcomed.
UNIT METHODS

HISTORY & THEORY - LECTURES & SEMINARS

Students joining EXP 8 should have a strong interest in sociocultural, urban and architectural theories, aiming to translate this into specific design proposals. These theories are considered a fundamental part of design development, driving the unit work conceptually. The unit recommends to combine History and Theory (HTS) work with individual design researches and to find a common conceptual grounding for both. Therefore, students should familiarised with unit bibliography, and most importantly read texts related to each brief provided by the unit along the year in order to progress within the unit. These texts will be either commented in group seminars and some will be expanded in lectures.

Seminars and lectures related to the unit interests and bibliography will be conducted throughout the first and second term of this academic year. These will cover three major questions related to design development: the politics of architectural space and form, an understanding of urban questions within the city of Barcelona, and sociocultural conditions that define forms of living. Tutors will host seminars on specific readings while some guests will be invited to conduct talks. The aim of these activities is to facilitate a clear understanding of key concepts along the year.

WORKSHOPS

This academic year there will be two different set of workshops for students. The first section will provide software inductions for helping students to progress with block designs and their representation. In the first term there will be a Rhino & Illustrator workshops to help those who have more difficulties with this design tool while in the second & third term there will be an Autocad workshop to help represent design proposals detail plans & sections, and a Photoshop Advance & VRay workshop to help express spatial atmospheres created. The second section will help the laying out and online presentation of portfolios and booklets, as they are a fundamental part to communicate individual arguments and ideas. For that, there will be inductions on necessary software such as basic Adobe After Effects & InDesign. We recommends to have enough space in the laptop or desktop to work with these software, and possibly to have a secondary screen to work more comfortable.

MODELS

Models are part of unit design development and students should plan the buying of materials for making them during the academic year. Models will be more schematic using close at hand materials at the beginning, for instance paper, cardboard thin wooden layers and sticks, for later move to materials with more specific manipulation. We will work consult DPL, metal, wooden and model workshops to realise this second more experimental part that will be complemented with an investigation on local material traditions and resources. There will longer time frames for allowing students to familiarise and get necessary material, laser cuts and CNC moulds. Some guests will be invited to give some advices on how to get casts and small wooden assembles done Photography will be an important technique to be used for exploring models. Basic knowledge on how to use a camera or a high resolution mobile camera will be necessary, but some tips will be taught during the academic year. We recommend to have a photographic camera to depict this exploratory process better.
EXP 8 Work by Raya Shaban, Emily Zinselmeier Marina Gubbins
TUTORIALS

Tutorials are Tuesdays and Fridays, sometimes on Mondays. Schedule are announced at: newformalism.aaschool.ac.uk
Any enquire please email us to: nuria.lombardero@aaschool.ac.uk; francisco.gonzalezdecanales@aaschool.ac.uk

SITE

This academic year, EXP 8 will be focus on an investigation on **Barcelona** city in the Spanish Mediterranean coast. This very well documented city by scholars, urbanists and geographers will allow students to investigate it and found their block sites. From the unit we will provide information about Barcelona, such as digital resources, readings and documentaries that describe the city, to help this investigation. Guest speakers, will be invited to talk about the city in its contemporary state and its history. Besides Barcelona, investigations about local material sustainable possibilities of construction and creative explorations of traditional crafts aligned to experiences in the **Mediterranean** culture will be considered. There is a strong tradition on brick, wood and adobe in Mediterranean countries that will be considered. In principle there will not be a **unit trip** to Barcelona. But if COVID-19 circumstances will improve and travel to Spain is allowed to all students in the unit, we can consider to visit the city.

![Diagram of Tutorials and Site Information]
Shape & Material

Term 1 - Weeks 1-5, Term 3- Weeks 5-6

SHAPING THE STRIP-BLOCK

As a starting point the unit will explore through models the initial shape of 113,3 x 113,3 metres blocks plan. For this aim, this exercise will encompass two main explorations of the overall block shape and the intricacy of its fragments. Firstly, these explorations will be developed in a purely intuitive manner imaging the block shape. Different malleable materials, such as paper, cardboard, cloth, foam, metal cables, and wood sticks, will be initially use to have a range of schematic shapes that will be later used.

After a critical analysis of these first models finding block intrinsic principles, two models will be constructed individually: a 1/250 scale model showing the overall block shape and a 1/100 model showing a fragment of it in more detail. In this second exploration, the experimentation will be focused on material aspects of the proposal. Individual investigations on local sustainable material possibilities, such as wood, brick, adobe or others, will be conducted to be considered for this second exercise. Models here will be made with equivalents in material behaviour and effects, such as wood, terracotta and plaster are recommended to discover other possibilities for block schematic designs. Students are invited to feel comfortable with these materials, and learn rules and modelling criteria out of their manipulation. For that, mock-ups or material tests at 1/10, 1/5 or even 1/1 scale will be done. Photography will be use as a technique to study these models experimenting with light, texture and colour effects in space related to material and local climate conditions.

References abstract material models: Saloua Raouda, Rachel Whitehead, Jorge Oteiza, Eduardo Chillida, Mathias Goeritz, Manuel Felguerez, Jorge Yazpik, Lygia Clark, Gego and Helio Oiticica, among others.

Seminar: Photography and materials

Reference Books:
FINDING FORMAL PRINCIPLES

Following previous shape explorations, examples of block configurations as collective models of housing by R. Bofill, Lacaton & Vassal, A.Siza or Herzog & DeMeuron, among others, will be scrutinised to understand this urban typology. At the same time, different readings on Form and typology will be reviewed in a seminar to understand the relationship between these theories the city and architecture. General formal aspects defining block individual proposals - such as voids, modularity, porosity, repetition and circulation - will be explored through diagrams, giving special attention to different architectural elements- such as thresholds, courtyards and patios-. Consequent findings of these explorations will be applied to initial block proposals in different iterations and expressed through compositional diagrams and models. In this manner, the block formal intricacy will be defined.

Lecture & Seminar: On Form: theory on the city and its architectural consequences.
Workshop: Rhino and Grasshopper (date tbc)
Readings:

BARCELONA URBAN GRID

Before deepening into material aspects of the block the unit should be familiarize with the different formal aspects of Barcelona City. In groups, the unit will create an archive of drawings in different scales (Large, Medium and Small) with information about its urban grain, voids, density, and specially, the urban grid. A special attention will be given to urban voids and gaps on the grid. Readings on Barcelona history and an understanding of its grid and social structure will be also conducted to learn about its evolution and urban fabric configuration.

**Seminars:** Barcelona urban history and contemporary concerns

**Readings:**
- Ross Exo Adams, 2018, *Circulation and Urbanization (society and Space)*, SAGE
BARCELONA URBAN COMPLEXITY

A research on Barcelona sociocultural, political and economical issues will be initially and individually planned at the end of the first term. Readings, visioning of documentaries and check of references will help in this process. This investigation will have a major focus on local ways of living, different cultural customs and spatial characteristics where everyday life takes place. Findings will be expressed in different analytical diagrams, video fragments, photographs and information maps that will be completed after the unit trip and edited in a booklet. The major aim of this exercise is to define each block context and content.

Workshop: Basic Adobe InDesign & After Effects

Reference books for diagrams:

Photography: Tino Soriano, Xavier Misetachs, José Porroche, Ignacio Loyola.
- José Porroche, 2015, Keeping Barcelona Weird is Not a One Man Job. Barcelona: Clandestine.


Readings:

On Catalan Culture

Barcelona social, cultural political and anthropological studies
POLITICS OF BLOCK INSERTIONS

After researching Barcelona urban grid and complexity, a location or context of each individual proposal - vacant or not- is selected. Each interventions will redensify, infiltrate, rearticulate or totally redo a block in the city. Building on the conversation from first term on form, the politics generated by the block in the city fabric, after being placed in their location, will be assessed and discussed. Collages and short texts will define each proposal critical position. In addition, block proposals will be interrogated regarding their relationships with its immediate context and the passer-by and their capability in specific locations to engage with the city public space. In this sense, the context is brought forward as an important part of each proposal design.


Readings


On politics, economics and the city of Barcelona

- Frank Eckardt, Javier Ruiz Sanchez, 2015, City of crisis: the multiple contestation of southern European cities, Jstor.
TIME & HOUSING

In recent years, we have witnessed as large-scale investment of global financial corporations increasingly dominates the real estate market, what avoids citizens, particularly younger demographics, to access affordable housing. The post-Covid-19 economic deceleration will worsen this situation, and therefore as architects we must consider alternative, even more affordable, models of inhabitation, such as co-operative, self-built and resilient residences. Barcelona city is not unfamiliar to this problem, in fact it also suffers the consequences of an economy based on tourism with an exponential increase of residences transformed into touristic apartments reducing even more housing offer. Under this question, a specific investigation on housing and new forms for living for future generations will be developed individually by students in EXP 8. This investigation will be developed in two ways: first, as social structures that are able to survive in the ever-changing contemporary city through networks of shared interests, association, co-operation, and care; and second, as urban artifacts that can articulate these relations in meaningful ways. All documents will be compiled in a small booklet focus on how different intensities and times of usage can reshape the arrangement of the domestic realm that will define the programmatic brief of the block.

After defining the specific housing programmatic brief of the block, understanding it as the basic unit to provide interpersonal relations between temporary occupants, the proposal will be interrogated under various questions. Firstly, permeability, porosity and accessibility of the block in relation to the immediate context will be evaluated when looking to different time residents. Then, relationships established between different spaces will be questioned by looking to interior connections, transits and different levels of privacy. These scenarios will be expressed through sections, views and conceptual drawings by taking into consideration different building users, interior environments, circulation main trajectories and sensual perceptions.

**Seminars** Housing & Immediate Politics

**Workshop:** VRay and Photoshop

**Readings:**
Inter Unit 8 understands the Environmental and Technical Studies investigation as an integral part of the design process. This academic year, the unit is interested in exploring the insertion, restructure or consolidation of a block within Barcelona grid with housing as its major programmatic component. In the Barcelona context, there are some environmental challenges related to both its metropolitan condition, like pollution, waste management, water shortage and green gentrification, and its climatic condition, looking for passive buildings that could improve energy management by citizens. On the other hand, Barcelona province is well-known for its building materials factories and craftsman ateliers that can be explored to find new sustainable ways of construction with local materials and ways to invigorate local fabrication. Hybrid systems of fabrication and construction combining both low and high technologies of fabrication and construction, as well as collaborative models of self-building could be also part of a technical investigation.

Following these two local conditions, the unit suggests ETS explorations on material, structural and construction processes drawn from the richness of local culture and addressing environmental challenges, and also on new environmental possibilities and economic ways of construction, considering light and ventilation. These or any other interesting ETS topic is welcomed to be discussed in the context of designing a block proposal infiltrated or inserted in the 113.3 x 113.3 square metres grid of Barcelona.

ETS WORK & SCHEDULE

As the unit follows ETS Option 2, previews will be in week 9 of Term 2 and final submissions in the first week of Term 3. Students’ work for ETS has been structure in different stages along the first two terms that run in parallel to the development of STRIP-BLOCK designs. ETS work will start by defining an individual research topic by the first two weeks of the second term, when unit designs are developed enough. Once the topic has been defined, most of ETS work will be developed through the term with assistance of the ETS tutors. We strongly recommend all students to book in advance tutorials with ETS tutors and use these tutorials intensively for the development of their designs. These sessions are an opportunity for the students to be helped and discover the potentials of their projects. Along the term, students will analyse the fundamental aspects of their technical interest, select and analysed relevant case studies, apply their research to the design development, experiment with different possibilities working with models, mock-ups and simulations.

TERM 1 - W9 - First meeting with ETS tutors to understand ETS work dynamic and development.

TERM 2 - W1-2 Definition. Coherent description of the ETS theme according to the development of the design deciding between structural innovations or vertical interfaces definition.

W3-4 Comprehension. Analysis of the fundamental aspects implied and selection and analysis of relevant case

W5-6 Experimentation. Experimentation with different possibilities and hypothesis as part of the design exploration in its technical aspects

W7-8 Application. Translation of the acquired knowledge to the reinforcement and development of the unit design

W9 ETS3 INTERIM JURY OPTION 2

W10-11 Revision. Assimilation of the criticism derived from the interim, improving the necessary aspect for the development of the ETS

TERM 3 - W1 ETS3 FINAL SUBMISSION OPTION 2