

[Liquid Porosities]

*"Physical urban quality is in the measure, the proper understanding of the limits of a space. As soon as we define it, we segregate it. **Good public space has no limits, or the ones it has are undefined, multiple, oscillating.** As a relative place, its references to the urban whole are more important than its own identity and yet this is enhanced thanks to them. Watch those perimeters! They are both main theme and baptism of fire of urban quality."*

Solà-Morales, 2010

1. Objectives

The course “Integrated Project I” aims to develop critical and design skills in more complex urban contexts and in relation to emerging themes in contemporary society, particularly regarding the relationship between public spaces and buildings.

Thus, through a critical and integrated approach that combines theory and practice, analysis and design, the course seeks to develop an understanding of the city as a living, multifaceted organism. The aim is to deepen critical reflection on the discipline of architecture and its morphological relationship with the city. Based on a theme and a major exercise in urban and architectural composition, the course seeks to work with new design tools that integrate building typology, complex architectural programs, and the design of public space and the city.

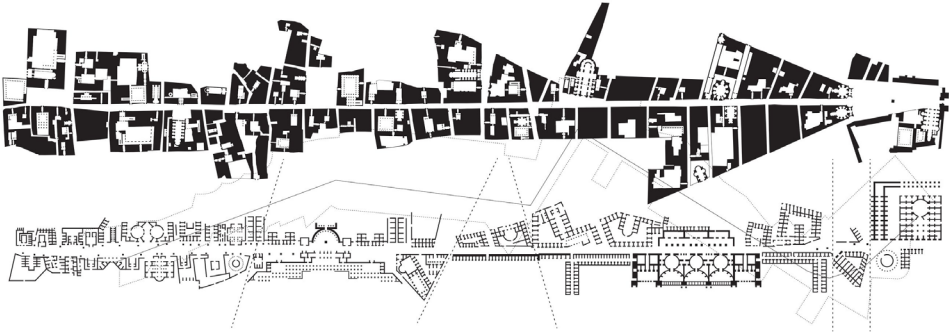
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2.Theme: Liquid Porosities: between water and the city

The 20th century was profoundly shaped by the theoretical principles established by the Modern Movement, which represented a dramatic rupture with the pre-existing city. From the second half of the century onwards, theoretical thought sought to react against this new dogma, giving rise to various currents that reinforced the importance of establishing a balanced and integrated dialogue within the urban and landscape

[Nolli vs Piranesi]

© Bryan Maddock



[2004] . Kanazawa Museum of Contemporary Art . SANAA



[2010] . Viadukt . EM2N



[1980] . Arsenale di Venezia

[2019] . Inverted Hong Kong . Geraldine Borio



context. The so-called crisis of the isolated architectural object and of urbanism as a science led to a new disciplinary approach that emphasized the relationships between the built fabric and the values of public space.

More recent architectural production seeks to reinvent or recover spatial systems characterized by ambiguous transitions, where rigid limits between public and private are questioned in favor of collective and democratic use. The architect is thus called upon to imagine new spaces, or to transform pre-existing structures, where the dissolution of boundaries, porosity, fluidity, and the extension of public space into the built fabric emerge as strategic hypotheses for anchoring architecture to place.

*"... of spatial continuity and the tendency to erase every articulation between spaces, i.e., between outside and inside, between one space another. Instead I suggest articulation of transition by means of defined in-between places which induce simultaneous awareness of what is significant on either side. **An in-between place in this sense provides the common ground** where conflicting polarities can again become twin phenomena"*

Aldo Van Eyck, 1962

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In this context, it becomes inevitable to recall Giambattista Nolli's innovative vision of public space in Rome (1748) and to recognize the value of certain building typologies in shaping urban form and in demonstrating how architectural works can design and influence the urban habitat.

Liquid porosity thus emerges from the exploration of urban transition systems that connect water and the city, taking into account the diverse flows and rhythms of both ecological systems and people themselves. The conception of these urban devices, as structuring elements, is recognized in contemporary discourse as one of the essential tools for (re)designing a new urban cartography, reconfiguring public space and the various boundaries of transition with the built environment.

The city's spatial structure acquires a shared meaning as supports for collective activity emerge, and alternative routes catalyze the urbanity of urban space, leading to transformative actions in the built city [*urbe*] and urban society [*civitas*].

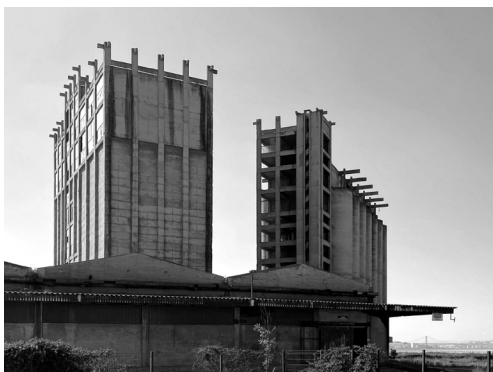


3. Site

The city of Barreiro currently faces some of the greatest challenges, and at the same time opportunities, in the Lisbon Metropolitan Area. The construction of the third bridge across the Tagus River and the resulting implementation of the high-speed rail line (TGV), as well as the expansion of the Metro Sul network, are bringing about transformations in this area that will reshape significant parts of the city. The introduction (and reconfiguration) of this transportation infrastructure adds a new dimension to the city's relationship with the river—a relationship that has yet to be developed since the decline of industrial activity at the Quimigal industrial park. Vast areas of landfill remain to be reclaimed, creating a barrier that separates the city and its people from the river.

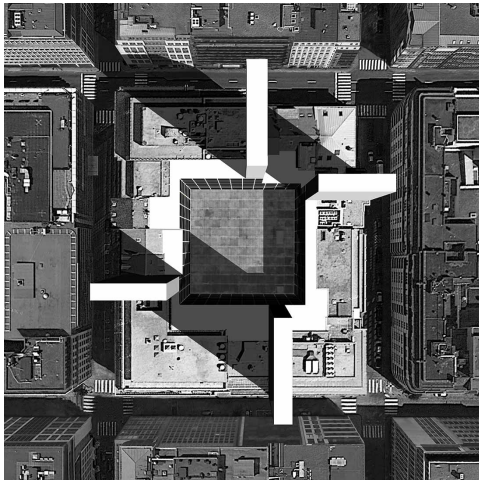






[Quartier-Leopold]

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[Continuous Monument | Positano]

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Vacant terrains, ruins, a waterfront with untapped potential, infrastructure in need of upgrading, and neighborhoods waiting to be connected emerge as the basic urban material for processes of urban metamorphosis that could reconfigure the built fabric of the city of Barreiro, developing new spaces for transition and articulation between different systems and creating new areas for employment, production, commerce, and culture with those on the opposite bank of the Tagus (in Marvila)—as exemplified by initiatives such as the Unicorn Innovation District or spaces like Marvila 8 and Fabrica do Braço de Prata.

Furthermore, it is important to enhance public space and its regeneration in conjunction with the built fabric as a strategy for consolidating a common ground that structures and integrates lines of continuity with existing elements.

4. Programme and Project Methodology

The proposed core exercise consists of developing an urban-architectural project with a hybrid program capable of integrating different uses, while simultaneously redesigning public space and establishing a relationship with water. The architectural project thus takes on a public value, creating new spaces and repurposing existing structures, while shaping communal spaces that connect the city's public infrastructure with the private spaces of the building(s). By defining ambiguous, shared-use spatial systems, the building incorporates a porosity that shapes a diverse urban way of living and integrates with the surrounding urban context. Water, the city's ground, and the building's ground floor merge, expanding spaces, blurring boundaries, and fostering places for gathering and socializing that regenerate the site's urban character.

Starting from a concrete reality that contains territorial attributes capable of contributing to the development of students' creative stimuli, three exercises are proposed that are autonomous but interconnected throughout the semester.

The methodological approach is grounded in direct experience with the site and is structured into three essential phases, each corresponding to one of the three exercises.

Decode

The territory, as a supporting framework, is assumed as material for exploration and reference. Accordingly, the first step is the recognition of place—understanding its characteristics, potentialities, and weaknesses. Context and its critical interpretation are regarded as the initial act of design; the site itself carries the imprint of the project's foundation.

Concept

The testing of hypotheses of a conceptual or exploratory nature is understood as an essential stage in the initiation of the project. It represents the moment for developing an idea or the foundational principles of the intervention. The elaboration of scenarios or more conceptual explorations contributes to the consolidation of spatial systems, functional organization, and the structuring relationships between the programme and the city.

Project

The project, as a conceptual phase, develops integrated solutions in which the building must seek ways to articulate the city's form, the architectural object, and its connection to public space.

The design process is understood as a continuous process of research and experimentation, with various hypotheses or tests being evaluated using different tools. Hand-drawn sketches, rough sketches, models, and technical drawings are used in a coordinated manner, operating at various scales and with the aim of addressing different questions or phases of the work.

The project focuses on a specific, predefined area of intervention but encompasses a broader urban area as its territory of knowledge and information. In this way, the logic of broader urban systems that directly or indirectly affect the site of intervention is taken into account.

The development of the exercises involves periods of group work, while the architectural composition project will be carried out through individual work. Throughout the various exercises, students will be asked to create an individual notebook to organize their work and keep a more personal record of the various circumstances they identify as essential.

Theoretical Component

The practical component of the exercises plays a structuring role within the course unit; however, project decisions must be informed by the provision of fundamental theoretical content, articulating both practice and theory. In this way, design choices are consolidated through a solid theoretical and conceptual foundation. In addition to the theoretical lectures, the program foresees the involvement of invited guests, either connected to the thematic scope or to the intervention site, who will contribute to complementing and enriching the debate and the underlying design process.

5. Research

The work carried out in the curriculum is well-aligned with ongoing research lines by the research group *formaurbis* LAB. You can find more information about this research group at the following link: <http://formaurbislab.fa.ulisboa.pt/>

6. Assessment

Assessment of the course is based on Continuous Assessment and, if applicable, a Final Exam, in accordance with the FA.ULisboa Assessment Regulations.

In accordance with the provisions of Article 3, paragraph 7, a final Continuous Assessment grade of 10 (ten) or higher results in passing the course.

Continuous assessment takes into account the development of assignments and public presentations, as well as participation, attendance, and work during the class period. Thus, continuous assessment is structured around three main points:

1. Continuous assessment consists of three formal evaluation periods corresponding to the three assignments, as well as class attendance and participation, with specific dates set forth in the course calendar. It evaluates all work produced and the development process, and must take into account the minimum requirements defined in the syllabus for each assignment. The grade for each phase will be expressed on a scale of 0–20 points.
2. The percentage distribution of the three assessment components is as follows: 1st Midterm Assessment: 10%; 2nd Midterm Assessment: 30%; and Final Assessment: 60%.
3. Each assessment component includes the submission and presentation of assignments and a comprehensive evaluation by the instructors, allowing each student to understand the level achieved for each learning objective.

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Final approval in Continuous Assessment requires a passing grade on all assignments for the semester.

Registration for the exam is optional and serves as a supplementary assessment, constituting the final exam for students who do not pass the Continuous Assessment or for those seeking to improve their grade from the Continuous Assessment. This exam is graded independently, without a fixed weighting relative to the Continuous Assessment; the higher grade prevails when the exam is taken to improve the grade. In this course unit, registration for the exam is contingent upon attendance at a

minimum percentage of in-person sessions: 60% for students in the standard program and 30% for students with special status who are not exempt from the minimum attendance requirement. Attendance will be verified by signing the attendance sheet provided by the instructor. Failure to meet the applicable threshold results in exclusion from Continuous Assessment and from the exam for the semester in question, without prejudice to the mechanisms provided for in Articles 8 and 10.

In programs with a legal exemption from attendance, no minimum attendance requirement applies; demonstration of learning and competencies, when necessary, must be ensured through the compensatory measures provided for in Article 8, namely an Individual Compensation Plan (ICP).

If an exam is required, it will consist of the submission of all work completed during the semester in digital format and an in-person oral exam covering all the work from the semester. The exam will be administered in person before a panel of jury members.

7. Bibliography

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