ULISBOA | FACULDADE DE ARQUITECTURA | MIARQ | PROJECTO V | SEMESTRE V | ANO LECTIVO 2025-2026

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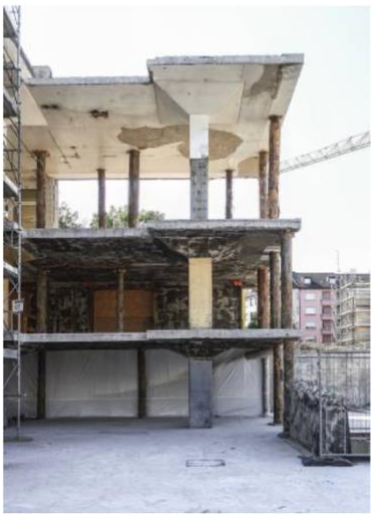
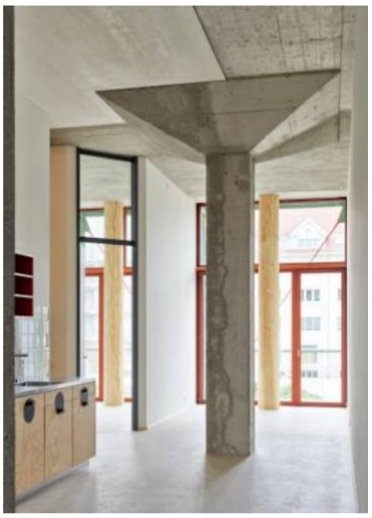
EXERCISE 02 [PHASE 2]





Conversion of a Wine Warehouse into Housing, Basel, 2023.

TYPOLOGICAL ADAPTATION [in a built context]

1. Introduction

Following the design of a basic housing unit (the prototype), as established in the first phase of this exercise, this second phase focuses on exploring its repetition and aggregation within a specific context, using processes of *typological adaptation* through the *re-functionalization* of a building currently occupied by services and retail.

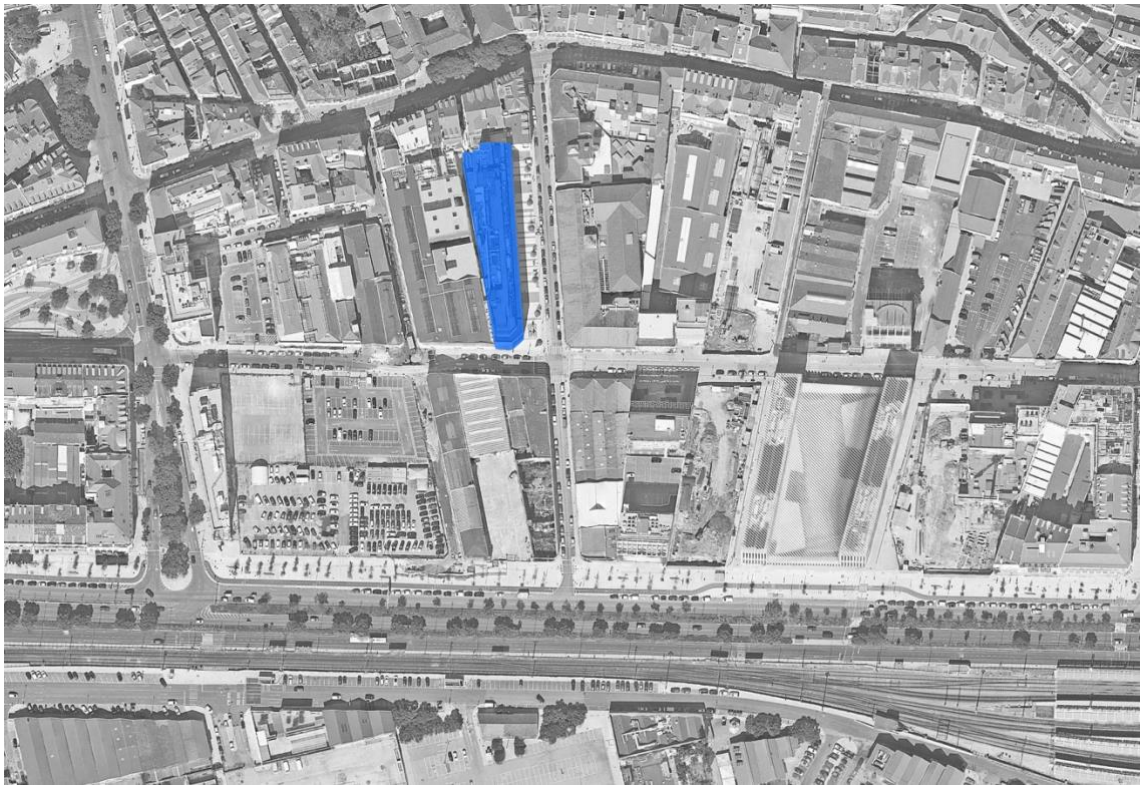
The theme of re-functionalization [reuse], ever-present throughout the history of Architecture, has regained central importance in contemporary debate and practice. While most urban centers are relatively consolidated in terms of their built fabric, current economic and social dynamics—accentuated in the post-COVID era—have revealed imbalances in the housing/services ratio, largely due to the growing significance of remote work.

This issue also arises within the framework of sustainable development principles, given the well-known direct and indirect environmental impacts of the construction industry. Consequently, a new design ethic is emerging worldwide—one that begins by questioning the need to demolish buildings that may have become obsolete from a programmatic standpoint but still retain architectural and constructive qualities that justify their reuse for other purposes.

Within this framework, we will develop an academic speculation through which a built proposal is designed to support a medium-term housing program, based on a *co-habitation* model, including the necessary complementary and collective spaces. The aim is to transform the chosen site into a meaningful contribution to the urban fabric of the city, while critically addressing one of the pressing issues of our society—the housing shortage and the need for dwelling models better suited to contemporary life.

2. Site

Dom Luís I Building, Rua do Instituto Industrial, nºs 7 A–G, Lisbon



(source: Atelier Fragmentos)

The object of intervention, with a gross area of 10,300 m² and a plot area of 2,775 m², is located in Lisbon, at the intersection of Rua do Instituto Industrial and Rua Dom Luís I.
As this is a building situated in a consolidated urban area, the project should focus exclusively within the limits of the defined private property, while preserving the existing spatial continuities (public and pedestrian) of the surrounding urban space.

3. Program

> "The act of dwelling reveals the ontological origins of architecture; it engages with the primordial dimensions of inhabiting space and time, while transforming a meaningless space into a special space—a place..."
> — *Juhani Pallasmaa, 2017*

In Over recent decades, both the concept of the "typical family" and the ways of inhabiting domestic space have undergone significant transformations, prompting us to question standardized and pre-determined typological models.
At the same time, increasing difficulties in accessing housing—particularly affordable housing—and the instability of employment conditions have led to a growing demand for new models of shared living. This has given rise to multifaceted and complex domestic environments that combine different generations, cultures, genders, rhythms, and needs within the same living space.
The collective space, as a transitional system, emerges as a device capable of fostering greater social integration and creating places where community can be built.

3.1. On this site, and using the previously developed prototype as a typological reference, a proposal should be developed for an experimental housing complex aimed at an active population living in a *co-living* model, for stays of 1 to 3 years, within the thematic framework defined in the first phase of this project.

3.2. The proposal should accommodate the largest possible number of shared housing units. The implementation/adaptation of the original prototypes should serve as a starting point for the generation of dwelling units, rather than merely replicating the typological model.
Adjustments should arise naturally from the aggregation process, reflecting factors such as interior–exterior relations, specific site conditions, ventilation, solar orientation, structural constraints, and the limits of the intervention area.

3.3. The functional program must also include commercial and service spaces, as well as complementary communal facilities primarily for residents' use, forming a network of spaces that foster neighborhood interaction and mutual support, namely:
a) A multipurpose room (200 m²) for socializing or extending the domestic space.
b) Co-working spaces with a total area of 400 m².
c) Laundry facilities at a minimum ratio of one machine per ten inhabitants.
d) Communal kitchen and dining areas with a total area of 400 m².
e) An administrative/maintenance office (80 m²).
f) Sanitary facilities supporting collective areas, properly dimensioned and distributed.
g) Retail and service spaces totaling approximately 1,400 m² (to remain generic or *raw*, without interior characterization or detailed subdivision).

3.4. Within the speculative framework of this academic exercise, the development of the complex must consider the following aspects:
a) The proposal may, at its limit, remove all existing built elements except for the primary structural system (slabs, columns, beams, and access cores).
b) Each proposal may decide whether to preserve or replace façade elements, partially or entirely.
c) Selective slab demolitions are permitted to ensure proper ventilation and lighting for the basement levels or to create vertical connections between duplex units.

Note: No additional programs or built spaces beyond those listed above are allowed.

4. Objectives

This work has several distinct objectives, which must be demonstrated in the final outcome. Students should:

- Identify and apply different systems of repetition, transformation, and aggregation as structuring tools that provide unity, extension, and diversity;
- Define a spatial logic for the new construction in relation to the remaining built context, within a framework of resource rationalization and optimization;
- Design and dimension access and circulation systems as both functional and spatial structures mediating transitions (interior–exterior, public–private, individual–collective, domestic–urban);
- Design complementary spaces as communal areas of civic dimension that foster urban integration;
- Ensure adequate living conditions (lighting, ventilation), privacy, and accessibility for prototypes and adjacent spaces (when applicable);
- Consider the physical support structure also as a conceptual framework;
- Work with infrastructural logics in the aggregation/repetition of units;
- Manipulate and organize the various design components expressively so that the overall proposal can be appreciated as a coherent *language*;
- Achieve a qualified synthesis that transcends the resolution of individual design challenges.

5. Evaluation Criteria

In assessing how well the objectives are met, the following criteria will be considered:

- **Work process** (extent, diversity, quality, and critical judgment in hypotheses, verifications, alternatives, and design decisions);
- **Instrumental proficiency** (methods and processes of design and their simulation/representation);
- **Conceptual mastery** (understanding, exploration, and synthesis of the themes addressed in both practical and theoretical classes, as expressed in the architectural solution).

6. Final deliverables

The conclusion of the exercise must result in the production and submission of the following minimum elements, organized in vertical A1 panels.

6.1. Drawings

- Plans (ground floor, typical floor(s), roof), sections (minimum two, including one through a vertical circulation core), and elevations — **scale 1:200**;
- Plan(s) of two horizontally aggregated housing units, including distribution spaces (gallery, staircase, or other) — **scale 1:50**;
- Section of two vertically aggregated housing units, including distribution/circulation systems, ground contact, and roof contact — **scale 1:50**.

6.2. Models

- Model of the full complex — **scale 1:200**;
- Model of the revised/developed prototype (if significantly transformed in this phase) — **scale 1:50**.

8. Timeline

Start: Class 15 – **October 27, 2025**

Conclusion: Class 26 – **December 10, 2025**

Interim presentation for continuous assessment: **December 10, 2025**

Digital submission of final materials: **December 19, 2025**, by 23:59 (via the FA cloud, in the specific link created for each group).

The publication of the **3rd continuous assessment** (Phase 2 of Exercise 2) and the **final semester grade** will take place on *January 7, 2026*, according to the current Academic Calendar approved by the Pedagogical Council.

Lisbon, October 27, 2025