

Teachers:

João Pedro Costa (coord.), Carlos Ferreira, Carlos Macedo, Filipa Serpa, Jorge Mealha, José Nuno Beirão, Luísa Marques, Madalena Cunha Matos, Margarida Louro, Caio Castro, Gil Abreu, Pedro Bento

EXERCISE III

AGGREGATION [in context]

1. Introduction

Once completed the design of an elementary cell of accommodation (the prototype), the development of the exploration of its repetition and aggregation in a defined context follows, through the definition of a proposal capable of sustaining a program of collective housing and its complementary spaces, transforming the residual place where it will be set into a contribution to the urban fabric

2. Site

Portela de Sintra

The intervention site is located in Portela de Sintra, in a space defined to the west by Doutor Félix Alves Pereira street, to the north and east by Mira Serra street and to the south by the existing kindergarten. Considering the complexity of the context, the area has the potential to relate establish a public and pedestrian relationship with the buildings existing in Mira Serra street and Doutor Félix Alves Pereira street.

Thus, given the latent condition of the plot, new meanings and uses are expected to structure the site and contribute to a new relationship between the built and free spaces in the context of the fabric in which they are inscribed.



3. Brief

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In this urban void, and taking the developed prototype as a unit, the exercise consists of the development of a proposal for a (permanent) complex of (temporary) housing, for students in mobility. The proposal should ensure a minimum of 36 housing units. It must also comprehend areas dedicated to the administration and maintenance of the complex, storage units (5-10 m² per unit), and complementary community spaces of civic dimension, promoters of social inter-action and integration, able to serve both the in-house community and the surrounding community, namely:

- a) At least 150m² of commercial units,;
- b) one multipurpose room, for social interaction and meetings, with 200 m², including a storeroom, toilet and a outdoor space of 100m² (minimum);
- c) laundry spaces, considering 1 laundry machine for each 12 inhabitants (6 prototypes);
- d) administration and maintenance spaces – 50 m²;
- e) storage units, 5-10 m², for each prototype.

The implementation of this complex must also meet the following requirements:

- a) promote a public pedestrian crossing connection between the Mira Sintra street and Doutor Félix Alves Pereira street;
- b) ensure privacy of views over confining buildings and plots in the intervention area;
- c) define an outdoor meeting and gathering collective space;
- d) maintain the number of existing parking spaces within the limits of the parcel;
- e) consider the dimensional elevation of the bordering streets.

Note: Other spaces or uses besides the ones defined in the brief are not allowed. Basement spaces are also not allowed.

4. Objectives

This exercise has different objectives and for which compliance must be demonstrated. Thus, students should:

- Recognize and use different ways of repetition and aggregation as structuring systems that confer unity, extension and diversity;

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- Define the relationships between proposed and pre-existing buildings, between proposal and surroundings, both at the built and at the void levels;
- Propose a qualified characterization of intermediate places between the city, the building and the house;
- Articulate and dimension accesses and collective circulations as effective functional structures, and as qualified spatial structures of transition (indoor-outdoor, public-private, individual-collective, domestic-urban);
- Dimension and qualify additional complementary spaces as civic community places, promoters of social inter-action and integration;
- Ensure appropriate living conditions (lighting, ventilation), privacy and accessibility to the prototypes and the adjoining buildings (if applicable);
- Design the structure both as physical and as conceptual support;
- Work with infrastructural rules and logic in the aggregation / repetition of the units;
- Handle and organize the various constituent elements of the proposal in an expressive form, allowing the understanding of the whole as "language";
- Achieve a qualified synthesis that transcends the individual solving of the challenges of the project.

5. Evaluation

In evaluating the response to the expressed objectives, the following items will be considered:

- Design process (extension, diversity, quality and criteria in the hypotheses put, checks, alternatives and project choices);
- Instrumental mastery (design methods and tools; simulation / representation tools);
- Conceptual mastery (understanding, exploration, synthesis of themes and interests of the proposal).

6. Items to be submitted

The completion of the exercise must result in the timely delivery of the following minimum elements:

6.1. Final Drawings

- Site Plan longitudinal section through the axis of the streets and cross section through the centre of the lot (scale 1: 500);;

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- Plans of the proposal of all levels (including basement - if it exists -, ground floor, typical floor(s) and roof plan (scale 1: 200);
- Sections - minimum two - (scale 1: 200), including one through the vertical circulation accesses;
- Elevations (through the axis of the streets) (scale 1: 200), representing the immediately adjacent buildings and the complete volumetric front of the block;
- Plan (or plans, when there are two levels) (scale 1:50) of two prototypes in horizontal aggregation, including the representation of the distribution space (gallery, staircase, or other);
- Section and elevation (scale 1:50) of two prototypes in vertical aggregation, including the representation of the circulation system, the contact with the ground and contact with the sky.

6.2. 3D Model

- At the scale 1: 500 with the representation of the surroundings and 1:100 part of the building.

7. Calendar

- Beginning 02nd of December 2020
- Midpoint 16th of December 2020
- Last class 13th de January 2021
- Final delivery 15th January until 23:59 in FA cloud

Lisbon, September 28th, 2020