

## Rehab Convents in Lisbon. Built heritage, adaptive reuse and urban form transformation.

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### Keywords

Adaptive Reuse, Urban Morphology, Built Heritage, Convent, Housing

### Partner Institutions

Grupo de Investigación HABITAR, del departamento de proyectos arquitectónicos (DPA) de la Universitat Politècnica de Catalunya (UPC)

### Expected Future Partner Institutions

Institute for Housing and Urban Rehabilitation (IHURU); City Hall of Lisbon

## OBJECTIVES

The study aims to build an inventory of the built heritage reuse, at this stage aimed at analysing and systematizing the different processes of transforming the old convents into housing typologies; to, from a theoretical point of view, propose a new way of social housing.

Another goal is the opportunity to understand the ability of convents to have indoor/outdoor relationships, making, for example, the cloisters, traditionally private, into spaces for public enjoyment. These cloister-squares can be spaces of transition, integrated in paths that connect them to the urban surrounding context.

It also aspires to build a set of reflections based on urban morphology to support architectural and planning project practice, positioning itself between the recognition of the existing space and the drawing of a new shape. These reflections are aimed at architectural and urban designers for concepts consolidation, and in the academic field, for architecture, rehabilitation and urbanism teachings

## ABSTRACT + IMAGES

The present proposal is a morphological study of the built heritage, considering in this embryonic phase the conventual typologies in Lisbon, vacant or unused, with the aim of understanding its (re)adaptive capacity to new ways of housing. The idea is to highlight the opportunity to reuse convents, in an inclusive and social way, for the construction of single-family homes with social needs, for example: homeless, refugees, loneliness, in the extreme people with infectious diseases that impose a need for isolation, etc.

This idea of built heritage recycle and social inclusion, is integrated in the topics of the "tactical urbanism" concept. This urban solution intends to transform these structures in a more inclusive action by creating relations with the public urban sphere. The idea is to enhance the adaptation of the circulation and living spaces of the convents, traditionally private, to the logic of public space: the cloister as an articulated square with routes that connect it with the city. The care of social houses, wholeness and integration in local and public life, are an opportunity to permanently rethink our built heritage adaptive reuse in the 21st century.

This study is an exploratory entry for a future research project that aims to build the "Atlas of Reuse of the Built Heritage in Portugal". It's important to point out, that the proposed study is part of a continuous and individual study addressing the issue of the morphological evolution of the urban fabric in particular its relationship with the singular buildings. Sedimented on a doctoral thesis with the theme "The Invention of the Urban Heritage", the general idea is to understand how the built heritage is transformed in a long time supported by relevant morphological, cultural and historical examples in Europe and in Asia.

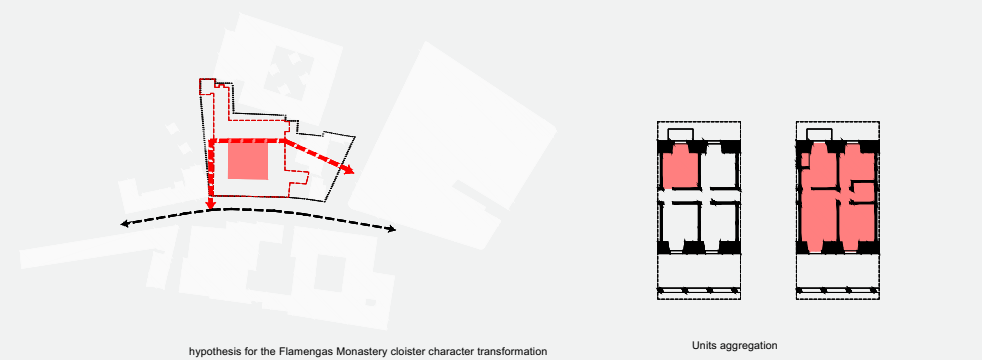
This is an important moment for actions like this theme in Lisbon. Some hospitals, installed in old convents buildings in the city centre, for example, are being redesigned to receive new uses. In this sense, in opposition to the proliferation of hotels or "companies' nests", this study proposes their reuse to housing typology, to become "nests of [social] houses". The idea of behind the new ways of housing is an intention to study the unit house, considering the optimization of the habitable space, for example, considering the opportunity to redraw it influenced by a post pandemic notion. Forced by the Coronavirus the adaptive reuse, urban centres, houses and heritage buildings have to become more community, integration hygiene areas in spaces of interior/exterior transitions, natural ventilation efficiency, etc. So, the idea is to understand different processes of adaptation of housing

typologies to wholeness solutions, supported by examples of traditional architecture in Portugal and in Japan, to propose them as present solutions. See, for example, the importance of the Japanese house main entrance as a "purification" space – doma (土間) or genkan (玄関) – it is a process that comes from the traditional architecture, an aspect that the pandemic forced the West to think about.

This relationship between traditional space and the continuity of time, supports the need to affirm urban morphology as a fundamental instrument in the analysis and interpretation of the building through time. For Rafael Moneo, the life of the buildings affirms them as ongoing works, transformed over and over again as cultural and material expression and not momentary projects images or theoretical discourse. These changes may contain diverse natures, formal characteristics that are versatile, ephemeral, resilient and sustainable. So, has the built heritage the capacity to receive specific programs such as new homes? In the process of adaptive reuse, can urban morphology be useful? What are the persistent conditions in the conventual typologies that allow their continuous readaptation? As a hypothesis, it is attested that it is possible to reuse and adapt the convents to housing typologies, promoting the conservation of the memory of the past as is social integration. It is said, that it is not a process of returning to any past condition, but the defending the continuity of the building with a new-old use.

Methodologically, the study seeks to establish a reconstructive and morphological analysis of the built heritage, building and urban form, documenting its successive composition stages until our days, especially its resilience to the introduction of different architectures, programs and spatial organization. The result is the construction of a database possible to be used as a support in the adaptive reuse of convents today. In a first approach, the former Flamengas Monastery and the Bernardas Convent, both in Lisbon, will be studied. They are example of convents that were transformed or reused in housing typologies.

In this context, a systemic inventory of the heritage built on adaptive reuse process in a city scale makes perfect sense. The problem of resource efficiency imposes a sustainable integration in the urban and cultural context, and its inventory results in a useful tool first for understanding the reuse process as well as for designing new housing programs.



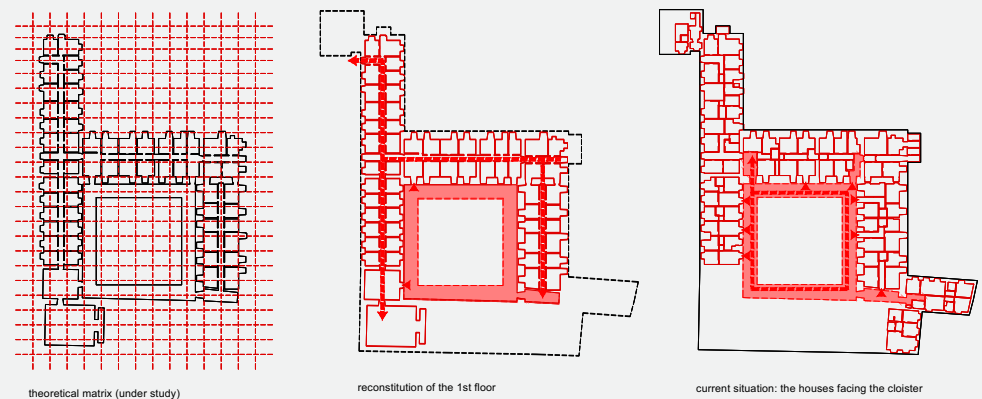
hypothesis for the Flamengas Monastery cloister character transformation

Units aggregation

## BIBLIOGRAPHIC REFERENCES

Knowing the origin of the urban shape and the composition phases of the city is essential to understand the urban morphology as a result of the continuous adaptation of different buildings. Recognizing the contribution of many other authors to the theme, the study by Gianfranco Caniggia in the "Lettura Dell'Edilizia di Base" (1979) and, at the French school, the work of Alain Borie, Pierre Micheloni and Pierre Pinon, in "Forme et Deformation des objets architecturaux et urbains" (1988) should be highlighted. In Portugal, the relationship between the city, heritage and the different ideologies involved in the 20th century was studied by Miguel Tomé (2002) in "Heritage and restoration in Portugal (1920-1995)".

Finally, from the Catalan school, the book "Atlas do Reuso" developed by the research group HABITAR, coordinated by Xaveir Monteys (2018), is an instrument for reading the constructed fabric that systematizes the typological and formal characteristics of the buildings in Barcelona for to know their ability to adapt to new uses. And, it is in the idea that changes in contemporary society transform housing typologies into their "traditional" composition, which Anna Puigjaner (2011-ongoing) explores the concept of Kitchenless City.



theoretical matrix (under study)

reconstitution of the 1st floor

current situation: the houses facing the cloister

## SCIENTIFIC RELEVANCE FOR THE DISCIPLINE

The study is scientifically relevant because it addresses the theme of the built heritage reuse, particularly addressing the adaptation of conventional typologies into housing typologies. Many of the existing works, academic, architectural or urban planning areas, even if thinking residential programs, are often focused on tourism, nursing homes or student residences typologies, never considering this type of social housing.

In this context, the proposal is divergent from others, because through a systematic and comparative analysis of existing cases, national and international, it creates a tool with transformation processes that, from a theoretical point of view, can be transposed to new ideas to reuse the built heritage as houses, always integrated into their urban context. In order to make the study operational, it highlights a set of characteristics of the typological genesis of the convents, aiming, among others, to support the regulation, planning and enhancement of this new use change, although, always in the sense of safeguarding the built heritage..

## EXPECTED ECONOMIC AND SOCIAL IMPACT

With the growing lack of housing and the emerging need to apply measures of sustainability and resource management, the reuse of our built heritage is a viable solution. In other words, it is essential to have the capacity for a balanced management in the sense of the built heritage continuity. However, this sense of permanence is not considered as a strict preservation method, but in its natural and resilient capacity to be adapted to special social realities.

This study recognizes strategies such as Tactical Urbanism, Circular Economy or the 2030 Agenda concepts, by defending methods such as social inclusion, sustainability and reuse of resources. The built heritage is (re)appropriated in its entirety, as habitable spaces, promoting development and its economic profitability and its continued use. This sense of reuse and optimization of the built heritage, added to public housing investment programs, from a theoretical point of view, will allow for an increase in the number of available houses, social inclusion with the integration of new inhabitants in the community and, consequently, the local development.

## RESEARCH PLAN AND TASKS

The research plan was executed with the objective of allowing a good development of the proposed activities, organized in three groups of tasks: 1) methodology definition, 2) inventory construction and 3) research dissemination.

### Task 1 | methodology definition

With this task it is intended to define the project methodology, necessary to clarify the goals and to define the selection and representation criteria of the case studies. It is anticipated that this task can be developed over a period of three months and will be implemented by all team members.

### Methodology and conceptual definition

The methodology and conceptual definition will be the result of the multidisciplinary of the working group, focusing on the discussion of topics such as housing, heritage and urbanism, in particular the integration of urban morphology as an interpretation tool of the city over time.

Of particular importance will be the inclusion of the external partner in the discussion, allowing to establish criteria by comparison with the knowledge acquired by the research group HABITAR in the urban context of Barcelona.

It is also planned to establish contact with public entities considered relevant to the definition and implementation of the work, namely the Institute for Housing and Urban Rehabilitation (IHUR) and the City Hall of Lisbon. The inclusion of these "expected partners" will allow, in a first phase of discussion, to delimit a universe of study, to assess the occupations and ongoing proposals and, above all, to identify the convents that are not yet proposed for future use.

On the other hand, the possibility of articulating the proposed study with the Research Project "Building Typology - Morphological Inventory of the Portuguese City", financed by the Portuguese Foundation for Science and Technology (ref. PTDC / ART-DAQ / 30110/2017) and developed at the Lisbon School of Architecture of the University of Lisbon, by the research group FormaurbisLab, it creates the opportunity to access themes and a vast documentary base aimed at the entire national territory. Recognizing the embryonic context of this project, if there are no possible case studies in Lisbon, other examples may be added that are considered relevant, in a broad context in the territory, continental and islands, to clarify the theme and the methodology.

### Identification and selection of case studies

Once the methodological process is understood, a list of case studies will be built based on reference bibliography, online digital databases - Architectural Heritage Information System (SIPA) -, previous or ongoing studies and, in particular, information provided by the partners.

For the case studies selection criteria will be taken into account its geographical and built period context, the character of the transformations carried out, its impact on the urban, cultural and, of course, social context. However, it is essential that the selected cases are currently vacant, unused and, above all, without a proposal for their future adaptation. The selection it will be taken into account, as well, the methods and practices in the international heritage intervention context, in Europe and Asia, with the aim of contextualizing the theme in the distinct disciplinary and cultural literature.

In this activity, the characterization of two pilot case studies is going to be carried out: the former Flamengas Monastery and the Bernardas Convent, both in Lisbon. Their comparative characterization will allow the clarification of the criteria assessment and representation processes, standardization of scales and graphic elements.

### Workshop

During this task development, some team meetings will be held, in a workshop format, to consolidate the proposed methodology, as well as to determine the case studies to be worked on. One of the events may be open to the students and teachers participation to introduce other areas of knowledge.

### Task 2 | inventory construction

During this period, the works are organized according to two activities, one for researching and the other for characterizing the identified cases. The research will be based on a specific bibliography as well as in the compilation of relevant graphic information from public archives and other private entities. Given that it is a continuous work, there may be moments for the initially established methodologies review. The task will have a duration of 6 months, with the inclusion of a scholarship holder for its execution.

### Field Research

The field research will be planned based on a previous selection of cases and carried out through several missions. The missions are intended to validate each case by direct observation, to do a photographic survey and to search for graphical information - plans,

sections and elevations - as a basis for the drawings analysis documenting the buildings composition different phases as well the surrounding context. In cases where information is completely or partially unavailable or inexistent, a metric survey of the selected floor plans and section of the building must also be done.

### Individual and comparative characterization

Each case study will be represented according to the previously stabilized methodology, using the same criteria and drawings, in digital format, for documenting, comparison and systematization of each phase and transformation process. The drawings should be in two colors - black and red - to differentiate the fragments that persists and what is added, juxtaposed and, often, overlap.

This representation process should be organized as follows: i) framing the case study in the urban context, relating the building to the city and the territory. The representation will be in the scale 1: 5000; ii) the integration of the building in the morphological unit to analyze its relationship with the built fabric. The representation will be on the scale 1: 2000; iii) in the typological characterization, it is intended to representation of the ground floor and the first housing floor, properly articulated with a section and the main elevation. The representation will be performed at a scale of 1: 200; iv) the construction of comparative tables for a transversal reading of the formal and typological diversity under study. The representation will be done at the scale of 1: 200; v) at last, the representation of interpretative diagrams and axonometries, duly supported with texts and images.

### Exhibition

To conclude this second group of tasks, an exhibition will be held to present intermediate results and to reviews the case, criteria and representation methodology. The exhibition will be supported by the graphic elements drawn along the task, considering the building and its relationship with the urban context and the different composition phases identified.

### Task 3 | Research dissemination

In this last task, it is intended to build a synthesis of the work, with the development of a scientific paper that includes a selection of drawings, diagrams and interpretative texts. At the same time, it is considered necessary for the team to participate in at least one scientific meeting in order to disseminate and discuss the results with the scientific community.

## EXPECTED SCIENTIFIC RESULTS

It is hoped that the scientific results will highlight different possible solutions for the adaptive reuse of convents typologies to housing, considering its typological, morphological and functional nature and its importance regarding the surrounding urban nucleus. At the same time, the proposal is innovative because it rethinks the house, considering a new social and wholeness context. The proposed evolution drawings allow the construction of the interpretative synthesis, composed of comparative tables of studied examples, allowing the depiction of similarities and variants, constituting a tool to read the morphological diversity on building adaptive reuse. The final result is a didactic and pedagogical instrument for the study and teaching of architecture and urbanism transformation; and to create an instrument capable of reflecting in today rehabilitation practice, assuming itself as a typological basis for its own conception. This tool is an inventory of actions, composed of evolutionary drawings and documented with images and texts that identify and differentiate the different phases of the convent.

## BUDGET: € 7.500,00

The expenses to be carried out in the development of the research project aims at the perfect execution of each task, considering the human resources, expenses with missions and dissemination. Thus, the following expenses are expected: i) Human resources assigned to the project: As part of the activities described in task 2, a scholarship holder will be included for a period of 6 months, with full-time dedication. A total expenditure of € 5700 (76%) is expected. ii) Mission expenses: The missions are external activities carry out to observed, research and collect data. A maximum of €800 (11%) is expected for its realization. iii) Dissemination of results: For the dissemination or results, a workshop and an exhibition at FAUL must be consider, integrated in the development of task 1 and in the conclusion of task 2. In the workshop, it is proposed the printing of graphic material related to the pilot case studies. And, in its turn, the exhibition will mostly consist of drawings of the characterized cases printed a rigid support, dimension to be yet defined. For the realization of these two events, € 1000 (13%) are allocated.