

FRANCISCO CONCEIÇÃO SILVA, 32 single-family houses.

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Partner Institutions

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Expected Future Partner Institutions

Sistema de Informação para o Património Arquitetónico (SIPA)

OBJECTIVES

This Project is organized by short- and long-term objectives. In the short term, the objectives of this research are:

1. To redesign the 32 houses based on existing documents with the maximum possible fidelity, in order to standardize the representations and allow for a direct comparison between projects, considering their scale and materiality;
2. To develop, based on existing literature, an evaluation framework for the relevant typological and morphological aspects to be analyzed;
3. To assess the 32 residences using this framework and create a comprehensive comparative chart, in order to support future more targeted investigations.

In the long term, the objectives of this research are:

4. To lay the cornerstone for future in depth investigations on the work of FCS mainly - but not only- on his residential work;
5. To help disseminate among the scientific community and architects, as well as the interested public the work of FCS contributing to complete the historiographic picture of Portuguese architectural production in the 20th century.

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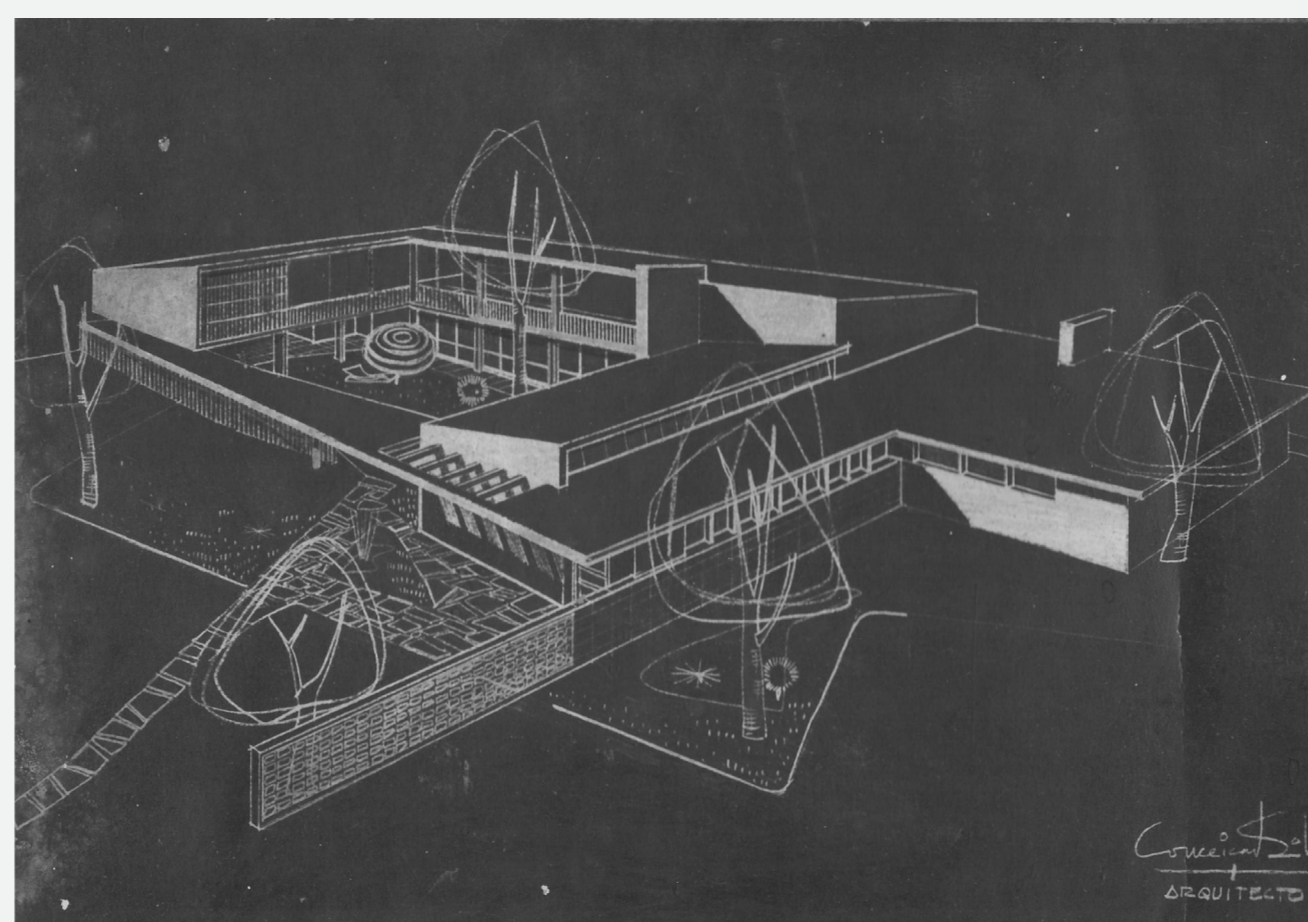
ABSTRACT + IMAGES

Francisco da Conceição Silva (FCS) was undoubtedly one of the most important Portuguese architects of the 20th century. His unique path decisively placed him within the context of Portuguese modern architecture, although his actions often led him to transcend the strict boundaries of architectural practice. Pioneering, he sought interdisciplinary participation and maximum design detailing to achieve, in each of his works, compliance with client's requirements, maximum efficiency throughout the process, and, above all, a rigorous allegiance to spatial and material quality. Conceição Silva always fought for the Portuguese architecture updating, for the profession dignity, for the renewal of architectural education, and the promotion of the arts, all in the pursuit of a comprehensive body of work; reflecting the strong influence of Le Corbusier, Alvar Aalto, and especially Frank Lloyd Wright.

After a brief period at Adelino Nunes' studio, then at Federação das Caixas de Previdência (Social Security Funds Portuguese alliance), and a partnership with architect José Bastos, Conceição Silva establishes his own studio in 1953. During this first decade, his projects demonstrate a deepening of spatial and constructive issues, as well as a constant attitude of experimentation and integration of new conceptual interpretations. It is also during this time, with FCS as the director of Sindicato Nacional dos Arquitetos (Architects' National Union), that the Inquérito à Arquitetura Regional Portuguesa - a very influential and comprehensive study on Portuguese vernacular architecture - starts, allowing him and a whole generation to develop a modern architecture based on the principles exposed by this survey.

The houses designed by Conceição Silva in the early 1950s, such as the Casa José Ribeiro da Cunha (1952-55), align themselves with a current of Brazilian modern influence, probably due to the impact of the exhibition "Brazil Builds" and its catalog, held at the MOMA in 1943.

Its impact was felt in Portugal, where two exhibitions related to the original were held. However, by the end of the decade, FCS adopts a methodology that approaches each project as a unique instance, aligning himself with a movement guided by a new organicism, influenced by Scandinavian neo-empiricism, the works of Wright and Aalto, and that emphasize on social and human dimensions of built environment. It is during this time that FCS designs a set of three weekend houses in Praia do Guincho (for himself, António de Melo Garcês, and Joaquim Ribeiro da Cunha), built between 1959 and 1965. This collection settles his departure from the 1920s' Corbusian aesthetics, embracing the integration of vernacular architecture and Mediterranean culture in the spatiality and informal way of living, a feature of the modern movement. These single-family homes combine an open and fluid spatial structure, with the intimacy recovered through the arrangement around sheltered courtyards, typical of Mediterranean dwellings. It also restores vernacular construction systems, the density of materials with thick masonry walls and irregular stone walls finishing the terraces. In 1975, FCS arrives in Brazil, bringing along all the features that subsidized his recognition in Portugal—rigor, discipline, persistence, and a sense of opportunity—as well as the accumulated experience from many years of activity. His designs from this period—Casa Steinberg (1976), Casa Coslowski (1976), Casa at Barra da Tijuca (1976), and Casa Salik (1981)—represent an experimental attitude, continuously updated with revisited themes of modernity, adapted to the local context, materials, and construction processes. Thus, they follow a continuous line started with the houses he built in Portugal in the 1960s, namely Casa Amália Rodrigues (1967-68) and Casa Valadas Fernandes (1968-71), which reintroduce themes of Wrightian residential organization. Having his own language, this architect redesigned the single-family home model in each project undertaken by him, deepening his previous research, evolving step by step in a continuous line that unifies and gives meaning to his overall body of work. With a portfolio spanning two countries, a typological-morphological analysis of the 32 single-family houses designed by Francisco Conceição Silva will allow us to understand their models, typologies, and the underlying language, enabling the definition and characterization of these projects, considering the constraints and the way the elements relate to and influence each other, as a unique exercise of each time and place.



SCIENTIFIC RELEVANCE FOR THE DISCIPLINE

This embryo research project on Francisco da Conceição Silva (FCS), holds significant scientific relevance for the discipline as it aims to redesign and analyze the 32 houses designed by FCS, contributing to the understanding of his design principles, spatial arrangements, and material choices. It also aims to develop an evaluation framework for assessing the typological and morphological aspects of the single-family homes, offering a valuable tool for future research, not only regarding housing but to an extensive array of programs.

Acknowledging the historical significance of FCS's work, this project helps to shed light on Portuguese architectural production in the 20th century. The research also emphasizes knowledge dissemination, aiming to share not only FCS's work, but to incite a broader debate on design principles within the framework of Portuguese architecture with the scientific community, architects, and the interested public.

EXPECTED ECONOMIC AND SOCIAL IMPACT

Two aspects are expected as economic and social outcomes of this project: one looking at the past and another towards the future.

Regarding the past, we know that the results of this project will (re)value a part of the imagined and built heritage that in general is overlooked by the historiography of Architecture, by heritage policies, by the economic fabric that, with few exceptions, systematically invest in the rapid obsolescence of the built solutions and in the uncritical renovation, without paying attention to the cultural value of the pre-existences or to the importance of preserving collective memories. Such despise lead to a cycle of unnecessary demolition and reconstruction, resulting in an economic waste of scarce resources.

As for the future, it is expected that the results can influence future generations of architects to pay attention to the values present in FCS's work - of which the current architectural production is greatly lacking - when conceiving their own projects.

RESEARCH PLAN AND TASKS

With a maximum project duration of six months, the plan aims to achieve realistic results within this timeframe, involving tasks such as preparing digitized resources, developing a graphical standard for drawings, creating an evaluation framework, redrawing houses, analyzing the redrawn elements, and organizing dissemination efforts. The project seeks to standardize representations, apply indicators to analyze typological and morphological aspects, and ultimately provide a comprehensive understanding of FCS's work.

While the tasks are outlined sequentially, we expect some of them to overlap. However, we believe that this overlapping won't hinder our progress in reaching intermediate milestones and ultimately obtaining the desired final outcomes.

This project is divided in 6 tasks:

TASK 1 – PREPARE THE DIGITIZED RESOURCES

Task start date: January 2, 2024 Task duration (in weeks): 1

Task finish date: January 12, 2024

The main objective of this task is to prepare the digitized resources so it can be imported to proper software to be redrawn. It will be developed taking in consideration one out of 32 houses designed by FCS, in order to create a procedure to be applied on the remaining examples. The methodological approach of this task includes:

- choose the relevant drawings (plans, sections and elevations);
- crop the image files, if necessary;
- import into the CAD software;
- align and scale to 1:1 the elements imported.

TASK 2 – DEVELOP A GRAPHICAL STANDARD FOR THE DRAWINGS

Task start date: January 15, 2024 Task duration (in weeks): 1

Task finish date: January 19, 2024

The main objective of this task is to develop a graphical standard for the drawings, using one of the residences as starting point. This initial template should accommodate all the information needed to realize the intended analysis during the project. It should be constantly re-evaluated, looking for improvements that can be easily incorporated on the graphic elements already produced.

The methodological approach of this task includes:- perform print tests from samples of drawings to assure the readability and accuracy of graphics. The methodological approach of this task includes:

- define a color and conceptual code of representation, based on literature, which can be further adapted to the multiple drawing scales considered;

- perform print tests and set the initial standards for the next works.

TASK 3 – DEVELOP AN EVALUATION FRAMEWORK

Task start date: January 22, 2024 Task duration (in weeks): 2

Task finish date: February 2, 2024

The main objective of this task is to develop an evaluation framework that allow the further analysis of the most relevant typological and morphological elements of the houses. The evaluation framework is a relevant tool to dissect the form, to uncover the relationship between the different elements among themselves and with the specific conditions of each location. This procedure reveals some underlying aspects of the organization, reaching into discovering the content of the projects and their elaboration.

The methodological approach of this task includes:

- define a set of indicators - internal and external to the object - based on literature to be verified on each design, such as urban context and morphology, topographical relationships, alignments, proportion;
- to create the definitions for the application of the indicators: determine, based on relevance and pertinence, which elements can be used in different analyses and how they can be used;
- outline and test the process of indicators verification, in order to assess the readability of the obtained results and their usefulness for future analyses.

TASK 4 – REDRAWING THE HOUSES

Task start date: February 5, 2024 Task duration (in weeks): 12

Task finish date: April 26, 2024

The main objective of this task is to redraw the remaining 31 single-family homes designed by FCS accordingly to the a graphical standard defined on the Task 2, Where a house was used to calibrate the standard. It must be done in a way that ensures accurate reading of the elements, without omissions or distortions that may impair the standardization of the architectural expression of FCS, a necessary requirement for future analyses. The methodological approach of this task includes:

- perform again the Task 1 for each residence: import, align, scale the images and import them to the CAD software;
- redraw the elements defined accordingly to the graphical standard set on Task 2;
- perform print tests from samples of drawings to assure the readability and accuracy of graphics.

TASK 5 – ANALYSIS OF THE REDRAWN ELEMENTS

Task start date: April 29, 2024 Task duration (in weeks): 4

Task finish date: May 24, 2024

The main objective of this task is to proceed on the analysis of the houses, based on the evaluation framework developed on Task 3. It is based on indicators capable of highlighting FCS' approach regarding different aspects of the built environment. This will be accomplished by summarizing all the elements developed throughout the project by plotting them in a synthetic matrix, which allows a direct comparison between the houses redrawn at the same scale regarding the indicators chosen. As a result, at the end of this task, in addition to the redesign of the houses, we will also have a comprehensive recognition of the highlighted aspects, which will allow us to verify the existence of a continuity and the evolution of FCS' work.

The methodological approach of this task includes:

- apply the indicators raised on the evaluation framework developed on the Task 3, in comparison with the remaining standardized drawings;
- create a graphic report of the results, highlighting the findings.

TASK 6 – ORGANIZING THE DISSEMINATION

Task start date: May 27, 2024 Task duration (in weeks): 2

Task finish date: June 28, 2024

The main objective of this task is to organize and prepare the exhibition on the research done. As the time for the project development is short compared to amount of work. The dissemination actions should take place shortly after the project's completion. Nonetheless, it is in this task that preparatory actions should be taken to ensure the success of disseminating the embryo project. The methodological approach of this task includes:

- edit and print the book that contains the project results;
- print the panels with the project results;
- choose the most representative houses and 3D print components for model assembling.

According to the information revealed throughout this research process, it is accepted that some of the following research phases may also be considered within the scope of this embryo project: identification of information gaps; research of complementary documentation (licensing files, photographic files, company archives); attraction of institutional partners and preparation of applications for funding research projects at national and European level.

EXPECTED SCIENTIFIC RESULTS

In order to contributing to the understanding of design principles, spatial arrangements, and material choices of FCS practice, the redesign and analysis of the 32 houses have as scientific results expected to be produced by this research:

1. Creation of a methodological tool for the analysis of Conceição Silva housing design, flexible enough to be adapted in other programs;
2. Creation of a database encompassing all Conceição Silva work, but referential to the housing design as experimental support for his practice;
3. Organization of an exhibition of the case studies, including drawings, diagrams and models. As well as Participation in lectures, constituting an opportunity to present the results of the research and to discuss the FCS architectonic production;
4. Organization of a book about FCS's selected houses, covering the different scales and aspects of his office's Architecture.

BUDGET: € 7493,12

The expenses of this Embryo Project will focus on the dissemination of its results, both in the publication of a book and the preparation of an exhibition. So, the budget was structured in:

Graphic Elements and prototyping - **1000 euros** for printing panels for the exhibition. **1000 euros** will be allocated to make mock-ups of the projects. To organize the documentation of these projects, we will need 30 reams of white A3 paper (11,99 each – total **395,67 euros**) and 20 sets of 25 acid free archive box's to safely conserve the spoils (63,9 euros each – total **702,9 euros**).

Equipment - An amount of **3799 euros** is also requested for the acquisition of one Mac Book Pro 14", M2 Max da Apple com CPU 12-core, GPU 30-core e Neural Engine 16-core, with 32 GB of memory and 1TB off SSD. Finally, 3 HDD Extern WESTERN DIGITAL Elements SE Portable disk (2Tb – USB 3.0) that costs 79,99 euros each, total **239,97 euros**. Finally, 2 Disco HDD Extern WESTERN DIGITAL (6 TB - USB 3.0) , 162,79 euros each (total **355,58 euros**).