

## **ANALYSIS OF A RESILIENT HOUSING PROJECT: QUINTA DA MALAGUEIRA (1977) BY ÁLVARO SIZA. A LESSON TO RETAIN.**

**Ana Luísa Rodrigues, Prof <sup>1</sup>**

School of Architecture of University of Minho (EAUM), Portugal  
e-mail: luisar@arquitectura.uminho.pt

**Keywords:** Values; Criticism; Housing; Architectural Practice; Resilient Building

**Abstract** *Back in 1974-75, Portugal had to face a huge housing problem: half a million of Portuguese people had to be reintegrated in the Portuguese society. The decolonization imposed by the end of the dictatorship (called Estado Novo), which stopped controlling the former Portuguese African colonies (Angola, Mozambique, etc.), was the reason behind the return of 500 thousand people to such a small country in less than a year. In fact, they did it honourably. Besides many other solutions, resultant of the generosity of the native people, some housing cost-controlled programs were settle by the Portuguese Government and took place with pragmatism but without thoughtfulness, from the architectural point of view. But some intervention were remarkable. The Quinta da Malagueira (in Évora, 1977) designed by the architect Álvaro Siza was one of those examples.*

*Sustained in a mere economic support (public, private and community help), facing a coherent reading of the place and addressing solutions related to a methodological analysis of suitable and evolving typologies, streaked to a close relationship with the vernacular materials and techniques, this Social Housing Project became an amazing example of success, right from the beginning. Forty years later it is still a success from social, architectural and urbanistic points of view. So what can we learn with the experience of Quinta da Malagueira? What methodological tools did the architect use that should be retained for the sake of consistent and sustainable Architecture?*

*Concerning namely the inevitable housing crisis resulting from post-conflict scenarios of nowadays, this paper aims to analyse the Quinta da Malagueira Project in order to make visible the key of success of this resilient Housing Project, which has been able to deal with the pressure of the adverse circumstances through times, finding architectural, structural and constructive solutions to face it all. To sum up, this paper aims to scrutinize the methodological process in which this project was achieved, to retain the main lessons, seeking the dwelling for the dignity of mankind.*

### **1. INTRODUCTION**

The Quinta da Malagueira Complex Housing (QMCH) was designed by the architect Álvaro Siza in 1974-75, seeking to solve a huge housing problem that Portugal was facing, namely concerning the return of 500 thousand people to such a small country, in less than a year. Back then, with the end of the dictatorship (called Estado Novo), half a million people from

the former Portuguese African colonies (Angola, Mozambique, etc.) had to be reintegrated in the Portuguese society, due to the decolonization imposed by the circumstances. This situation worsened the struggle against the housing condition already caused by the exodus of the country people that ran away from the country life, craving a better life in the cities. And the city of Évora, in the South of Portugal, was witnessing an absolutely appalling situation.

In this context, with good political intentions but a reduced economic condition, they managed a solution to solve those particular circumstances, which proved to be a success. Indeed, forty years later it still is, and *“perhaps it’s the last great social housing project, i.e., the last great architectural contribution to the city in which architecture plays a fundamental role.”*[1]

So, in this paper we wonder: What methodological tools did the architect use, which should be retained for the sake of consistent, sustainable and resilient Architecture?



Figure 1. Arrival in Lisbon of the returnees of the former colonies of Africa (July.1975).  
Alfredo Cunha Arquivo®,

## 2. HISTORICAL BACKGROUND: THE CONTEXT

With the intention of organizing the urban periphery of Évora, a former Roman town which became the capital of the southern Alentejo Region, the City Council begun by expropriating about 27 hectares of the original Quinta da Malagueira – a large farm located 1km far from the “city-walls” – which had been invaded by illegal and precarious housing.

However, its political character was outlined only when the Architect Nuno Portas (then Secretary of State for Housing and Urban Planning) chose architect Álvaro Siza to work with them, taking into account his experience in the SAAL Housing Complex (in the city of Porto). In other words, above all, it was a political challenge because, in this deliberate choice, certain “left-wing” ideologies were visible, aiming a fruitful dialogue with the population, giving rise to an participatory and experimental process, validating an equitable distribution of dwellings that aimed the real needs of its inhabitants. It actually happened, indeed. A mutual affinity of worries and goals was clear, right from the beginning, with all interveners working with the same intentions.



Figure 2. Siza photographed on a site visit in 1977.  
In <https://www.architectural-review.com>

The result of the collective funds predicted a specific distribution of the dwellings: 407 for Cooperatives; 100 for Residents’ Association; 300 for Public Housing Development Fund; 93 for Development Contracts; and 300 for private initiative. Financing was arranged so that the houses could be owned after 25 years. Resale prices were also controlled to avoid speculation. Some other rules was imposed, like limiting modifications to the original building, contributing to a sense of well-being and increasing its maintenance.

Thus, in 1977, 1200 dwellings started being built on 27 hectares of expropriated agricultural land, outside Évora. But instead of building high towers – as it was a practice in that time – Siza chose to read the territory aiming for continuity, linking all the references he could find with the old charming Évora, controlling the relation to the topography, and taking into account the existing informal settlements. Therefore, the architect draw a high density scheme of row houses of two-level that were spread along a net of streets, establishing different neighbourhoods, respecting the old relation already established between the inhabitants. This was absolutely uncommon, regarding the urgency of the situation, as well as the lack of financial conditions, but, curiously, somehow it assured that QMHC functioned as a genuine expansion of the city, rather than as a mere dormitory of poor people.

### 3. MEANS: THE PROBLEM

First of all, the huge problem they were facing was related to the construction condition. Back then, especially in that underprivileged south of Portugal, there were an enormous lack of construction material and skilled labour. They actually had no means nor money, so the architect was forced to induce responsible acting-principles, leading to an economy of resources and sustainability, doing his best to find creative and efficient urban, architectural and constructive solutions, optimizing and making the whole operation possible.

Hence, concerning the infrastructures, instead of being located underground, Siza draw a kind of gallery, called “*conduta*”, inspired by the Roman aqueduct of the city (*Aqueduto da Água de Prata*), which accumulates all the substructures in a high conduit, gathering a network of distribution pipes (water, electricity, gas, telecommunications, etc.). This unusual solution, was the logical one, according to Siza, as it offers the cheapest means of distributing services around the complex. Furthermore, this “*conduta*” – made of cheap concrete bricks – also works as arcades where some commercial services are located, and imposes a certain functional/rational discipline and continuity to this housing complex, as well as it helped to create its identity.

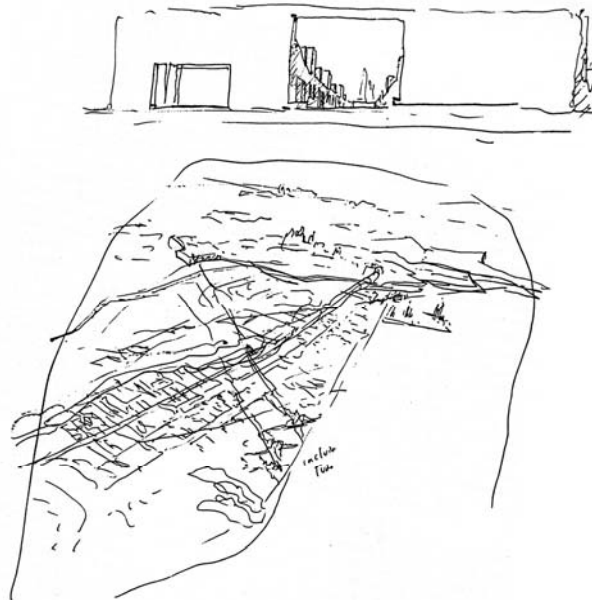


Fig.3 Relation between the aqueduct and the houses.  
In Álvaro Siza, *Imaginar a evidência*, p.119.

Then, the architect decided to design just one evolving and flexible type of a single-family house aligned in a row, grouping them – making the blind rear plan cling to the infrastructures gallery – standing face-to-face with another set of houses (with these same characteristics), conforming each street. And while repeating this same solution, Siza drew the territorial disposition at once, adjusting the project’s conception and its formalization.

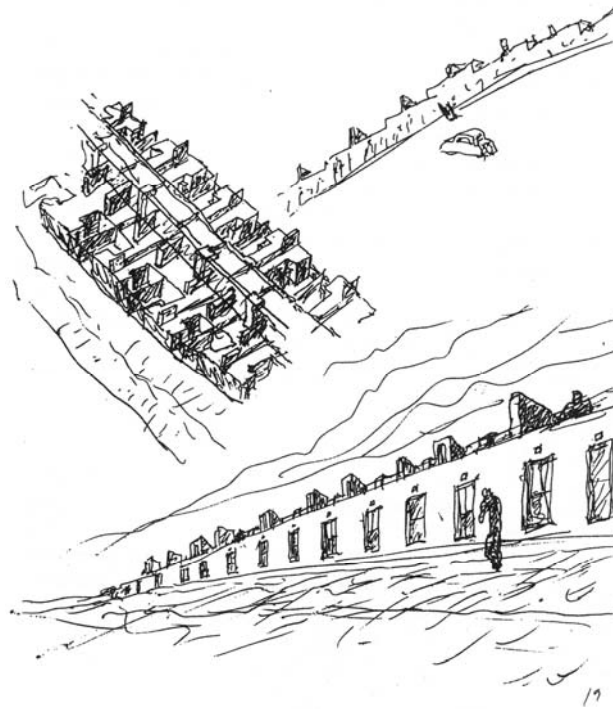


Fig.4. Study for the aggregation of houses.  
In Álvaro Siza, *Imaginar a evidência*, p.102.

However, the choice of a single evolutionary typology, apart from its pragmatic virtues, it became a particularly contentious issue, like Siza recognizes: *«The first problems concerning the choice of a single typology were manifested during a discussion with the inhabitants and then turned into a political issue. It was spread the idea, which had arisen inside the assembly or had come from outside, that building only courtyard-houses in a part of the city was inhuman and unacceptable. This fear of monotony is a challenge to the search for difference that cannot be solved in an aesthetic question, because if it were, the result would appear artificial, caricatured or invented. The discussion was conflicting, as it should be in a participatory process, and yet it never compromised the dialogue. Twenty years later I continue to have the support of the populations and Cooperatives.»* [2] Actually, now – more twenty years later – he still has.

#### 4. SOLUTIONS: THE PROJECT

*«The dwellings I designed correspond to a single typology: the construction moves away from the road, freeing a yard, and then joining along a back wall with another house repeating behind the same design.»* [3] This was the solution designed by Siza. However he drew two

versions employed in the scheme, both built on an 8m x 12m plot: House type A, with the patio facing the street; and House type B, with patio on the backyard, in the rear of the lot.

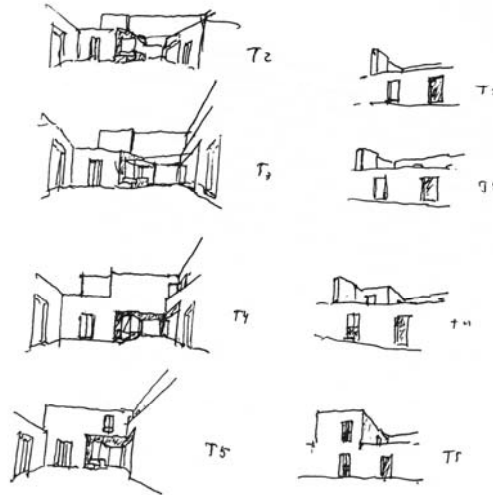


Fig.5 Study of the relationship between housing size and articulation of outer space.  
In Álvaro Siza, *Imaginar a evidência*, p. 123

Framing the concept of minimum-dwelling (*Existenzminimum*) [4], Siza rationalizes the areas, based on a pragmatic functional organization, which segregates areas of social life (day) vs intimacy (night), reducing circulation areas to the absolute minimum, but giving private outdoor space for domestic actions. Thus, the ground-floor, with direct access to the street, is implanted in an "L" shape, where the service areas (kitchen, storage and sanitary installation), a living room and a small room (which can take different appropriations), are arranged in a pragmatic order. On the upper floor are the bedrooms, which vary in the typologies of T2 to T5, according to the familiar needs *per capita*, i.e., having one, two, three or four rooms, being inversely proportional to the use of free outer space/balcony. This way, Siza stabilizes the ground floor, that is common to all houses, and assumes the evolutionary character on the second floor, resulting in different games of full and empty spaces (a solid/void pattern), combined in various ways, counting thirty-three types and subtypes of houses. This way Siza provides a great formal variety given by the presence of courtyards and terraces, avoiding the rigid monotony that was feared by “the politicians” and some sceptics.

*“The last controversy had to do with the terrace roof. And yet one of the reasons for choosing it, certainly not decisive, was the absence of tiles. Even more, in order to build the first 100 houses, it was necessary for the Câmara de Évora [the City Council] to support an existing small factory to produce the cement blocks. This explains the constructive deficiency, since it lacks the indispensable technical knowledge, due to the absence of specialized workers.*

*Therefore, the patio, which certainly depends also on clear historical influences, is explained by the need to create a transitional microclimate between outdoor and indoor climatic conditions that could not be sufficiently protected by the materials used then. Ignoring these factors, one does not understand the meaning of the project. On the other hand, it should be noted that the first 100 dwellings were intended for people coming from the countryside who still retained rural models in the spirit. Thus, the elaboration of the patio-house is something much more complex and articulate than the dichotomy between vernacular model and Modern Movement, references always present, but among many others.” [5]*

With these words, the architect clarifies the conceptual solution (the courtyard-patio-houses) as a result of a sustainable and educated solution, regarding the local architecture traditions, to solve a construction problem caused by the financial constraints. Back then, in that region, the local production response was very slow and dependent on traditions and crafting techniques. For instead, the houses were still built with ceramic bricks cooked by the sun, which elucidates the conditions they had to overcome. There were no tile or brick factories, and not money enough to produce as much as needed right away.

## **5. CONCLUDING REMARKS**

So, how can we learn from the experience of Quinta da Malagueira Complex Housing?

If resilience means the ability to identify and accurately perceive the causes, relationships and implications of problems, conflicts and adversities in the environment; if it means the ability to deal with problems, to overcome obstacles, to resist the pressure of adverse situations, to find strategic solutions to face and overcome adversity, then we have to admit that the QMCH designed by Álvaro Siza is a resilient housing project, if we take into account all the hardships it overcame during these long four decades.

Those white two-story single-family houses with flat roof undoubtedly foster a Modern language, but also finds their roots in traditional Alentejo architecture [6], even more when it is allowed to paint (with strong colours) the edges of the windows and doors, and the wainscot of the outer walls, capturing the ambience of the vernacular Alentejo buildings, easily interrelated to the centre of Évora. Nowadays, this complex mix of modern and local architecture belongs to the city. It is also a part of Évora and it is not only inhabited by the old poor, uneducated people, but also by middle class young couples, living proudly in the same neighbourhood. Somehow, they gained a sense of community, offering some of the appealing features of a broader social relationship which is a remarkable capital gain.

Sustained in a mere economic support (public, private and community help), facing a coherent reading of the place and addressing solutions related to a methodological analysis

of suitable and evolving typologies, streaked to a close relationship with the vernacular materials and techniques, this Social Housing Project became an amazing example of success, right from the beginning. Forty years later it is still a success from social, architectural and urbanistic points of view, that's why it requires our careful attention.

*"Álvaro Siza's buildings have an economy of means, a nimble opportunism and a quiet generosity"*[7] and are full of substantial, non-rhetorical lessons for architectural practice, showing how conventional building form and its relationship to surroundings can say extraordinary and experiential things that are timeless.

Concerning namely the inevitable housing crisis resulting from post-conflict scenarios of nowadays, this paper aims to analyse the Quinta da Malagueira Complex Housing Project (QMCH) in order to make visible the key of success of this resilient housing project, which has been able to deal with the pressure of the adverse circumstances through times, finding architectural, structural and constructive solutions to face it all.

To sum up, this paper aims to scrutinize the methodological process in which this project was achieved, to retain the main lessons, seeking the dwelling for the dignity of mankind.

## REFERENCES

- [1] Aureli, Pier Vittorio (DOGMA), in "Comentários sobre o projeto Quinta da Malagueira de Álvaro Siza", accessed December 27th, 2017, <https://www.archdaily.com.br/br/761284/comentarios-sobre-o-projeto-quinta-da-malagueira-de-alvaro-siza>
- [2] Siza, Álvaro, *Imaginar a evidência*, Edições 70: Lisboa, p.117, 2000.
- [3] Siza, Álvaro, *op.cit.*, p.107.
- [4] Teige, Karel, *The Minimum Dwelling*. The MIT Press: Cambridge, Massachusetts; London, England, 2002.
- [5] Siza, Álvaro, *op.cit.*, p.177.
- [6] Rodrigues, José Miguel, "Tradition and the problem of the flat roof" in *Die Neue Tradition, Europäische Architektur im Zeichen von Traditionalismus und Regionalismus*: Dresden, pp. 221-233, 2011.
- [7] Mann, William, in "Comentários sobre o projeto Quinta da Malagueira de Álvaro Siza", accessed December 27th, 2017, <https://www.archdaily.com.br>.