

Sustainable Housing for the 21st Century in Lisbon

When the Social Comes Together with Architecture to Empower Heritage Values¹

Abstract

Telheiras Sul (1974) exemplifies the Portuguese state's response to Lisbon's 1960s housing crisis, reflecting emerging concerns with identity and environmentalism. Rooted in a former garden city and integrating an old village core, the plan addressed hygiene, ecological, and social needs. Unlike Le Corbusier's Plan Voisin, it balanced standardized housing with existing urban fabric. This paper explores how to conserve and adapt the area while ensuring quality of life, recognizing housing as a broader urban experience. It argues that strong local identity and community resilience stem from aligning architecture, urban policy, and resident participation. Telheiras Sul's inclusion in Lisbon's Heritage Protection Charter confirms its significance and helps preserve its character, reinforcing community belonging.

An Innovative Plan

In 1971, the municipality of Lisbon sought to establish a business structure to address the shortage of middle-class urban housing, given that the Gabinete Técnico de Habitação (GTH, Technical Department of Housing) was primarily focused on the more disadvantaged sectors of society.² Consequently, the Empresa Pública de Urbanização de Lisboa (EPUL, Public Company for Urban Development of Lisbon) was established with the objective of assisting municipal initiatives concerning the design and implementation of urbanization and housing projects within the city of Lisbon.

The first plan, commissioned from a French team (OTAM-Interlande, coordinated by Giles O'Calaghan, 1969 and 1972), was handed over to architects Pedro Vieira de Almeida (1933–2011)³ and Augusto Pita (1941–)

for a revision that resulted in the *Plano de Pormenor de Telheiras* (PPT, Detailed Plan for Telheiras) approved by the Lisbon Municipal Council (CML) in 1974. Occupying 63.5 hectares, the plan included 3,300 dwellings for 14,400 inhabitants.⁴

The conceptual universe of Telheiras Sul, although based on a modern matrix, underwent a critical re-interpretation at the hands of architect Pedro Vieira de Almeida and his team. Their experimental approach entailed the mixing up of zoning, contradicting the CIAM grid and separating traffic lanes from pedestrian routes through the buildings, blocks, and gardens. The concept of the street as the conduit of the urban fabric was recuperated, with the base of the building again becoming the defining element of the street frontage and the residential buildings—predominantly organized

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2 Sérgio Melo, *Telheiras. Conteúdo e Continente* [Telheiras. Content and Container], MSc thesis, IST, Lisboa 2013.

3 Pedro Vieira de Almeida (1933–2011) was a Portuguese architect, theorist, critic, and historian. A graduate of the Escola Superior de Belas Artes do Porto (1963), he was a key figure in architectural thought, blending practice with rigorous theoretical analysis. He worked in Portugal, Cape Verde, and Mozambique, contributing to both urban planning and architectural criticism. His seminal works include *Ensaio sobre o Espaço da Arquitectura and História da Arte Moderna*, challenging conventional narratives and introducing innovative interpretations of modernity. A professor and researcher, he played a crucial role in shaping Portuguese architectural discourse, advocating for critical engagement and intellectual independence.

4 Ana Tostões, *Lisboa Moderna* [Modern Lisbon], Lisboa 2021; Ana Tostões / Zara Ferreira, *Large-scale housing projects in Lisbon: Olivais and Telheiras* [Housing for All], in: *Docomomo Journal* 65, 2021, pp. 56–69, doi: <https://doi.org/10.52200/65.A.CAH2R2X9>; Ana Tostões, *A Idade Maior. Cultura e Tecnologia na Arquitectura Moderna Portuguesa* [The Greater Age. Culture and Technology in Modern Portuguese Architecture], Porto 2015.

in linear or perimeter blocks, never exceeding eight storeys—and being divided into residential blocks or cells. However, it should be noted that the streets were not fully consolidated, the blocks were not closed, and the squares were not perceived as such, because they did not acquire monumental proportions. The egalitarian and open notion underlying modern man⁵ was maintained through a more fluid understanding, as recommended by Jane Jacobs.⁶ The interiors of the blocks were understood as semi-public spaces to support the community (day-care centers, schools, public services, and daily commerce); the ground floors of buildings along main roads were reserved for non-housing uses, fostering an understanding of a mixed city; a network of pedestrian paths traversed the blocks, interconnected—when possible—with green spaces and enhanced by facilities for collective use; the relationship between construction and public space approaches the human scale (Fig. 1).

Following the approach of Christopher Alexander⁷ and his “Pattern Language”, and thus representing



Fig. 1: Pedro Vieira de Almeida, Augusto Pita, Telheiras Sul detailed plan, 1973–74

a completely new approach in Lisbon's expansion to date, the PPT decided to anchor its development in the renovation of the old Telheiras (village core where the center of the old peasant village was located), considering it to be the embryo of the life already existing in the area. It acted as a backbone for the entire neighborhood, with 700 meters of pedestrianized streets interspersed with social facilities and preserved urban elements (a convent, mill, pump, wells, water tanks, benches, etc.). This option was anchored in the arguments of environmentalism and historicism, which at the time were just beginning to find their way into the ideologies of urbanism.

Pedro Vieira de Almeida, the architect author of the urban design, sought to define a strong urban image in which the influence of Kevin Lynch and Gordon Cullen⁸ can be found. This approach entailed the establishment of a system of spatial notation, a methodology devised by the architect to serve as a codified language for the architectural expression of buildings, characterized by volumetric, spatial, and usage-related attributes. This methodology was meticulously applied to each building, encompassing its envelope and relationship with the surrounding public space. The objective of this approach was to imbue the urban landscape with landmarks and a distinct identity. The layout and outline of the cells and buildings were guided by this system, a kind of psycho-morphological *gestalt*, which identified notable points in the ends and connections between buildings, zones of compression and decompression, barriers, and crossings. They sought to punctuate pathways with points of interest or variation. The goal was to coordinate architecture and urban design, modifying the typology and concept of the street⁹ in such a way that the routes to be taken, whether from the perspective of the driver or the pedestrian, were punctuated by moments of interest defined by the geometry of the streets and the surrounding built or landscaped environment.

Modern in its planning, the PPT intended to demarcate the categories of housing by the quality of finishes rather than areas. However, following new regulations implemented in 1978,¹⁰ in the aftermath of

- 5 Ana Lourenço, *Olivais e Telheiras marcos do movimento moderno na expansão planeada de Lisboa* [Olivais and Telheiras: landmarks of the modern movement in Lisbon's planned expansion], MSc thesis, ISCTE, Lisboa 1999.
- 6 Jane Jacobs, *The death and life of great American cities*, New York 1961.
- 7 Christopher Alexander, *A city is not a tree*, in: *Architectural Forum* 122, No. 1, 1965, pp. 58–62.
- 8 Kevin Lynch, *The image of the city*, Cambridge MA 1960; Gordon Cullen, *Townscape*, New York 1961.
- 9 Augusto Pita, *Telheiras Sul—Plano de Pormenor [Telheiras Sul—Detailed Plan]*, in: *Arquitectura* 137, 1980, p. 48.
- 10 *Fundo de Fomento da Habitação*, Instructions for state-promoted housing projects, Lisbon 1978.



Fig. 2: Building block with exterior galleries, photo 2021

the Carnation Revolution of 25 April 1974,¹¹ the housing categories were replaced by a single category to promote equality and avoid social segregation. In the context of an era reaching the 21st century, this plan took care to provide housing appropriate for elderly residents and those with disabilities through differently serviced and specialized structures, and also housing for young and single people.

What is most extraordinary about Telheiras is that, despite having a great appreciation of traditional urbanism, some of the most daring Modern Movement solutions can be found there. The dialogue between the two ideologies produced a hybrid outcome. Most of the buildings in linear blocks were flanked by exterior access galleries, but—unlike the repetition on every floor commonly found in the typical housing block—the access galleries were only located every two or three floors (Fig. 2).¹² This occurred either because there were duplex apartments inside, or because the logic of familiar pathways through this urban fabric—of corners, nooks, and surprises—was elevated (via secondary routes originating from the main galleries), resulting in the front doors of the apartments being grouped on landings of a more intimate character. Sometimes, the sculptural celebration of vertical communication was expressed through elevator towers, which included a window allowing a visual promenade of the surrounding park. The towers¹³ were set on *pilotis*. Research

was undertaken into “low-rise high-density”.¹⁴ Inside the apartments, one can find the convenient modern solution of the kitchen hatch.

Public Space and Neighborhood Liveability

The attention given to the surrounding neighborhoods is evident in de Almeida’s plan for Telheiras Sul, as he sought to achieve a harmonic design to ensure complementarity of the areas in terms of the urban landscape. As such, the neighborhood is situated in a higher-altitude area and composed of low-height buildings, planned for a controlled scale with a limited population. The PPT followed coherent planning regarding the dimensions and typology of the buildings, as well as the fundamental relationships of demographic and social balance.

However, these principles of modern urban design were intersected with a critique of the massification of the International Style and a return to certain concepts of the traditional city. The most evident principle is the rejection of isolated buildings, except for a few towers. This represents a reinterpretation of the notions of streets and blocks, where the housing layout once again becomes the defining element of the street front. Nonetheless, a compromise is evident: Although the street becomes the channel space of the urban fabric, with roads and pedestrian paths occurring simultaneously, there is a network of alternative pedestrian routes subtly integrated throughout the plan. These routes traverse buildings, blocks, and gardens, reflecting a clear focus and care for pedestrians (as can be observed in the original plan, where these routes correspond to the entire dotted layout), thereby enhancing safety, especially for children and the elderly (Figs. 3 and 4).

Some consider that Telheiras represents an acknowledgement of averageness, what the Swedes call the spirit of *lagom*, and that none of the buildings, considered individually, are significant for the contemporary history of Portuguese architecture.¹⁵ However, the best assessment of the success of a neighborhood is that made by its residents—based on which, its achievement is difficult to deny: 85% of residents are

11 The Carnation Revolution ended the dictatorship in Portugal.

12 Designs by Augusto Pita; Duarte Nuno Simões and Maria João Cardoso; Leopoldo Criner.

13 Design by Sérgio Melo, Valmor Prize 1985.

14 Design by Gabriela Tomé.

15 Paulo Martins Barata, Telheiras: o espírito Lagom [Telheiras: the Lagom spirit], in: *Jornal Arquitectos* 205, 2002, pp. 60 f.

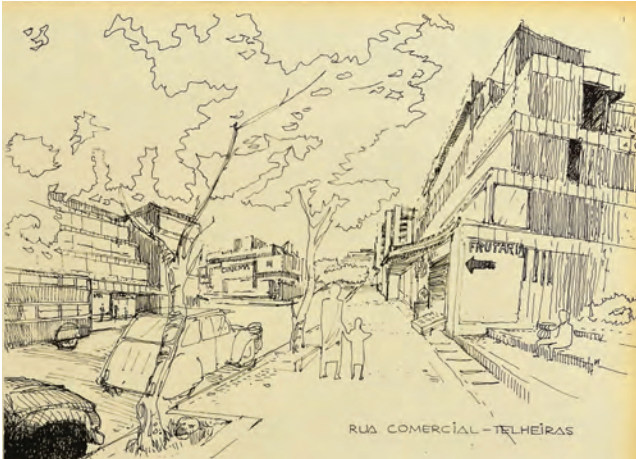


Fig. 3: Pedro Vieira de Almeida, Augusto Pita, Telheiras Sul detailed plan, 1973/74. Sketch of a commercial street



Fig. 4: Underpass pathway, photo 2021

satisfied or very satisfied with the neighborhood, and 77% consider it the best neighborhood in Lisbon to live in.¹⁶ Among the reasons most commonly invoked¹⁷ is the pleasant and enjoyable urban ambience resulting from the “*volume and aesthetics*” of the buildings, the combination of housing and services, the presence of green spaces and public areas for socializing and recreation, the coexistence of old and new areas, the quality of the facilities, its ease of access (augmented by good public transport infrastructure that was consolidated in 2002 with the arrival of the metro), and its ease of parking (the PPT envisaged there would be underground

parking in each cell, although only half was built). But the most mentioned factor is the quality and quantity of street commerce.

The extensive traditional street commerce, including restaurants, cafés, bars, bakeries, butchers, fishmongers, and shops, as well as the proximity to hypermarkets and public and private schools—from daycare to the 12th grade—makes Telheiras a place where everything needed for a peaceful and safe life is within reach. Through a very regular and consistent connection to nearby services, the so-called Docas Secas at Rua Prof. João Barreira serves as a lively space, featuring a canal-like area lined with several cafés and bars side by side, which enliven the neighborhood’s life (Fig. 5). It remains a family-oriented neighborhood full of children and domestic animals.



Fig. 5: Commercial street with terraced housing buildings, photo 2021

Cultural and Community Living. The Role of ART – Associação de Residentes de Telheiras (Telheiras Residents’ Association)

The relative socio-cultural homogeneity of Telheiras has also contributed to the development of a strong local identity and a resilient community: “[T]hose who live in the Telheiras neighborhood don’t want to leave. You change your home, but you don’t change your

16 Infografia, Inquérito a seis bairros lisboetas, Lisboa. Da cidade para os Lisboetas, No. 26—Especial Bairros de Lisboa [Infographic. Survey of six Lisbon neighborhoods, Lisbon. From the city to the Lisboners, No. 26—Lisbon Neighborhoods Special], 2019, pp. 12 f. (Infografia 2019).

17 Carlos Meira / Guilherme Pereira, O ordenamento urbanístico de Telheiras visto pelos residentes: O plano de pormenor, a realidade actual e o futuro [The urban planning of Telheiras as seen by residents: The detailed plan, the current reality, and the future], in: Sociedade e Território 23, 1996, pp. 140–160.

neighborhood.”¹⁸ It so happens that, due to its proximity to several universities (Cidade Universitária) and the moderate prices offered at its launch by the EPUL, Telheiras attracted young graduates who settled and never left the neighborhood.¹⁹ The idea that began to circulate in the late 1980s—that Telheiras had the highest educational level in the Lisbon metropolitan area—has remained true to this day,²⁰ being known as the “neighborhood of doctors”.

The fact that 88% of the apartments are owned²¹ and not rented is symptomatic of the residents’ satisfaction with life in the neighborhood but also of their purchasing power (reinforced by the incentive to use credit, created in the late 1970s). It should be noted that a sense of self-preservation is necessarily linked to a culture of ownership: Residents are prepared to work on the conservation of something they are proud to own, which in 1988 led to the creation of the *Telheiras Residents’ Association* (ART).²² The association’s acronym itself reflects the significance of art, connecting the creative spirit of the association while promoting artistic courses on music, visual and dramatic arts, as well as important policies for the neighborhood. ART’s main activities include promoting the creation of infrastructure that directly supports the resident community (gardens, playgrounds, pedestrian walkways, public lighting, security, urban furniture, etc.); actively participating in municipal debates, such as the extension of the metro line to the neighborhood and the creation of one of the city’s first bicycle paths; and, through initiatives, promoting cultural, social, civic, and physical improvement for residents—recently incorporating environmental concerns. ART’s long-running publication “*Jornal de Telheiras*” also served as a means of bringing residents closer together, supporting social cohesion and the sustainable functioning of the neighborhood. Another example of ART’s activities is the creation of a social network for information, training, and debate around the Transition Movement which promoted the creation of community gardens, regular markets for organic products, and periodic conferences. Taken as



Fig. 6: Guided tour through the neighborhood, photo 2024

a whole, the activities undertaken by the ART contribute to consolidating community living, promoted by mobilizing and active social resources (Fig. 6).

Conclusion

Telheiras represents an important moment in the planned expansion of Lisbon. This is evident in the way it managed to surpass the intermittent and punctuated architectural housing production, promoting solutions to the housing question at the city scale. The proposals succeeded one another in time, inserted in an evolutionary path of the conception of the Western city, from the rejection of the traditional city lexicon to the reconciliation with history; from an initial period when society was divided between two extremes—a wealthy social group that held power, and an extremely poor, laboring or rural, working population—to a time when the middle class arose, alongside and in step with the democratization of access to higher education.

Telheiras is now the stage for discussions on the city’s future, namely at the neighborhood’s Orlando Ribeiro Library within the scope of an exhibition on housing held at the Museum of Lisbon in 2023; or as part of the 2024 “Open House” program, involving a half-day guided walk through the neighborhood involving residents

18 Infografia 2019.

19 Maria Assunção Gato, *São as Pessoas que fazem o Bairro, Estudo Prévio* [It’s the People who make the Neighborhood, Preliminary Study], in: *Revista do Centro de Estudos de Arquitectura* [Journal of the Center for Architectural Studies], Cidade e Território da Universidade Autónoma de Lisboa 4, 2014.

20 Census 2011. Within the Lisbon metropolitan area, it has the largest percentage of residents holding higher university degrees.

21 Infografia 2019.

22 Mário Contumélias, *Uma Aldeia na Cidade – Telheiras, o Que é Hoje e Como se Produz um Bairro?* [A Village in the City—Telheiras, What it is Today and how a Neighborhood is produced], PhD thesis, ISCTE, Lisboa 2008.

and the general public, which was a very well-attended and successful event.²³

Bringing together a curious catalogue of architectural tendencies, the series of projects demonstrated tremendous structural, formal, and spatial experimentation, which revealed the architects' concerns and search for "housing for the greatest number". Although the buildings were not pioneering in introducing formal and architectural vocabularies, Telheiras is a paradigmatic case of the search for modernity in building design, as an attitude that values universality, rationality, and a fair and effective response to new social and technological orders.

Telheiras has been assimilated and today is a consolidated part of the city. Designed and occupied in just over thirty years, its consolidation as urban territory, developing its own character and a recognizable identity in such a short time, is evidence of its coherent conceptual frameworks.

Incorporated in the broader ideology that we call the Modern Movement, Telheiras constituted important steps in the highly complex path of producing the city through a humanized approach to architecture and urbanism, in contrast to the anonymity of many of the mass housing developments commonly located on the outskirts of large cities.

23 The city's Garden Neighbourhood. Trienal de Arquitectura de Lisboa. <https://www.trienaldelisboa.com/ohl/en/event/the-citys-garden-neighbourhood/> (24.07.2025).