



Duarte Nuno Simões and Maria João Cardoso, linear housing buildings, Telheiras, Lisbon, Portugal, 1977. © Ana Tostões, 2021.

Large-scale housing projects in Lisbon: *Olivais and Telheiras*

BY ANA TOSTÕES AND ZARA FERREIRA

The neighborhoods of *Olivais Norte* (1960), *Olivais Sul* (1963) and *Telheiras Sul* (1974) are paradigmatic examples of the Portuguese State's response to the housing shortage that was acknowledged in Lisbon, in the period of the post-wwii. Featuring a varied catalogue of architectural trends, this series of projects demonstrated extensive structural, formal, and spatial experimentation that revealed the concerns and quest by their designers to respond to the need for "housing for the greatest number". What all three projects shared was that they were large scale, publicly financed, started out with similar programs, and that various architectural teams were involved in each of them. The fact that they succeeded one another chronologically enables a critical reading to be made of the evolving interpretation of the Modern Movement in Lisbon, and the pursuit of modernity as an attitude that valued universality, rationality, and a fair response to new social orders.

Introduction

The Portuguese dictatorship that survived the end of wwii¹ – the *Estado Novo* (1933-1974), led by António de Oliveira Salazar (1889-1970) – was forced to carry out "cosmetic operations, with the adoption (...) of some democratic mannerisms."² In terms of architecture and urbanism, this translated into accepting projects that, in former years, would have been rejected. Even though Salazar did not like these projects, there was an overarching idea that Lisbon had to be a modern city, that it to be in line with what was most innovative in Europe.³ Swayed by the climate of challenging the regime and inspired by visits to Welfare State developments in Holland, England, France and Nordic countries, the Portuguese architects who gathered at the 1st *National Congress of Architecture* (1948), appealed for industrialization, and their involvement in regional planning and in seeking solutions for the housing problem.⁴

Throughout the 1940s, the shortage of housing in the metropolitan area of Lisbon increased inordinately, leading to the appearance of illegal dwellings and shanty towns in many areas of the city: in 1959, there was an overall shortage of 140,000 homes.⁵ To solve this situation, the *Câmara Municipal de Lisboa* (CML) [Municipal Council of Lisbon] created the *Gabinete de Estudos Urbanos* (GEU) [Urban Studies Office] in 1954, and the *Gabinete Técnico de Habitação* (GTH) [Technical Department of Housing] in 1960, to build new housing with affordable rents for low-income households, co-funded by the State.⁶ In 1959, the Decree-Law 42454 determined that the shortage should be resolved by providing a ratio of 70% social housing to 30% at market rents. Within the first group, 4 categories were identified (40% I, 30% II, 20% III, and 10% IV) according to household rent, in an effort to foster social diversity.

It was an era for rethinking the traditional city. The idea of an "integrated plan" became prevalent, extending the concept of housing to a full and balanced quality of life.

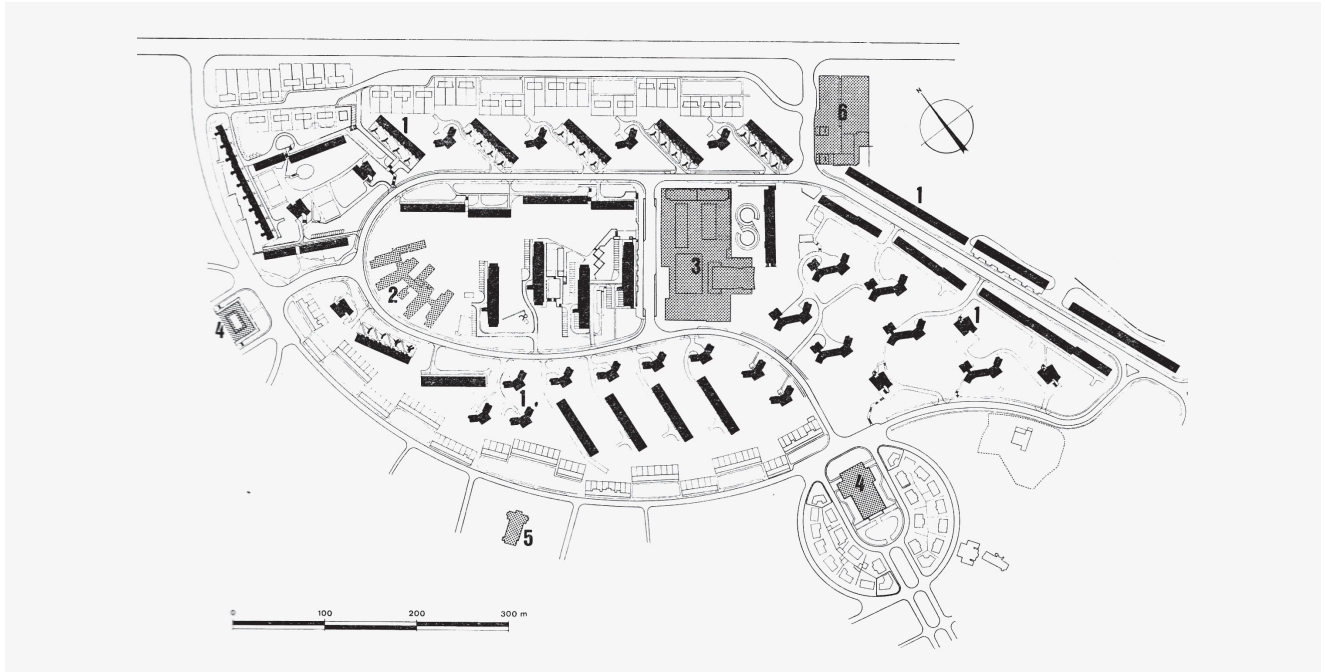
Housing implied not only "the dwellings", but everything else involved with human life in an urban context. At long last, the ethical dimension of the Modern Movement was accepted on a large scale in the Portuguese capital, and the development of habitat for the greatest number could finally be undertaken by socially-aware architects.⁷

Notable among the action undertaken were the neighborhoods of *Olivais Norte* (GEU, Guimarães Lobato, Sommer Ribeiro, and Pedro Falcão e Cunha, 1960-1972), *Olivais Sul* (GTH, José Rafael Botelho and Carlos Duarte, 1963-1972) and *Chelas* (GTH, José Rafael Botelho, Francisco da Silva Dias, João Reis Machado, Alfredo Silva Gomes, Luís Vassalo Rosa e Carlos Worm, 1964).⁸ Covering more than 700 hectares (ha), they provided decent housing for around 100,000 inhabitants. Because of their size, their role in the city's plans for expansion eastward, on land bordering the city, and because the architectural design of the various buildings and facilities were entrusted to different teams of professionals, these neighborhoods provided unprecedented conditions for exploring modern planning in Portugal and made the GTH a laboratory for urban and housing development.

Olivais Norte, the radicalism of the Athens Charter tempered by the contestation of the International Style

The first realization in Lisbon of a large-scale housing plan designed in a truly modern way.⁹

Olivais Norte, in Lisbon, marked a break with the traditional urbanism formed by a system of streets and urban blocks, and the adoption of fundamental principles of the Athens Charter: the urban structure was based on a rational occupation of the site marked by the isolated insertion of



residential buildings, subject to the criteria of solar exposure and ventilation, in an open landscaped space.¹⁰ The circulation spaces formed a hierarchical system with a clear differentiation between the traffic and pedestrian circulation networks, with a road layout independent of the buildings' orientation. Conceived as a neighborhood unit, the facilities supporting the housing, of a social nature (commerce, culture, and recreation), constituted a nucleus in a civic-commercial center. School groupings were located to never be further than 250 meters (m) from the housing.

Exploring the linear, block and tower typologies, the solutions presented were divided into two scales of intervention determined by social categories: the higher categories (III and IV) were given taller buildings (8 and 12 floors) and the lower categories (I and II) lower buildings (4 floors), avoiding the need of installing an elevator that makes construction more expensive. The tallest buildings were arranged next to the civic-commercial center and the primary school, in the highest and most central area of the urban-cell, oriented along Cartesian axes and resembling a kind of acropolis. The lower buildings, with greater repetition of type, and more varied orientation, were dispersed around the periphery in order to follow the terrain, following a *plan masse* logic. As a belated application of the principles of the Athens Charter, the plan reflected post-war tendencies, notably the British new town construction program.¹¹

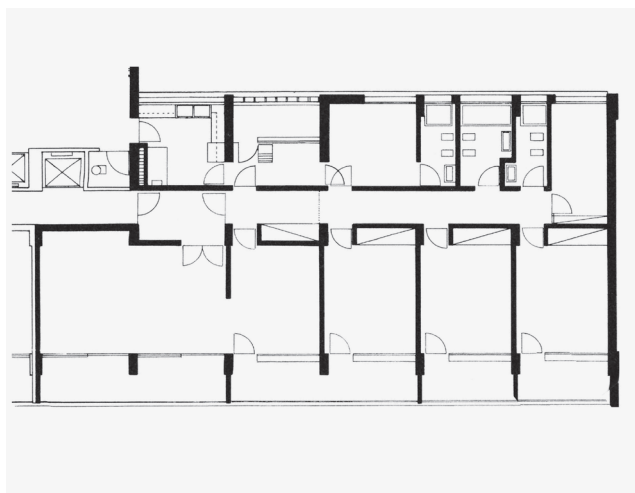
The buildings intended for the higher categories¹², with a more imposing volumetric presence, embodied rationalist devices in a more pronounced way, paradigmatic of the typical modern housing block: the use of *pilotis* on a broad platform articulating accesses, the expressed modulation of the structure in the elevations, the plastic exaltation of

vertical communications, the shared terraced roof, generous windows, and the wall-to-wall balconies. At the same time, and paradoxically – given that residents still lived under a dictatorial regime – the rooms made a clear distinction between family and servant areas (including a room and bathroom for the maid), with independent access doors.

In the buildings for the lower categories,¹³ their considerably smaller areas and lower quality finishes contrasted with their more varied internal layouts, with solutions that enabled future adaptation, and that directly connected the living room and kitchen, promoting greater spatial fluidity and family communication. More organic alternatives were explored, some reminiscent of Italian neo-realist precedents, with exposed brick, projecting balconies, sloping roofs, and plans renouncing orthogonality in an effort to promote more varied ways of living. The tower by Nuno Teotónio Pereira (1922-2016), António Pinto Freitas (1925-2014) and Nuno Portas (1934-),¹⁴ which, in 1967, won the Valmor Prize, awarded for the first time to a building that was social in character and budget, was the example that took this exploration the furthest. In its design, the parts of the tower were detached and inflected to provide a more favorable orientation for the apartments, and to create a naturally ventilated and lit interstitial access space, with a character of permanence. Featuring a fixed bench on each level, traditional Portuguese paving, and occasional artworks, the design sought to overcome the isolation between neighbors that a tower typology can engender and provide social housing with dignity. This logic of social interaction continued in the apartment interiors, whose social areas could be used fluidly and flexibly.



02 Abel Manta, housing block (category IV), *Olivais Norte*, Lisbon, Portugal, 1960.
© Armando Maia Serôdio, 1963, PT/AMLSB/CMLSB/PCSP/004/SER/013043.



03 Abel Manta, housing block (category IV), *Olivais Norte*, Lisbon, Portugal, 1960.
© *GTH Boletim*, Vol. 2, No. 15, 1968.



04 Nuno Teotónio Pereira, António Pinto Freitas and Nuno Portas, housing tower (category II), *Olivais Norte*, Lisbon, Portugal, 1958. © Armando Maia Serôdio, 1968, PT/AMLSB/CMLSB/PCSP/004/SER/S01382.



05 Nuno Teotónio Pereira, António Pinto Freitas and Nuno Portas, housing tower (category II), *Olivais Norte*, Lisbon, Portugal, 1958. © *GTH Boletim*, Vol. 2, No. 15, 1968.

- 06 José Rafael Botelho and Carlos Duarte, *Olivais Sul*, Lisbon, Portugal, 1963. General plan. 1) Primary school, 2) elementary school, 3) secondary commercial centers, 4) church, 5) *contador-mor*, 6) sports area, 7) cemetery, 8) industrial area, 9) Lisbon Water Company, 10) social medical center, 11) nursery/kindergarten, 12) parks. © GTH Boletim, Vol. 3, No. 20, 1971.



Olivais Norte, with 1,889 houses for 8,500 inhabitants on 40 ha, was conceived as a smaller scale trial for the major operation that would follow it to the south, the neighborhood of *Olivais Sul*, providing 7,996 dwellings for 38,250 inhabitants on 186 ha.

***Olivais Sul*, the return of the garden-city new-town version**

*Olivais-Sul constituted the largest and most ambitious housing development created among us.*¹⁵

Due to its size, the planning of *Olivais Sul* was divided into 4 basic urban scales, based on the number of inhabitants: urban fabric (38,400-48,000 inhabitants), urban cell (9,600-12,000 inhabitants), neighborhood unit (4,000-5,800 inhabitants), and residential group (1,200-2,400 inhabitants). The residential groups were clustered into neighborhood units that were arranged around a local civic-commercial center, together constituting an urban cell. While the main amenities of social life (civic-commercial centers, health facilities, parish centers, sports facilities, and urban parks) were designed on the perimeter of the cells, concentrated along a main vector running through the center of the urban fabric, schools (pre-school and primary) were sited in the central zones of the urban cells (serving a radius of 150-200 m and 400 m, respectively).

Commercial services were planned on 3 levels: the first, to satisfy daily needs, and consisting of nuclei of 10-15 stores, were designed to serve inhabitants within a radius of 150-200 m, with some occupying the ground floor of residential buildings; the second, intended for weekly/monthly purchases, were located in the civic-commercial centers of the cells, with 40-50 establishments, serving a 400 m radius; and the third, made up of commerce and services for occasional use, were incorporated in the main civic-commercial center, serving a 1,000 m radius.

In addition to *Olivais Norte* (subsequently known as cell A), 6 further cells were defined: four mainly intended for housing (B, C, D, E), another incorporating a housing nucleus for rehousing, and largely occupied by a cemetery (F), and another intended to be entirely occupied by the main civic-commercial center (G) at the core of the urban fabric, where it was planned to include cultural and recreational social amenities, a municipal library, museum, art galleries, cine-theater, cinemas and stores.

The vehicle and pedestrian circulation networks remained independent, and the buildings were sited organically, as the topography dictated – the towers were placed at the highest points while, on the slopes, the buildings were sited to follow the terrain – on an immense green space that played a fundamental role from a hygienic, sanitary, recreational, and psychological point of view. The plan sought to establish a green curtain that would form a barrier between

the industrial zone and housing areas, able to prevent the entry of polluted air from nearby industries, and protect the inhabited areas from the harsh prevailing winds and from excessive heat in the summer months, through the propagation of vegetation that could improve the local micro-climate.

In order to avoid creating socially segregated areas, the 4 categories established by Decree-Law 42454, were included in every cell. However, there was an attempt to define a socially homogeneous spatial system through the grouping of nuclei of similar categories, leaving schools and civic centers to articulate social heterogeneity, according to principles implicit in the concept of neighborhood unit. This was the basic concept of post-war British urbanism, which relied on primary schools becoming a center to foster civic activity that, through a series of extra-curricular services (gymnasium, library, meeting rooms, and event rooms) would encourage a fluid boundary between the population and the school community. Additionally, with regard to the younger population, it was intended to create outdoor spaces that provided educational experiences, inspired by the Swiss Robinson Crusoe parks, through the inclusion of facilities suitable for cultural and craft activities. The principle of combining art and architecture, which can be seen in the tower by Nuno Teotónio Pereira and António Pinto Freitas in *Olivais Norte*, was transposed, in *Olivais Sul*, to the level of public space, and assumed a scale unprecedented in Portugal, reflecting a belief in the transforming power of art in society.¹⁶

Thus, a hierarchical cellular structure was created that developed the tradition of garden cities and departed from the rationalist mainstream of the CIAMs [*Congrès Internationaux d'Architecture Moderne*] and the Athens



07 Costa Martins, Hernâni Gandra and Nevez Galhoz, housing block, *Olivais Sul*, Lisbon, Portugal, 1963. © Augusto de Jesus Fernandes, 1966, PT/AMLSB/CMLS-BAH/PCSP/004/AJF/001817.



08 Costa Martins, Hernâni Gandra and Nevez Galhoz, housing block, *Olivais Sul*, Lisbon, Portugal, 1963. © *Arquitectura*, No. 97, 1967.

Charter. As Nuno Portas argues, “if the plan for *Olivais Norte* resembled a timeless immense *siedlung* of parallel blocks interspersed by towers – unity imposed on diversity – that of *Olivais Sul* was already cellular, (...) facilitating the (divergent) incursions into urban design itself by the development’s designers – diversity imposing itself to unity.”¹⁷

With great autonomy, the 26 teams¹⁸ who undertook the architectural designs had the opportunity to explore programmatic innovations and new ways of living, adapting the homes to manners and customs within the context of the minimal areas and limited budgets of social housing.¹⁹

Generally speaking, two different urban approaches coexisted: one more tied to rationalist principles, and another that sought to reinvent traditional images with the aim of fostering neighborhood relations. The first approach is exemplified by the buildings of Vítor Figueiredo (1929-2004) and Costa Lobo (1929-2013), and the team formed by Costa Martins (1922-1996), Hernâni Gandra (1914-1988) and Nevez Galhoz. Thought as autonomous buildings, easily repeatable in other places, they replaced a relationship with the immediate exterior with the intention of transporting social relationships to the heights, through access galleries that recall the celebrated “streets-in-the-air” of Alison and Peter Smithson. However, in *Olivais Sul*, the second route was primarily pursued, through the creation of outdoor living spaces that could function as an extension of the home, places for meeting and appropriation, with the aim of satisfying a need for participative civic involvement and a social life after work. Particular efforts were made to satisfy the needs of residential groups in which the lower categories predominated, whose residents, due to traditional cultural habits, sedentary lifestyles imposed by their own economic condition, and the exiguity of housing, would most appreciate them. As Carlos Duarte explained,²⁰ in a search for “neighborhood life”, which meant streets, paths, intimate town squares and plazas, places traditionally found in a city of commerce, meetings, and gatherings, architects attempted to recreate traditional images of sociability and the neighborhood and, in the architecture, sought to incorporate features of Mediterranean life, such as balconies

and washing lines facing the street. The developments designed by the teams of 1) Vasco Croft de Moura, Justino Morais (1928-2011), Joaquim Cadima (1925-?) and João Matoso; 2) Bartolomeu Costa Cabral (1929-) and Nuno Portas; 3) Chorão Ramalho (1914-2002), Santiago Pinto and Nuno Simões; and 4) Nuno Teotónio Pereira, Freitas Leal (1927-2018), Silva Gomes and Correia Rebelo (1923-2006), were paradigmatic of this approach. In different ways and to varying extents, solar orientation ceased to be a primary factor, while the relationship between the interior of the dwelling and the public outdoor space was given a pivotal role. This resulted from the articulation of the various buildings – even in the case of towers – which were arranged in different shapes and configurations to define squares, plazas, and gardens of predominately irregular geometry, in the spaces between them. At the same time, the volumetric modulation of the façades was intended to avoid “the monotony of continuous façades and blind gables, often observed in buildings with limited budgets.”²¹ Through the use of exposed brick and sloped tiled roofs, “building traditions and craftsmanship were evoked, (...) an unusual option for an architecture rooted in modernism,”²² which sought to respond to the budget, to thermal comfort, to durability, and to establishing visual continuity between the façades and the urban space. As Nuno Portas explains,²³ these concerns had affinities with the experiences of the Italian INA-Casa neighborhoods (Ludovico Quaroni (1911-1987), Carlo Aymonino (1926-2010), Mario Ridolfi (1904-1984), Giancarlo De Carlo (1919-2005), and Mario Fiorentino (1918-1982)) and with the work of Francisco Sáenz de Oiza (1918-2000) and his disciples in the social housing developments of Madrid.

In terms of the internal organization of the apartments, the most modern solutions were found in the buildings intended for the lowest categories. The buildings provided for the wealthier families, although they no longer had a service area independent from the family area, or spaces for servants, remained closely tied to a logic of compartmented space; a “Babylon of house parts”²⁴ inherited from the past. In buildings for the poorer families, it was more common to find interior layouts that prioritized communal life, through the design of fluid spaces, that communicated freely, and promoted an idea of simultaneity and versatility of uses and circulation. The grouping formed by the living room, kitchen, often a balcony, and sometimes the children’s room, functioned as a permeable arrangement, promoting a communal experience. Also due to limited space, it was common for the kitchen and living room to share the same space. The balcony was often seen as a living space or as a link between different spaces. Some architects even dared to design small spaces with no particular designated function, because they considered it essential that residents were able to actively participate in and, thereby, appropriate the space, as Henri Lefebvre (1901-1991) so well identified in his *Le droit à la Ville* (1968).

Olivais became a reference for its capacity to innovate in industrialized construction and developing architectural typologies in line with new standards of comfort and social

engagement, and for its ability to act as a vehicle for new urban ideas.

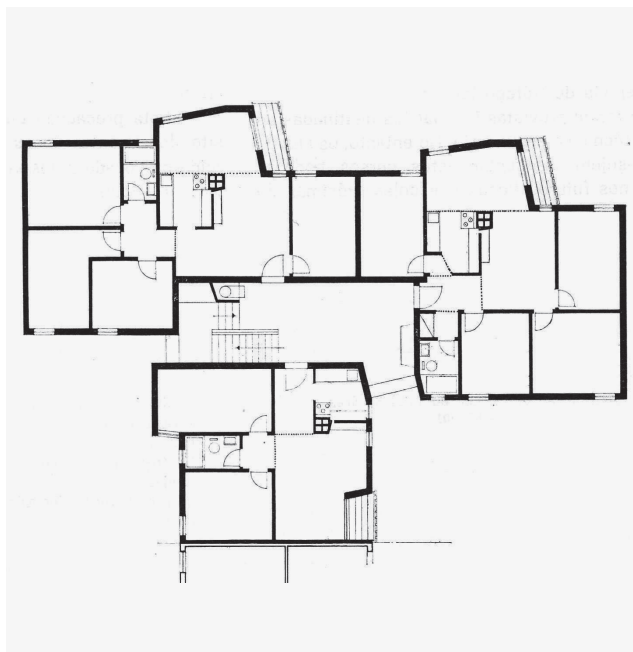
As is often the case in the history of social housing developments, vicissitudes of various kinds led to the appearance of some social stigmas regarding the *Olivais* neighborhood. These originated from the fact that those who financed and managed the construction of the housing were usually different from those who did so for the complementary facilities, so that many of the facilities were not built (the main civic center was only opened in 1995). This led to a lack of services and commerce that inevitably generated a perception of the neighborhood as a dormitory town. Among the most common criticisms raised were the lack of unity and formal dispersion of the groups of buildings, due to the disparate design teams and interpretations: “there are areas that are nothing more than a series of blocks with no sense of the whole; other areas that practically form more or less introverted blocks; and series of towers that, because they are incapable of punctuating the overall agglomeration and are arbitrarily varied, become dispersive elements, all within a motley array of architectural and constructional traits,”²⁵ “a neighborhood made up of smaller neighborhoods.” On the other hand, this idea made evident its distancing from the *plan masse* associated with modern rationalist planning, and seemed to be an important factor for its architects, and not for residents. As Carlos Duarte explains, the residential groups were large enough to create their own image, which is only lost when *Olivais* is seen by plane or car. In truth, what seems more important was the attention paid to the relationship between buildings and landscape, in a way that it rarely feels like mass housing. Furthermore, as Paulo Varela Gomes (1952-2016) argues,²⁶ the excellent and varied architecture of the development, as a counterpoint to the monotonous and banal architecture so commonly blamed for the failure of mass housing developments, created strong images that helped people to identify with the place they lived in.

The social distribution of the area led to the formation of a few ghettos which people gave names to, such as the “*Bairro dos Índios*” [Indians neighborhood], or the “*Aldeia dos Macacos*” [Monkeys neighborhood]. Many social studies were undertaken at the time, inspired by the work of Chombart de Lauwe (1913-1998) in France, studying the environment and way of life of the working classes, which recommended open methodologies, as opposed to the dogmatic solutions of “storing the population” that arose from the orthodox spirit of the CIAMS.²⁷ Despite this, in reality, many people were placed in apartments, irrespective of their wishes, and with no choice in the type of interior layout. Some conflicts, resulting from cultural differences in ways of living and inhabiting spaces, led to the stigmatization of the development. In the first few decades, some considered it an unsafe neighborhood, a criticism mainly levelled by people who did not live there. Today, on the other hand, it is common to hear reports from adults, who as children, played with children from all the neighborhoods, without encountering prejudice and with no social conflicts.²⁸ Time has passed, trees have

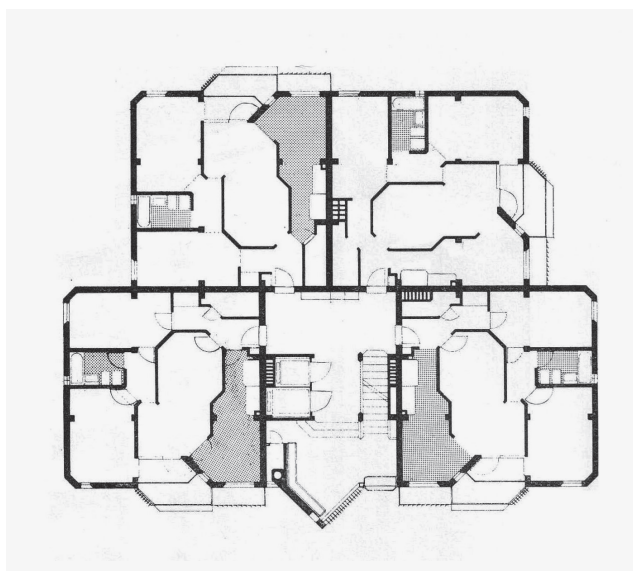
- 09 Vasco Croft de Moura, Justino Morais, Joaquim Cadima and João Matoso, linear housing buildings (category I), *Olivais Sul*, Lisbon, Portugal, 1963. © Arnaldo Madureira, 1965, PT/AMLSB/CMLSB/PCSP/004/ARM/004179.



- 10 Vasco Croft de Moura, Justino Morais, Joaquim Cadima and João Matoso, linear housing buildings (category I), *Olivais Sul*, Lisbon, Portugal, 1963. © *GTH Boletim*, Vol. 3, No. 20, 1971.



- 11 Nuno Portas and Bartolomeu Costa Cabral, linear housing (category II), *Olivais Sul*, Lisbon, Portugal, 1963. © *GTH Boletim*, Vol. 3, No. 20, 1971.



- 12 Nuno Portas and Bartolomeu Costa Cabral, tower (category II), *Olivais Sul*, Lisbon, Portugal, 1963. © *GTH Boletim*, Vol. 3, No. 20, 1971.

grown, and the children of the angry teenagers of the 1960s have already grown up in a stable part of the city that suits them, rooted in its culture. Nowadays, the stronger connection that the neighborhood has with the rest of the city is also one of its stabilizing factors, developed mainly with the Urbanization Plan for the Intervention Zone for *Expo 98*, and with the creation of the *Olivais* metro station, in the same year.

What has turned out to be more decisive in making the development obsolete in some ways, was the technological revolution and the democratization of the car and home appliances. The car invasion led to the gradual

disappearance of green spaces, transformed into parking areas, and the arrival of washing machines and refrigerators transformed balconies into enclosed utility rooms to house them.

Initiatives such as the *Associação Amigos de Olivais* [*Olivais Friends Association*]²⁹ and publications such as *Memórias de um Condomínio*³⁰ [*Memories from a Condominium*] (2010), celebrating 40 years of intense and uninterrupted activity in the condominium room of a building in *Olivais Sul*, by residents with common interests and affinities, reveal not only a strong sense of belonging and community, but also great satisfaction with living in the neighborhood.



***Telheiras Sul*, the synthesis**

This was an operation whose results seemed to be qualitatively superior, guaranteeing its insertion in the context of the city without the inconveniences of the grands ensembles of the isolated peripheries.³¹

In 1971, efforts were made to create, within the ambit of the municipality, a business structure to tackle the housing shortage for the urban middle class, since the GTH was primarily focused on the more disadvantaged.³² Thus, the *Empresa Pública de Urbanização de Lisboa* (EPUL) [Public Company for Urban Development of Lisbon] was created, with the objective of assisting municipal action to design and implement urban development and housing projects in 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 Pedro Vieira de Almeida (1933-2011) with Augusto Pita (1941-), who carried on a new concept

linked with the garden city legacy: the *Plano de Pormenor de Telheiras* (PPT) [Detailed Plan for Telheiras] approved by the CML in 1974. Occupying an area of 63,5 ha, the plan included 3,300 dwellings for 14,400 inhabitants.

The conceptual universe of *Telheiras Sul*, although based on a modern matrix, proceeds to its critical reinterpretation. The idea of the street as the conduit of the urban fabric was restored, the building footprints once again became the defining element of the street-front, and the residential buildings – mostly organized in linear or perimeter blocks, never exceeding 8 floors – were divided into residential blocks or cells. However, the streets were not completely 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 man³³ was maintained, through a more fluid understanding, as recommended by Jane Jacobs (1916-2006)³⁴: 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, as opposed to the polarization practiced in *Olivais*; 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.

Approaching the prospect of Christopher Alexander (1936-)³⁵ and, thus, representing an approach that was completely new in the expansions of Lisbon up till then, the PPT decided to anchor its development to the renovation of the old *Telheiras* nucleus, considering it the embryo of life already existing in the area. It functioned as a backbone for the entire neighborhood, containing 700 m of pedestrianized streets, interspersed by social facilities and preserved urban elements (a convent, mill, pump, wells, water tanks, benches, etc.). This option was anchored in environmentalist and historicist arguments that had begun, at the time, to make their way into ideologies of urbanism.

Efforts were made to define a strong urban image in which the influence of Kevin Lynch (1918-1984) and Gordon Cullen (1914-1994)³⁶ can be found. Through a “system of spatial notation”, volumetric, spatial, and usage intentions were defined for every building, in terms of its envelope and relationship with the public space, with the aim of introducing landmarks and strong identity to the urban space. The layout and outline of the cells and

15 Leopoldo Criner, linear housing buildings, *Telheiras*, Lisbon, Portugal, 1977. © *Arquitectura*, No. 137, 1980.



buildings were guided by this system, 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.

Unlike *Olivais*, the plan intended to demarcate the categories of housing by the quality of finishes, rather than areas. However, following new regulations implemented in 1978,³⁷ in the aftermath of the Revolution of 25th April (1974)³⁸, 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 disabled and elderly people, through differently serviced and specialized structures, and housing for young and single people, two realities that were not found in *Olivais*, where the apartments were clearly designed for families, age not being a parameter, and access to buildings and apartments on routes that often included stairs, were not designed for people with reduced mobility.

What is most extraordinary about *Telheiras* is that, despite having a far greater appreciation of traditional urbanism than in *Olivais*, some of the most daring Modern Movement solutions can be found there. The dialogue between the two ideologies produced a hybrid outcome. In contrast with *Olivais*, 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.³⁹ 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, which led to the front doors of the apartments, grouped on landings of a more intimate character. Sometimes, the sculptural celebration of vertical communication were expressed through elevator towers, which included a window allowing a visual promenade of the surrounding park. The towers⁴⁰ were set on *pilotis*. Research was undertaken into *low-rise high-density*.⁴¹ Inside the apartments, one can find the convenient modern solution of the kitchen hatch which was rarely employed in *Olivais*.

There are those who 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.⁴² However, the best assessment of the success of a neighborhood is the one made by its residents, and in this case, it is difficult to deny its achievement: 85% of residents are satisfied or very satisfied with the neighborhood, 77% considers it the best neighborhood in Lisbon to live in.⁴³ Among the reasons most commonly invoked,⁴⁴ are 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 (providing education from nursery

school to 12th grade), its ease of access, augmented by a 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 commonly mentioned factor is the quality and quantity of street commerce (restaurants, cafés, bars, bakeries, butchers, fishmongers, hypermarkets, etc.). In fact, the distribution of facilities and services, with variations in intensity and use in the spaces throughout the day, mean that *Telheiras* is a neighborhood with none of the dead or residual spaces that can be found in many areas of *Olivais*.

The relative socio-cultural homogeneity of *Telheiras* has also contributed to the development of a strong local identity and a resilient community – “those who live in the *Telheiras* neighborhood don’t want to leave. You change your home, but you don’t change your neighborhood.”⁴⁵ 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.⁴⁶ The idea, which began to circulate in the late 1980s, that *Telheiras* was the place in the metropolitan area of Lisbon with the highest level of education, has remained true to this day,⁴⁷ being known as the “neighborhood of doctors.”

The fact that 88% of the apartments are owned⁴⁸ 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 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. This culture of participation can be verified by the activity of the Residents’ Association (ART),⁴⁹ created in 1988, with the aim of promoting the creation of infrastructure that directly supports the resident community (gardens, playgrounds, pedestrian walkways, public lighting, security, urban furniture, etc.) and through initiatives carried out to promote the cultural, social, civic and physical improvement for residents, recently reinforced by environmental concerns. Taken as a whole, the activities undertaken by the ART contribute to consolidating a community living, promoted by mobilizing and active social resources.

Conclusion

Olivais and *Telheiras* represent important moments in the history of the planned expansion of the city of Lisbon. This is evident in the way it managed to surpass the intermittent and punctual 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



16 Duarte Nuno Simões and Maria João Cardoso, linear housing buildings, *Telheiras*, Lisbon, Portugal, 1977. © Ana Tostões, 2021.



17 Rodrigo Rau, linear housing buildings, *Telheiras*, Lisbon, Portugal, 1985. © Ana Tostões, 2021.



18 Rodrigo Rau, linear housing buildings, *Telheiras*, Lisbon, Portugal, 1985. © Ana Tostões, 2021.



19 *Telheiras Sul*, Lisbon, Portugal. © Ana Tostões, 2021.



20 *Telheiras Sul*, Lisbon, Portugal. © Ana Tostões, 2021.

of access to higher education.

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, *Olivais* and *Telheiras* were paradigmatic cases 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.

Olivais and *Telheiras* have been assimilated and, today, are a consolidated part of the city. Designed and occupied in just over thirty years, their consolidation as urban territories, developing their own character and a recognizable identity in such short time, is evidence of their coherent conceptual frameworks. Regardless of the differences in their intended objectives, the models that oriented each of the interventions, the circumstantial frameworks within which they were implemented, and their ability to embody a spirit of place – in contrast with the anonymity of many of the mass housing developments commonly located on the outskirts of large cities – are, in themselves, a sign of success.

Incorporated in the broader ideology that we call the Modern Movement, *Olivais* and *Telheiras* constituted important steps in the highly-complex path of producing the city, through a humanized approach to architecture and urbanism.

Notes

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- 1 With the advent of the democracies and an opposition revived by the defeat of fascism in Europe, the end of the war brought a period of cultural agitation that made the end of the 1940s particularly significant for the reflexion on the Modern Movement in Portugal. In the hostile political context of the regime, the notion of the values of ethical and cultural awareness disseminated by the neo-realist group, which was followed by the foundation of the architects' organisations ICAT – *Iniciativas Culturais Arte e Técnica* [Cultural Initiatives Art and Technique] (Lisbon, 1946) and ODAM – *Organização dos Arquitectos Modernos* [Organization of Modern Architects] (Oporto, 1947), was crucial in the understanding of both the architecture that was going to be produced in the post-war period in Portugal and the ideological weapons used in the assertion of the profession's social dimension.
- 2 Nuno Teotónio Pereira, "Que fazer com estes 50 anos?", in Ana Tostões (coord.), *1º Congresso de Arquitectura* [edição fac-similada], Lisboa, Ordem dos Arquitectos, 44.
- 3 Carlos Duarte, "Memórias de Olivais-Sul", *Jornal Arquitectos*, No. 204, 2002, 53.
- 4 Ana Tostões, "Portugal, the Modern Rupture: The Fifties 'Green Years'", in *Proceedings of the Fifth International docomomo Conference*, Stockholm, 1998. An analysis of the papers presented gives us an idea of the dominant themes, the question of the "utopia of architecture transforming life and society" being the most common theme raised by the 35 theses. For the younger architects, the transformation of the world with the participation and the leadership of architects now seemed possible. Democratization was reaching the architecture that "must be within the reach of the greatest number possible." It was the emergence of a "New Humanism (...)" that expressed the concern of men to solve the problems of their times and create conditions to

erect the cathedrals of modern times, rejecting the past that means routine, caste privilege or class prejudices." Architects undertook to carry out "the sacred mission to build houses rationally so as to maintain the equilibrium of society, so the jubilant path proposed by the Charter of Athens is the only way to bring joy and optimism to man." The architect's new tasks seemed to know no bounds, because he was the "builder for men and the organisms that serve him; the solution to man's problems is in his hands." Architecture was seen in an eminently social role, embracing the classical domains of an architecture that could not now be limited to serving a privileged few, but the whole population (Arménio Losa, 1948), encompassing a whole world of forms from the intimacy of the bedroom to the layout of cities (Keil do Amaral, 1948).

- 5 In accordance with the Master Plan for the Urbanization of Lisbon 1959.
- 6 Rui Ramos, Virgílio Pereira, Marta Moreira, Sérgio Silva (ed.), *Contexto Programa Projeto: Arquitectura e Políticas Públicas de Habitação*, Porto, Faculdade de Arquitectura da Universidade do Porto, Research Project (FCT) Mapa da Habitação, 2019.
- 7 Ana Tostões, *A Idade Maior. Cultura e Tecnologia na Arquitectura Moderna Portuguesa*, Porto, FAUP Publicações, 2015.
- 8 *Chelas* is omitted from our study, as it never came to fruition in the way it was planned, due to the time taken by the CML to acquire the land needed, and to the land occupations that took place during the turbulent *Verão Quente* of 1975. On *Chelas*, see Teresa Heitor, "Revisiting Chelas: in search of the promised urbanness", *docomomo Journal* 55 – "Modern Lisbon", Lisboa, *docomomo International*, 2016, 58-65.
- 9 Leopoldo de Almeida, "Olivais-Norte, nota crítica", *Arquitectura*, No. 81, 1964, 12.
- 10 Ana Tostões, "Olivais Cidade Jardim", *Lx Metrópole – Vida Urbana*, No. 06, 2002, 24-25; Ana Tostões, João Caldas, "A Carta de Atenas e o espírito das New Towns na cidade portuguesa dos anos 50: o caso de Lisboa", in *9th International Planning History Conference. Planning Theories Between Atlantic and Mediterranean Cultures*, Helsinki, 2000; Tiago Cardoso de Oliveira, "A modernidade complexa dos bairros dos Olivais", *Cadernos do Arquivo Municipal*, 2nd serie, No. 12, 2019; Carolina Marques Chaves, "Olivais Norte e Olivais Sul. Desafios para uma conservação urbana integrada", *Seminário Internacional de Investigação em Urbanismo*, Lisboa, 2020.
- 11 Teresa Heitor identifies similarities with Harlow (1947), one of London's satellite towns, whose plan incorporated a paradigmatic hierarchical cellular structure, and with the Alton Estate, in Roehampton, London (London City Council, 1952 and 1955), whose articulation and synthesis between buildings and surrounding landscape was considered exemplary. For *Olivais Sul*, the proposals were augmented by features resulting from a revision of the concepts underlying the British new towns, for example, those introduced in the plan for Cumbernauld, in Scotland, in particular, the higher density of the residential areas and the structuring of the city around a large-scale civic center. Teresa Heitor, "A Expansão da Cidade para Oriente: Os Planos de Urbanização de Olivais e Chelas", in Maria Helena Barreiros, *Lisboa. Conhecer Pensar Fazer Cidade*, Lisboa, CML, 2001, 72-85.
- 12 Blocks designed by Artur Pires Martins and Cândido Palma de Melo (category III), and Abel Manta (category IV).
- 13 Linear housing by João B. Vasconcelos Esteves; Braula Reis; Braula Reis and João Matoso (category I); linear housing by Pedro Cid and Fernando Torres; and linear housing and towers by Nuno Teotónio Pereira and António Pinto Freitas (category II).
- 14 Ana Tostões, "Obra Aberta: entre experimentalismo e contexto, um sentido de escola", in Ana Tostões (ed.) *Arquitectura e Cidadania: atelier Nuno Teotónio Pereira*, Lisboa, Quimera, 2004.
- 15 *Arquitectura*, No. 127-128, 1973, 57.
- 16 Inês Marques, *Arte e habitação em Lisboa 1945-1965. Cruzamentos entre desenho urbano, arquitetura e arte pública*, PhD thesis, Barcelona, Universitat de Barcelona, 2010.
- 17 Nuno Portas, "A Habitação Colectiva nos Ateliers da Rua da Alegria", *Jornal Arquitectos*, No. 204, 2002, 49.
- 18 1) Costa Martins, Hernâni Gandra, Coutinho Raposo, and Neves Galho; 2) Jorge Ferreira Chaves, and Goulart Medeiros, 03)

- Eduardo Moreira Santos; 04) Manuel Arroyo Barreira; 05) Victor Figueiredo, and Vasco Lobo; 06) Vasco Croft, Justino Morais, and Joaquim Cadima (sometimes with João Matoso); 07) António de Azevedo Gomes, and Fernando Shiappa de Campos (sometimes with Silva Campos); 08) Mário Xavier Antunes; 09) Bartolomeu Costa Cabral, and Nuno Portas; 10) Leopoldo Leal; 11) Fernando Gomes da Silva, Octávio Rego Costa and Sebastião Alves Samfins; 12) Jorge Teixeira Viana; 13) Frederico George and Manuel Alzina de Menezes; 14) Duarte Castelo Branco and Rui Pimentel; 15) Calvet da Costa; 16) Manuel Laginha and Rui Saraiva; 17) Luís Xavier; 18) Amândio Amaral; 19) Manuel Mendes Tainha and Raul Hestnes Ferreira; 20) Raul Chorão Ramalho and Raúl Santiago Pinto (sometimes with Nuno Simões); 21) Duarte Nuno Simões and Marília Noura; 22) Fernando Torres, Palma de Melo, Pires Martins, and Matos Gomes; 23) A. Petersen, L. Sá Marques, and F. Fonseca; 24) Alberto Camacho, Formozinho Sanches, and António Neves; 25) António Freitas, Silva Gomes, João C. Rebelo, and Nuno Teotónio Pereira; 26) A. Silva Gomes and F. Ferreira dos Santos.
- 19 Ana Tostões, “Plano dos Olivais Sul”, in Ana Tostões, Annette Becker, Wilfried Wang, *Portugal: Arquitectura do Século XX*, München/New York/Frankfurt/Lisboa, Prestel/DAM/PF97, 1998, 245.
- 20 Carlos Duarte, *op. cit.* 53–58.
- 21 “Conjunto de habitações económicas em Olivais-Sul”, *Arquitectura*, No. 110, 1969, 167.
- 22 Nuno Grande, “Bairro de Olivais Sul, Célula C”, in Ana Tostões, Nuno Grande, *Nuno Teotónio Pereira. Nuno Portas*, Lisboa, Verso da História e autores, 2013, 52.
- 23 Nuno Portas, *op. cit.*
- 24 Hernâni Gandra, Nevez Galhoz, Coutinho Raposo, Costa Martins, *Arquitectura*, No. 27, 1967, 115.
- 25 Nuno Portas, “A Evolução da Arquitectura Moderna em Portugal, uma Interpretação”, in Bruno Zevi, *História da Arquitectura Moderna*, Vol. 2, Lisboa, Arcádia, 1977.
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- 27 Ana Tostões, *Os Verdes Anos na Arquitectura Portuguesa dos Anos 50*, Porto, FAUP Publicações, 1997.
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- 45 “Infografia. Inquérito a seis bairros lisboetas”, *op. cit.*
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- 47 Census 2011. It is the area of the AML with the largest % of people with higher degrees.
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Ana Tostões

(Portugal, 1959). PhD, architect, architectural critic and historian, Chair of **docomomo** International and editor of **docomomo Journal**. Full Professor at Técnico – University of Lisbon, where she is coordinator of the architectural PhD program and the architecture research line of the Center for Innovation in Territory, Urbanism and Architecture (CiTUA). Her research field is the theory and history of architecture and construction of the 20th century, focusing on worldwide cultural transfers. She was awarded the title of Commander of the Order of Infante Dom Henrique (2006), with the Gulbenkian Prize (2014) and with the BIAU Prize (2016).

Zara Ferreira

(Portugal, 1988). Architect, MSc in Architecture (2012, Técnico – University of Lisbon, thesis: *The Modern and the Climate in the Lusophone Africa. School Buildings in Mozambique: The Fernando Mesquita Concept (1955–1975)*). She was the secretary general of **docomomo** International and co-editor of **docomomo Journal** (2014–2018). She is currently doing a PhD on the preservation of post-WWII European housing estates (Técnico – University of Lisbon) supported by a Doctoral Fellowship of the Portuguese Foundation for Science and Technology (FCT, SFRH/BD/115196/2016).