Revisiting Chelas.
In Search of the Promised Urbanness

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Chelas is situated in the east of Lisbon and corresponds to the third and final phase of a large-scale planning operation that began in the late 1950s, covering an area of roughly 737 hectares, equivalent to 1/10 of the city's total area. The Master Plan for *Chelas*, approved in 1964, was marked by the revision of the principles of modern planning and represents a landmark in town planning in Portugal. The protracted nature of the plan's implementation and the failure to complete all of its programs seriously compromised the success of the presented proposal.
This article proposes a reading of the ideological context that influenced its conception and design, as well as of the factors that conditioned its urbanisation process.

Introduction

Until the 1960s, the 510 ha that comprise the territory of Chelas remained isolated and practically immune to planning pressures, constituting a genuine anachronism, which can only be explained by its difficult conditions of accessibility and the existence of other priority axes in the city's development.

The studies for its urban development were begun in 1960 by a technical team[1] from the *Gabinete Técnico da Habitação* / (Housing Technical Office) (GTH) under the responsibility of Lisbon City Council. This team was composed of town planners, architects and other built environment professionals. Its activity benefited from the accumulated experience of the earlier phases of this planning operation – *Olivais Norte* (phase 1) and *Olivais Sul* (phase 2) – where the classical premises of "modern planning" had been applied, expressed in the form of the hierarchical cellular structure of neighbourhood units, which had become the paradigm of the programs for the construction of new postwar cities[2]. Together with their technical competence, they also shared an informed reformist approach to public urban development policies, seeking greater social justice, which was something unprecedented within the framework of town planning in Portugal.

At the time when this operation began, the predominant discourse was marked by a criticism of the doctrine and standardising view of modern planning arising from the most recent *International Congresses of Modern Architecture* (CIAM), namely "the separation of land uses, the accommodation of the automobile in the form of high-speed highways, the rejection of the street and street life, (and) the treatment of buildings as isolated objects in space rather than as part of the larger interconnected urban fabric". At stake was the search for an urban language that could promote the juxtaposition of a variety of different uses and could recover the sense of urbanness, regarded as "the key, defined as representing a way of life in which the concept of the town as a meeting place plays an important part" (Johnson and Johnson, 1977). It was not a question of breaking away from the functional principles of housing, work, recreation and circulation, from the Athens Charter, but rather amplifying them and adapting them to new situations with more elaborate proposals.

Encouraged by the debate that was in progress at that time, the planners involved in this operation were led to question the effectiveness of the model adopted in *Olivais Norte* and *Olivais Sul*, based on the neighbourhood units principle, with low densities, an abundance of open space and a segregation of uses (functional zoning). Housing was developed around a primary school and other local facilities, allowing people to live within a short walk of key facilities.

In *Olivais Norte*[3], we see a reflection of the solutions adopted in the first wave of new towns — Mark I new towns — built in a ring around London, in which the naturalistic tendency of the "garden city" gave way to the concept of the "city in the park", which was more dispersed and had a lower density[4]. The proposal involved the construction of isolated clusters of buildings, based on the typologies of strips and towers. The networks of green spaces are used to separate car traffic from the residential areas and provide access to green spaces throughout the area including formal and informal parks. In *Olivais Sul*, we see a densification of the residential areas through the use of new and more compact clusters of buildings. The proposal for building a civic centre detached from the neighbourhood units, with the aim of providing a meeting point for residents, was already a sign of the international debate taking place at that time, in contrast to the solution of small pedestrianised commercial areas with covered shopping malls within the neighbourhood units, which had been used in *Olivais Norte*.

The adopted strategies had made it possible to ensure an effective link between the housing units and their immediate

01 Éienne de Gröer, Master Plan of Lisbon, Lisbon, Portugal, the new expansion areas of *Olivais* and *Chelas* © GEO – *Gabinete de Estudos Olissiponenses*, DP 1272 CMLEO. See the detailed plans in the figures 05 and 06.
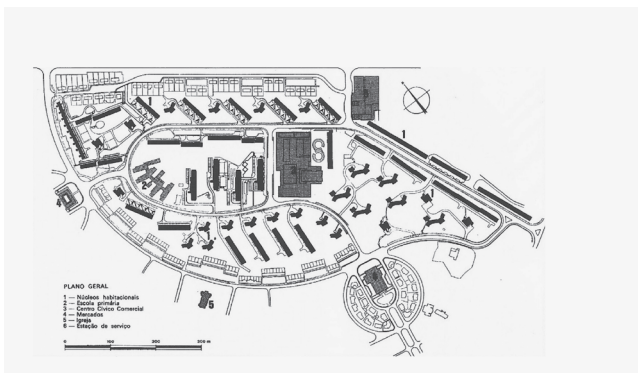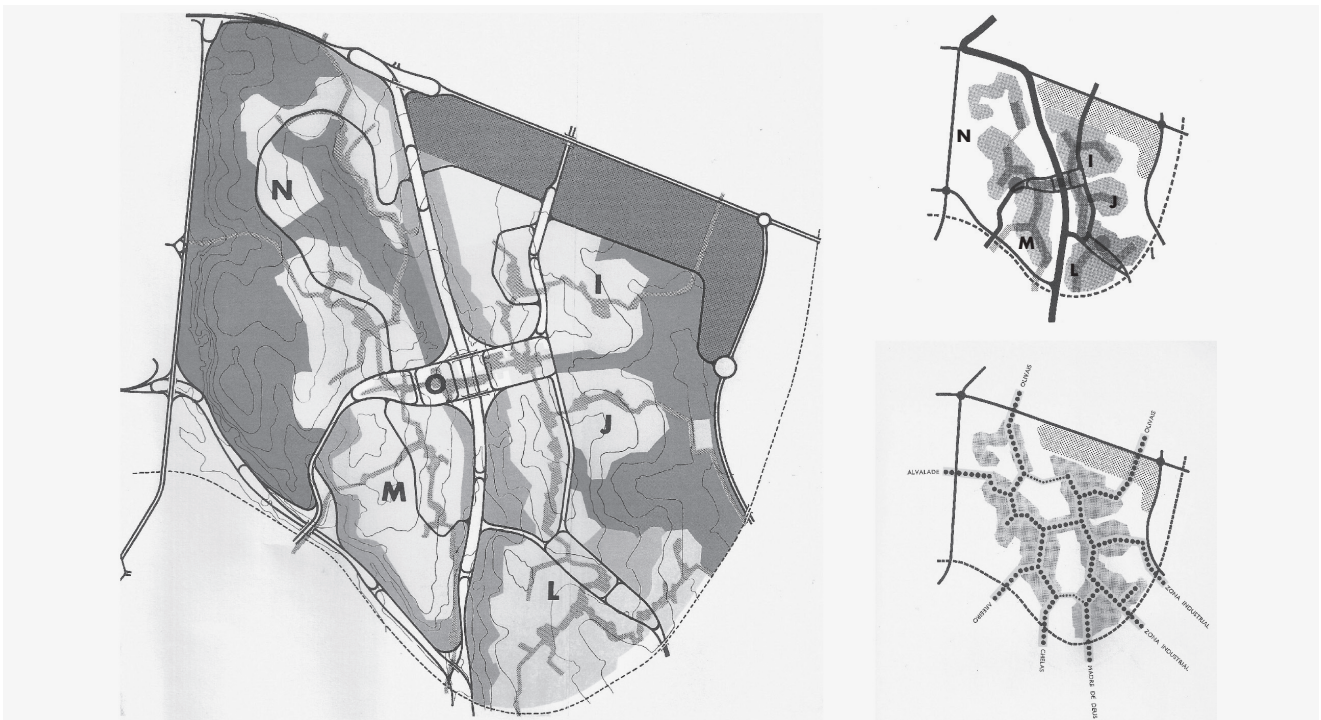

02 The *Chelas* master plan, Lisbon, Portugal, the main road network diagram and the connections with the outside. © 1964, CML-GTH.

03 Aerial view of *Chelas* from southwest, Lisbon, Portugal, The photo shows the area of Alvalade under development. © 1948, Historical Archives of the Portuguese Air Force, FAP 7184.

05 Étienne de Gröer, Master Plan of Lisbon, Lisbon, Portugal, the new expansion areas of *Olivais* and *Chelas* © GEO - *Gabinete de Estudos Olissiponenses*, DP 1272 CMLEO – Olivais Norte.

06 Étienne de Gröer, Master Plan of Lisbon, Lisbon, Portugal, the new expansion areas of *Olivais* and *Chelas* © GEO - *Gabinete de Estudos Olissiponenses*, DP 1272 CMLEO – Olivais Sul.

services and equipment. But the fact that no solution had been found for the relationship between the residential function and other productive equipment meant that *Olivais* was condemned to the status of a dormitory area.

The experiments that were being made at that time in the development of new towns in various European countries represented an additional motivation for Portuguese planners. The specialist international literature was already promoting new approaches and contributing to the dissemination of innovative experiences.

The model used in the expansion of the main Swedish cities, known as the ABC city (the acronym for *Arbete – Bostad – Centrum*, "Labour – Housing – Centre"), had become a central reference for the reflections being made on this subject. "The main idea was to replicate the variety and livability of traditional city life in newly created large-scale suburban areas. These new high-density areas of 25,000

to 30,000 residents were distributed in several neighbourhoods. The center of each one of them was located on the metropolitan transport network."[5]. Vällingby, in the suburbs of Stockholm, had successfully managed to reverse its dormitory status, and attempts were being made to adapt this exemplary experiment to the national reality[6].

The revision of the model adopted in the construction of the Mark I new towns in the United Kingdom had been introduced for the first time in Cumbernauld (1956-61), in the north-east of Glasgow, and was similarly arousing great interest. The strategies adopted for the densification of the residential areas, arising from the abandonment of the concept of the neighbourhood unit in favour of a "compact and nucleated model" and the inclusion of a large central multifunctional area embodying the concept of a megastructural edifice, "placed Cumbernauld at the forefront of architectural innovation"[7].

In parallel to the Urban Master Plan introduced by the London City Council for the construction of Hook, yet another new satellite town close to London (1959-61), great expectations were raised among Portuguese planners and their attentions were directed towards the strategies adopted. As Gold (2015) says:

From the Modern Movement came notions of urban form and building design. Hook would have embraced a commitment to greater clustering to provide what would have been effectively a walking-scale city arranged on linear principles, in which urban development would be arranged in strips around centrally-placed, high-speed route-ways. In addition, it offered the prospect of a central showpiece. A multilevel town centre intended to serve as a genuine focus for the gathering community, featuring shops and amenities placed on a pedestrian deck with cars and servicing beneath[8].

Although this new city was not built, the book *The planning of a New Town design based on a study for a New Town of 100,000 at Hook, Hampshire*, published in 1961, was soon converted into a manual.

News were arriving from France of the proposal being developed at that time for Toulouse-le-Mirail (1961–71) by the collective Team 10 of Georges Candilis (1913–1995), Alexis Josic (1921–) and Shadrach Woods (1923–1973). The creation of a megastructure composed of an area with a large concentration of activities and a high density of housing was seen as an attempt to restore the importance of the street, attributing to it a fundamental role in the life of the community.

Specialist Portuguese periodicals, such as *Arquitectura* and *Binário*, published articles about the new paradigms being followed in the construction of new towns or in the expansion of existing ones, showing evidence of various experiments that were in progress and were considered exemplary, justifying their pertinence and exhibiting signs of their actual completion. Robin Hood Gardens (Smithsons, 1962-72), Golden Lane (Smithsons, 1952), Park Hill, Hyde Park in Sheffield (I. Smith and J. Lynn, 1959-61), and Salermo (F. Gorio, 1961) were just some of the experiences that were disseminated and became a source of inspiration.

The Master Plan for *Chelas* was approved in 1964. The cellular model that had prevailed in *Olivais* was abandoned in favour of a model that was more linear and clustered in its form. Implicit in this new model was the vision of a more compact, multifunctional and socially diversified city with urban environments that were more attractive and vibrant, capable of promoting a closer community with a greater sense of neighbourliness.

In keeping with what was being proposed and tested in other cities, the planners entrusted with the task of drawing up the plan for *Chelas* based their thinking on the concept of a central area. The urban layout took the form of two parallel axes, described as 'linear strips of urban activity', which developed from a central core and then branched into secondary axes that formed the structure for five residential sectors[9] implanted at higher levels and which would each be afforded a different treatment so that they would be easily recognisable. As the focus of intense and diversified activity, the 'central core' stood out from the rest in formal and symbolic terms. Just as in the case of Hook, the plan was accompanied by maps that showed "the design and layout of a clustered area with a strongly demarcated centre located in a valley"[10].

In terms of mobility, the plan reflected the growing importance given to motor vehicle transport, which became a central parameter of urban planning. It assumed that the best way of overcoming barriers to pedestrian circulation was by establishing a functionally organised road system based on a hierarchy of flows and pedestrian-vehicle segregation.

After approval of the master plan, work began on the partial plans for the residential clusters. Replicated in these was the concept of linear principles in a tree-type solution in which the main axis ran across the whole site, bringing together housing, shops and services and being highlighted in formal terms. Grouped around this axis were a series of predominantly housing sub-clusters. In its urban layout, an attempt was made to interpret and recreate traditional elements of the urban form, namely the street-canal, the square and the interior spaces of the blocks.

The Implementation of the Plan

The solution that was adopted proved to be very controversial and it was often opposed by local residents. Today, *Chelas* has clearly established itself as a series of morphologically distinct parts, each with its own spatial idiosyncrasy, interconnected yet, at the same time, separated from one another and from the outside by the road network.

However, the failure of the vision of a formalised city in *Chelas* cannot be attributed solely to the reforming zeal and naivety of the architects and town planners involved, who were committed to creating a new type of town which would provide for future needs.

It is essential to bear in mind not only the specific characteristics of the place, but also the political and economic context in which this exercise in town planning took place, and which continually delayed its implementation and led to the failure to fulfil all the programs.

On the one hand, the topographical characteristics of the area conditioned the implementation of the plan from the very outset. The impossibility of building in continuity compromised the unity of the urban fabric, led to the rigid demarcation of the residential clusters and highlighted the discontinuity in relation to the surrounding areas, removing its potential as a walking-scale city.

On the other hand, the economic problems that the country was passing through, aggravated by the fact that earlier interventions were still in progress (*Olivais Norte* and *Olivais Sul*) ended up delaying the start of the *Chelas* intervention and drastically altered the development strategy. The integrated global operation that had been planned was interrupted and fragmented in its development, giving rise to a phased intervention that began in 1967.

The changes in public housing policies beginning in 1974 with the establishment of the democratic regime gave priority to the large-scale construction of social housing in order

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to rehouse the population living in slums. By making social diversification impossible, this gave rise to a social fabric consisting of a single class of the poorer population strata.

The building of the main road network and the connections with the outside, as well as the construction of the central nucleus kept on being delayed until the late 1990s. The building of the urban infrastructure and the road system accompanied the development of the residential clusters, with priority being given to the creation of local distribution networks. The preference given to the building of housing in detriment to other components that were complementary to the residential function cancelled out the desired functional diversity.

The first housing clusters — I, J and N2 — began to be built in the 1970s. In this case, the concept of linear principles was maintained, with work continuing into the 1980s. In clusters I (1972) and J (1980) — particular attention was given to the definition of a compact and formally coherent urban whole in order to enhance its formal legibility. Private outdoor spaces were eliminated and the connection of the public outdoor space to the private indoor space frequently meant resorting to transitional collective spaces.

In cluster I, the buildings have curved forms, adapting to the topography of the terrain. Particularly expressive are the elements of vertical and horizontal circulation. In cluster J, a continuous building structure was adopted, involving the use of continuous connecting elements superimposed on the structure of outdoor spaces. In cluster N2 (1975), contrary to what had happened previously, large clusters of buildings stand out along the main axis, conceived as autonomous units defining their own outdoor spaces which have no correspondence in the whole to which they belong. The reduced coherence of the layout resulting from the discontinuity between its constituent parts disturbs the legibility of the urban environment and interferes negatively in the organisation of activities and uses.

In the remaining clusters L, N1 and M, which began to be built in the late 1980s and 1990s, the concept of linear principles disappeared and residential monofunctionality became more evident. Instead a grid system was adopted, defining blocks that were open at the top. The buildings, belonging to the strip and block type, are arranged in parallel to the axes, in order to formally define the perimeter of the blocks and to recover the street as a space-canal.

08 Aerial view of Cluster N2, Lisbon, Portugal. © José Luís de Brito, 1995.

09 View from one of the main axes of the road system network, Lisbon, Portugal. © Saul de Carvalho, 2005.

10 Map of the area of *Chelas*, Lisbon, Portugal. © CML, 2016.

The solution adopted for the central core resulted from the revision of the initial plan in the early 1990s, which included a redefinition of the traffic circulation system and access to the surrounding areas. The construction of a megastructure in keeping with the model of a 'multilevel town centre' was abandoned, but the aim of creating a new centrality in the city was maintained: a busy centre which would also act as the neighbourhood shopping area. A podium structure was developed for the concentration of shops, which simultaneously supported 4 tower blocks with mixed uses. This structure stands out as an autonomous element linked to the main road network, without, however, being capable of generating pedestrian activity and directing their movement to the residential nuclei or imposing itself as an element that integrates the residential clusters as had initially been planned.

Studies developed and published while the plan was being drawn up had already identified some of the problems that might (and did) arise with its implementation and put forward measures of a functional and social nature with the aim of guarding against these problems actually happening. Aware of the financial difficulties accompanying the operation that threatened to render it unviable, the authors of these studies suggested that *Chelas* could only be integrated into the city if there was reciprocity in terms of functional and social relations. Accordingly, they highlighted the questions relating to the "social metrics" of the population to be housed there, to the creation of job offers in the neighbourhood, as well as to the conditions that would make it possible to link *Chelas* to its surrounding areas and facilitate the population's mobility both within and outside the neighbourhood[11]. Now, almost 5 decades later, we can see how pertinent those comments were.

Conclusion

Chelas was envisaged, programmed and built according to a humanistic view of social justice and public commitment, associated with the idea of intervening in the city on behalf of collective interests. It was the response that was given in keeping with the ethical posture that characterised the Modern Movement, and, in particular, in keeping with the voices and concerns raised at the most recent CIAM in defence of the quality of urban life, the need to promote a more "intense" urban experience, the desire to foster the sense of urbanness and collective life and to create more socially responsible environments.

Attempting to show that the plan's aims were achieved may be open to question, but the ideas underlying it continue to be pertinent ones in contemporary discourse. There is, however, no doubt that the vitality that this urban territory has shown, and the adjustments and completions that have been implemented with the participation of the local inhabitants, have helped to bring it closer to its original (humanistic) concept.

Notes

1   The team was coordinated by the architect José Rafael Botelho and comprised the architects Francisco da Silva Dias, João Rei Machado, Alfredo Silva Gomes, Luís Vassalo Rosa and Carlos Worm, and the engineers José Simões Coelho and Gonçalo Malheiro de Araújo.

2   Gibberd, F., "The master design; landscape; housing; the town centres" in Evans, H., *New Towns, The British Experience*, London, Charles Knight & Co. Ltd, 1972, 92.
3   Olivais Norte (40 ha; 2,500 homes; 10,000 inhabitants) and Olivais Sul (187 ha; 8,000 homes; 38,250 inhabitants).
4   Benevolo, L., Melograni, C., Longo, T.G., *La Progettazione della Città Moderna Versão consultada: Projectar a Cidade Moderna*, Colecção Dimensões, Lisboa, Editorial Presença, 1980 [1977], 100.
5   J. J. Guerin, "Vällingby", *Architecture and Building*, 33, 1958, 444–464.
6   The ABC concept gave way to the decentralization of the historical Stockholm city center with the creation of a number of decentralized satellite towns connected to the core city with a newly planned metro network. (Archer, 1969). Vällingby was the first prototype ABC city inaugurated in 1954. Vällingby received a number of visits by the team from the GTH. Duarte, C.S. (1965) and Goulart de Medeiros (1965) describe the study trips undertaken.
7   Reyner Banham, *Megastructure: Urban Futures of the Recent Past*, London, Thames and Hudson, 1976.
8   John R. Gold, "Hook: revisiting the New Town that might have been", introduction to London County Council, *The Planning of a New Town*, (originally published in 1961), Studies in International Planning History Series, London, Routledge, 2015, vii-xxviii.
9   The residential areas were destined for the construction of 11,500 homes, divided into five categories for a total of roughly 55,300 inhabitants (average density of 160 inhabitants/hectare).
10   John R. Gold, *op. cit.*.
11   A. Ribeiro Machado, "*Alguns Tópicos sobre o problema das Expropriações*", *Gabinete Técnico da Habitação* 1, No. 2, Set.-Out, Câmara Municipal de Lisboa, 1964, 58-62.

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