

Funchal's development and healing spaces of the twentieth century

(Summary)

This dissertation, results from a research on the architecture and urbanism of the city of Funchal in the twentieth century, relating the evolution of this urban center with the healing spaces, which are presented as a case study. It was "the fight against tuberculosis", from the middle of the nineteenth century, that motivated the realization of great works in this city, giving rise to its expansion as well as the renewal of construction practices. Moving patients to this city, looking for destinations with favorable climates for healing resulted in the emergence of seasonal tourism, a related phenomenon directly with climatherapy. The evolution of the healing method, in turn, has also resulted in the predilection of specific climates for the treatment of certain diseases, no longer having a preference exclusively for healing spaces by the sea, taking advantage of the maritime climate, and the emergence of therapy in particular. mountain climate with an environment of low atmospheric pressures and air purity.¹ Funchal, however, by its natural morphology presented several microclimates that simultaneously offered a maritime and mountainous climate. The natural features of the city associated with its marginality in relation to the industrial revolution, proved beneficial to the success of the activity. This period is marked in the history of economic development, architectural and public health as the phenomenon of the genesis of "therapeutic tourism" on the island.

As a consequence of this new activity, a process of expansion into and out of the city, on the hillside, tore down the defensive system of this intramural medieval city. From this time, the city of Funchal changed its paradigm, keeping an identity related to healing, which aims to explore this thesis, focusing on urban development and health equipment resulting from this period to the 70s this In this context, we intend to analyze the various healing spaces chronologically, characterizing and framing them in the evolution of the city and its image, answering the question: Is Funchal a sanatorium city? To answer this question, it was considered essential to study the set of works conceived by Ventura Terra, Carlos Ramos, Francisco Caldeira Cabral, João Faria da Costa and José Rafael Botelho, contextualizing them in the panorama of the country and Portuguese architecture, as well as , the study of the main health equipment, namely, the Hospital dos Marmeleiro, the Sanatorio Dr. João de Almada, the Preventório de Santa Isabel and the District Hospital of Funchal.

This analysis begins by addressing Ventura Terra's visionary plan for Funchal, which aimed to respond to the new needs of tourism (seeking to prepare the city for international tourism) and the reformulation of the urban fabric at the aesthetic and functional level. Despite the transformations made in the city during the nineteenth century, it still presented in the first decades of the twentieth century a set of conditions detrimental to the image of a city of therapeutic tourism. It had serious hygiene problems related to the lack of potable water and

¹ Rui Campos Matos, *A Arquitectura do Turismo Terapêutico - Madeira e Canárias, 1800-1914*. (Lisboa: Universidade de Lisboa, 2016), p.26, 27

sewage (conducted in the open by the streams), besides the presence of ventilation problems in the city, even after the demolition of the defensive system, due to the irregular urban network. The narrow, winding, bumpy streets that make up the city were far from the requirements that made up the road network of a modern city (beauty and convenience).² In order to respond to these demands, it draws up a split-part proposal to be implemented over the next 100 years, aimed at "cutting off the city with wide and appropriate squares and avenues, parks, gardens, neighborhoods of various categories, etc."³ Initially, his plan inspired by the works of Haussmann in Paris, points for better functional layout and aesthetics of the road network, promoting ventilation and accessibility of the city. The second layout would represent the transition studied between Funchal from 1913 and definitive Funchal (50 or 100 years from now), with the proposed avenues and streets. The political and economic instability of this era made it difficult to implement such a luxurious and bold project. However, it proved to be an important basis for the elaboration of the remaining urban plans of the first half of the twentieth century, as was the case of the Carlos Ramos Urbanization Plan (1931-1933).

Carlos Ramos's (1897-1969) Plan for Funchal City emerged in a context of crisis in Madeira. In 1930, the Funchal press "denounces the appalling misery that has struck large sections of the population where, through unemployment and hunger, tuberculosis rages, contributing to the high mortality rate"⁴. Similarly, there is a housing and public hygiene crisis in Funchal, associated with the disorderly construction of housing estates without the minimum health conditions. The lack of a general plan of the city and its surroundings would have contributed negatively to the development and urban quality of the city⁵, motivating the municipality of Funchal, despite the economic and social instability, to ask the architect Carlos Ramos for a modern urbanization plan for Funchal. Partly inspired by studies done fifteen years ago by his master, Ventura Terra, with whom he worked during his training at ESBAL, and supported by a large team, as well as his disciples Keil Amaral (1910-1975), Adelino Nunes (1903- 1948), Dario Vieira (1907-1956), Raul Tojal (1899-1969), Fred Kradolfer (1903-1968)⁶, proposes architectural and urbanistic novelties that are crucial for the modernization of the Madeiran capital. The works belonging to the Urbanization Plan for Funchal were exhibited in February 1932 at the Carlos Ramos Atelier in Lisbon⁷, and later in the Funchal Town Hall, when he took the opportunity to mention the rare opportunity in the country to carry out a joint work of

² Teresa Vasconcelos, *O Plano Ventura Terra e a Modernização da Cidade do Funchal (primeira metade do século XX)* (Funchal: Universidade da Madeira, 2005), pp.30, 31

³ Ventura Terra, *Memória Descritiva e Justificativa do Plano Geral de Melhoramentos do Funchal, texto policopiado*. Lisboa: 1915. Arquivo da Câmara Municipal do Funchal. p.1

⁴ Rui Carita, *História do Funchal* (Funchal: Imprensa Académica, 2017), p.214

⁵ Teresa Vasconcelos, (Funchal: Universidade da Madeira, 2005) *O Plano Ventura Terra e a Modernização da Cidade do Funchal (primeira metade do século XX)* (Universidade da Madeira, 2005), p.75

⁶ José Manuel Fernandes, *Carlos Ramos: Arquiteturas do Século XX em Portugal* (Lisboa: Imprensa Nacional - Casa da Moeda; Coimbra: Imprensa da Universidade de Coimbra, 2014), p. 135

⁷ Ibid., p.135

this nature⁸. The main interventions designed by Carlos Ramos, some commissioned by the Funchal City Council and others by the General Board of the District of Funchal (JGDF), are explicit with their respective location in the general plan of the city called "Localization of Improvements". The most significant works, however, were organized according to the surrounding area of the city, in the main expansion sites to the east, west, north and northeast. Many of these marked interventions represent the city's large square squares and gardens, as well as projects for the construction or adaptation of various types of buildings. Of this set of works stands out the Sanatorium.

In the early 1930s there was an increase in the number of tuberculosis patients in Funchal. Dr. João de Almada, Chairman of the Executive Board of the National Tuberculosis Assistance in Funchal, associated this occurrence "with poor housing conditions, ignorance of basic hygiene rules, overwork, even during pregnancy, weaknesses. congenital or acquired but, above all, the unsuccessful economic crisis." The impact of pulmonary physics on the population was overwhelming, and action had to be taken to combat this disease. The construction of new hospital equipment was indispensable, since the number of existing beds in the Hospice D. Maria Amélia and the Marmeiro Hospital was insufficient. Dr. João de Almada, in direct contact with this reality, points out to local authorities the imperative need to build a new space for the cure of tuberculosis, suggesting Quinta Sant'Ana, site of the former Kurhotel Amélia and Kurhaus Sant'Ana as the best place ⁹.

In this context, the General Board of the District of Funchal and Dr. João de Almada asked the collaboration of architect Carlos Ramos for the design of an Urbanization Plan, and a draft for the tuberculosis pavilion. The program devised for this work gave simple but precise directions for the establishment of "a tuberculosis pavilion of the same kind as Lumiar, for 100 patients, 50 Women and 50 Men, to be built near the Marmeiro Hospital", Taking advantage of its central and support services¹⁰. Reflecting on the program and the required functions, it seeks to distance itself from the reference indicated by the promoter, dedicating itself in the first instance to the investigation and analysis of other reference works in relation to sanatorial typology. After analyzing the effectiveness of these works in the treatment of pulmonary physics, it presents the approach of a "type of convex sanatorium over the south, shooting the eyes and intentions of these poor patients in divergent beam" ¹¹. This work, composed of an extensive, slightly curved and symmetrical four-story volume, was marked by three prominent volumes of the main façade, one central and one at each end, and long healing galleries along its length. Carlos Ramos' initial

⁸ Teresa Vasconcelos, *O Plano Ventura Terra e a Modernização da Cidade do Funchal (primeira metade do século XX)* (Funchal: Universidade da Madeira, 2005), p.80

⁹ Ibid. pp.102,103

¹⁰ Carlos Ramos, Memória Descritiva do Sanatório para Tuberculosos. 1932. FCG: CR 12; CR13.

¹¹ Carlos Ramos, Memória Descritiva do Sanatório para Tuberculosos.1932. BFCG: CR 12; CR13

proposal would never be built, however, it is considered that this project could be the basis for the built project of Dr. João de Almada Sanatorium, by architect Vasco Regaleira (1897-1968).¹²

The construction of the first project was in 1930 at the administrative table of the Santa Casa da Misericórdia of Funchal, however, from 1934, its construction became the responsibility of the National Assistance for Tuberculosis¹², resulting in a new project for the sanatorium. That same year, the ANT executive committee reportedly launched an "antituberculous armament" plan based on the "construction of tuberculosis treatment spaces, divided between sanatoriums, hospitals, sanatorium hospitals, preventive hospitals and dispensaries throughout Portugal", and who planned the construction of a sanatorium hospital for Funchal. The work that was to be built , according to Vasco Regaleira's typology , although similarly marked by the symmetry and theme of the long healing galleries facing the city, has a straight façade, without the same dynamism suggested by Carlos Ramos' draft. . The building stands out as a long, clean and austere horizontal volume, consisting of a semi-ground floor, three upper floors and a terrace covered by a long reinforced concrete slab. In its construction, the possibilities of new construction technologies were studied in relation to the exploitation of reinforced concrete and glass, enabling the construction of generous continuous balconies and large spans in the façade. It up so the first great building of "international style" built in the city with use of reinforced concrete. Its work began in 1936, being officially inaugurated on December 8, 1940, later, in 1942 was named Sanatorio Dr. João de Almada, in honor of its services provided in the fight against tuberculosis in Funchal¹³.

Despite efforts to address some of the problems raised in the Funchal Urbanization Plan of 1931-1933, the situation persisted. With the establishment of the Estado Novo in Portugal, Dr. Fernão Manuel de Ornelas Gonçalves, a man of vision, was responsible for a modernization policy that would deeply transform the city. Mainly based in Ventura Terra's improvement Plan and in Carlos Ramos Urbanization Plan enables the opening of several avenues in the city, such as Avenida Gonçalves Zarco, Manuel Avenida Arriaga, the West Avenue (now Avenida do Infante), Avenida do Mar and also Dr. Fernão de Ornelas Street. Also included in this process of transformation of the city are landscape architect Francisco Caldeira Cabral and urban architect João Faria da Costa. In this context, Caldeira Cabral collaborates on a set of beautification projects underway in the city (in 1941) , "such as the extension of Avenida Marginal, Praça do Municipio, arrangement of the Jardim de S. Francisco", Largo da Restauração and Parque de Santa Catarina¹⁴. With regard to the urbanist architect Faria da Costa, this helps u with an important study Remodeling of the Marginal Zone (1945) , including projects for the Avenida do Mar and the streets in their immediate area , as well as the extension of the Port Funchal, the arrangement of circulation in the Town Square and also the Jaime Moniz High School. He also

¹²Teresa Vasconcelos, *O Plano Ventura Terra e a Modernização da Cidade do Funchal (primeira metade do século XX)* (Funchal: Universidade da Madeira, 2005), p.103

¹³ Teresa Vasconcelos, *O Plano Ventura Terra e a Modernização da Cidade do Funchal (primeira metade do século XX)* (Funchal: Universidade da Madeira, 2005), pp. 104.105

¹⁴ Teresa Andresen, *Do Estádio Nacional ao Jardim Gulbenkian* (Lisboa: FCG, 2005), p.200

carried out studies for five of the blocks bordering Avenida do Mar and contributed to the design of three of the buildings built: the new Customs Headquarters (1956), the Funchal Harbor Captaincy (1947) and the GNR (1959).

Still in the 1940s, the Santa Isabel Preventory, designed by architect Edmundo Tavares in 1936, was under construction, but would not be completed until 1951 due to lack of funds¹⁵. The Santa Isabel Preventory, intended for the surveillance and care of children with parents affected by tuberculosis, was set up in a land north of the Sanatorium, approximately 420 meters above sea level. In this building, architect Edmundo Tavares follows the stylistic line adopted in the second project for the Liceu, a modern expression associated with nationalism, monumentality, a language defended by the Estado Novo in the construction of public works. In this sense, it used the drawing of a simple and austere parallelepiped volume, consisting of a semi-ground floor, three upper floors and a tiled roof with four north facing dormer windows (as opposed to the flat roof provided for in the initial project). The façade is animated by two generous detached balconies of the main façade (from which the main ground floor access stairway is projected), a volume with a terraced roof overhanging the side façades, and yet another cylindrical volume on the back façade with direct access to service areas. It stands out in this healing space its imposing and symmetry, as well as its longitudinal spans in the main façade, which allow access to the covered healing galleries and the illumination of the various treatment cells of patients.

The Antituberculous Dispensary built in Funchal refers to the Carlos Variant developed by Carlos Ramos in 1934, a model designed to be deployed in the most populous cities or municipalities. This important health facility, set in a prominent position north of Tenerife Square (Campo da Barca), is a faithful representation of "a Portuguese House", with the roof in expressive evidence, bordered on a triangular pediment that marks the axis of symmetry. The hesitation between the representation of an eventual national style and the conventions of compositional symmetry of an academic design do not conflict. The simplicity of the building coincides with the simplicity of the program, with three rooms (treatment, consultation and pharmacy) in the district program, complemented by an x-ray space and toilet facilities."¹⁶.

In the context of the country, the "Hospital Renovation" program of the Hospital Constructions Commission (created in 1946 by Law 2011) had as its competences the study, design, construction, expansion, adaptation, restoration, conservation and equipment of hospital establishments.¹⁷ The objectives of this Commission were fundamentally based on the objectives announced in the III Development Plan for 1968-1973¹⁸, where the intention to build a total of fifteen regional hospitals was mentioned: "three (Beja, Bragança and Funchal) are being

¹⁵ Ibid., pp.104, 105

¹⁶ André Tavares, *Arquitectura Antituberculose, Trocas e tráficos na construção terapêutica entre Portugal e Suíça* (Porto: FAUP Publicações, 2005), p.219

¹⁷ Francisco Teves, Nota Histórica, 23.11.2005. Projeto de Investigação FCT_CuCa_RE

¹⁸ Arquitectura, nº117-118, 4ª série, (Set.-Dez. 1970). FCT_CuCa_RE

concluded and six (Faro, Portalegre, Castelo Branco, Viana do Castelo, Aveiro and Évora) project preparation or start of works ".¹⁹

In the 1950s and 1960s, Funchal's main hospital equipment was the Marmeleteiros Hospital, originally a German Popular Sanatorium adapted to its role as a hospital in 1930, which, despite its recent addition of a floor, was only able to 385 beds, when 500 were needed. The overcrowding and the distance from the equipment to the urban center made this situation unbearable, since both Funchal and the rest of the island depended on their services. In this context, the construction of a District Hospital in Funchal was urgent. This equipment was intended to serve the population of the island of Madeira, which was around 269 thousand inhabitants in 1960, of which 99000 belonged to Funchal²⁰. In view of this situation, and bearing in mind that the forecasts for the population of Funchal in 1985 amounted to 204 392 (excluding the population of neighboring municipalities)²¹ intervention needed²².

The program that underpinned the study of the initial draft, carried out by the Hospital Constructions Commission, planned the construction of an extended Northwest-Southwest hospital unit in favor of the steep slope of the Ribeiro Seco valley. Unfavorable soil conditions , associated with the small size of the terrain and its limited limitation to the west by the valley, resulted in the choice of a tall building development, with its location in areas of low clay soil thickness.²³ These circumstances and the successive changes to the initial program carried out in 1960 influenced the project carried out by Eduardo Valente Hilário, architect responsible for the Hospital Constructions Commission. Its final proposal was the layout of a south-facing main building consisting of a 14-storey central block (zone 2), a north-linked 3-storey building (zone 1), another 2-storey south-linked building (zone 3), and an annex building.²⁴ The austere and most prominent body in the landscape (zone 2) is characterized by a parallelepiped central volume connected to two wings, one to the east and one to the west, slightly turned to the center creating a concave plant in It faces south and directs the view of the rooms to the west of the city and the ocean. At the same time as the construction of the Hospital (1973) was completed , the first works of enlargement and construction of new access routes to health equipment began.²⁵ This being one of the main works to be carried out of the Funchal Master Plan, prepared by José Rafael Botelho.

This urban architect architect led the team responsible for the elaboration of the Master Plan of the City of Funchal (between 1965 and 1970) , together with Pitum Keil Amaral (1935-)

¹⁹ III *Plano de Fomento para 1968-1973*, p.195. FCT_CuCa_RE

²⁰ Raul da Silva Pereira, "Habitação e Urbanismo no Funchal". *Colóquio de Urbanismo: Palestras e conclusões das mesas redondas* (Funchal: CMF, 1969), p.75

²¹ O concelho da Calheta tinha 21 799 habitantes e o concelho de Câmara de Lobos 29 759 habitantes

²² Eduardo Valente Hilário, "Hospital Regional do Funchal". *Arquitectura*, nº117-118, (Set.-Dez. 1970), p.190

²³ Memória Descritiva da construção do Hospital Distrital do Funchal, 1960?. AHMOP

²⁴ Eduardo Valente Hilário, "Hospital Regional do Funchal". *Arquitectura*, nº117-118, (Set.-Dez. 1970), p.190, 191

²⁵ Ibid.

and José Luís Zúquete (1935-)²⁶. At this time of crisis, which marks the passage for the tourism cycle in Funchal, it was the responsibility of the Chamber “to draw up the general plan and partial plans necessary to guide the city's evolution and orderly physical development.”²⁷ As such, it was urgent to establish an 'urban policy' that would promote the 'process of transformation' of the city. In Rafael Botelho's opinion, this process required not only “mechanisms of action, participation and decision appropriate to this policy”, but also integrated and operational planning that integrated, in addition to the physical, economic, social and institutional information. It was the intention of the architect and his work team to guide the city's master plan as a part of this process, seeking to further lay the foundational guidelines of the plan through a series of complementary operations. These operations included in the process of drafting the plan the execution of preliminary studies, a preliminary draft (carried out in 1968) and the program called the “Urbanism Colloquium”.²⁸

At the conclusion of this lecture cycle, architect José Rafael Botelho sets out his plans for Funchal, referring to the various expansion, regeneration and renovation requirements to be met, based on planning programs and plans. In his view, these needs should be considered globally and integrated into an overall vision, something which he became especially aware of during his participation in this Colloquium. Among the various shortcomings to be addressed, considers it urgent: “the construction of housing, including those for the economically weaker”; “The conservation of the main existing values, both built and natural”; “Improving traffic and public transport conditions”; “The regeneration and renewal of unhealthy areas, deteriorated or inadequate to the current demands of city life”; “Forecasting new areas for the establishment of new sources of work, namely industries”; “The enhancement and enhancement of recreational forms, especially outdoors”; “Improving and widening public service networks”; “The creation of primary schools and other educational and cultural establishments”.²⁹

After this extensive research on the city and the healing spaces, it is considered that, in fact, Funchal had the characteristics of a sanatorium city, closely related to the healing spaces by the characteristics that qualified it as a natural sanatorium. The discovery of a cure for tuberculosis changed its paradigm, however, it was the first healing spaces such as hotels and farms, associated with the qualities of the weather, that made it possible to reinvent the city to a world-class tourist destination. Knowledge of these important spaces is expected to contribute to a responsible rehabilitation practice, taking into account the architectural and heritage value of the buildings and their surroundings.

²⁶ José Manuel Fernandes, “José Rafael Botelho e o Planeamento Urbano em Portugal”. *Plano Rafael Botelho: Funchal 1969/72* (Funchal: Delegação da Madeira da Ordem dos Arquitectos, 2015), pp.15,16

²⁷ *Colóquio de Urbanismo: Palestras e conclusões das mesas redondas* (Funchal: CMF, 1969), p.V

²⁸ José Rafael Botelho, “O Plano Director da cidade do Funchal”. *Arquitectura*, nº114,1970, pp.51, 52

²⁹ José Rafael Botelho, “Realizações Urbanísticas e Programação”. *Colóquio de Urbanismo: Palestras e conclusões das mesas redondas* (Funchal: CMF, 1969), pp.143,144