



Alberto Pessoa, Hermâni Gandia and João Abel Manta, Infante Santo Avenue, mixed use tower, Lisbon, Portugal, 1953, computer generated image. © Tiago Farinha with António Damásio. (a63d.biz)

## City Architecture. The Example of *Infante Santo* Avenue (1945–1955)

BY TIAGO FARINHA

*Infante Santo* was idealized as a modern way of living in a modern avenue, within the existing city. This comprehensive project of city architecture, coordinated by the architect Alberto Pessoa (1919–1985) and built during the 1950s, embodies a site-specific attitude of cultural and urban continuity. During its planning and construction, this major urban project was first exhibited in Lisbon, in 1951, and then in Rome, 1955, London, 1956, Washington, 1958, Brussels, 1958, and also published in the French magazine *L'Architecture d'aujourd'hui*, in 1960. Today, the absence of a strategy for approaching *Infante Santo* as a whole is compromising its adaptation for the future.

From 1945 until the end of 1950s, the architect Alberto Pessoa (1919–1985)<sup>1</sup> was commissioned by the City Council, at the time chaired by Lieutenant-Colonel Salvação Barreto, to coordinate the urban project of *Infante Santo* Avenue, initially named *Tenente Valadim*. This new axis of the city, between *Basilica da Estrela* and the new city harbor along *24 de Julho* Avenue, was idealized as a modern avenue, drawn “in traditional urban fabric”, combining the “modern orthodox ideology” and the “peculiar geography” of Lisbon<sup>2</sup>.

### Urbanism

In the mid 1940s the word *urbanism* “sounds like an announcement of the new times”, yet “few people understand its real meaning”<sup>3</sup>. After concluding the course of Architecture at the Fine Arts School of Lisbon (EBAL) in 1943, the architect Alberto Pessoa attended the first course of Urbanism held at EBAL in 1945, under the influence of Professor Étienne de Gröer<sup>4</sup>. Later on, Alberto Pessoa became professor of Urbanism, 1951–1955, and Architecture, 1955–1960 at EBAL.

By focusing on a “conscientious study” of urbanism and housing, under the principles expressed in the Athens Charter<sup>5</sup>, and “in close contact with national realities”, Alberto Pessoa shared the overall spirit of the 1<sup>st</sup> *National Congress of Architecture*, held in Lisbon in 1948, where the construction of “functional and economic” housing units integrated into “rational plans of urbanization” was advocated, ensuring “wide open spaces”, and taking advantage of “technical knowledge and modern tools” towards a better quality of construction<sup>6</sup>.

After concluding the courses of architecture and urbanism, Alberto Pessoa worked for the Lisbon City Council, 1945–1947 and, in that period, developed the masterplan and the projects of public space and urban infrastructure of *Tenente Valadim* Avenue (Figure 02), the construction of which lasted until 1950. Already working as an independent architect, in 1949 Alberto Pessoa was commissioned

by the City Council to develop the preliminary study of the buildings in the central area of the avenue, a study that combined low-rise buildings with a public inner garden on the west side of the avenue and a modern set of 4 housing units with 8 floors, supported on *pilotis*, perpendicular to the avenue, on the east side of it. The first project of the housing units, including a market plaza and shops, was completed in 1950, setting out the main criteria underlying the design of this avenue, particularly its adaptation to the topography, the “link between architecture and nature”, the design of “accommodation on two levels” and the “simplification of access systems”, advocating a “more rational, comfortable and efficient” way of urban life<sup>7</sup>.

The preliminary studies of *Tenente Valadim* Avenue, meanwhile called *Infante Santo* Avenue, were revised and detailed between 1953 and 1955 by the architects Alberto Pessoa, Hernâni Gandra (1914–1988), and João Abel Manta (1925–). The new urban study included the architectural project of the different building types anticipated for this central area of the avenue, mainly combining a civic and shopping plaza, nine low-rise housing buildings, a mixed use tower, and five housing units<sup>8</sup>.

This “plastic harmony of volumes” was adjusted to the constraints of the site. On the west side of the avenue the site had very irregular depths, and the construction was developed parallel to the avenue, framing the rear of the existing buildings on the upper level, punctuated by a prominent volume facing a small civic plaza. On the east side of the avenue the site had almost uniform depth, although with a steep slope. The construction was organized in 5 housing units, perpendicular to the avenue, supported on *pilotis*, over a platform that was adapted to the topography and integrated retail and office spaces (Figure 03). The garden extended continuously along the platform, over the housing units, allowing the “unification of the green spaces” above the avenue<sup>9</sup>.



The precise idea of architecture, public space, and urban landscape is clearly manifested in the asymmetric profile drawn for the avenue, developed in collaboration with the landscape architect Gonalo Ribeiro Telles (1922–). The west sidewalk, 13 m wide, includes a large planted bed protecting the low-rise housing buildings from the traffic noise. Whereas the east sidewalk, 7 m wide, planned to be free from any urban obstacle — including lighting, that would be integrated in the buildings — faces directly the traffic of the avenue, playing as an urban kinetic device, with shop windows and modern urban art murals framing the stairs that connect to the quiet garden above.

This sense of “urbanistic update” is due to the will of a new generation of professionals working with the City Council, committed to the idea of a qualified urban environment in a city under active expansion<sup>10</sup>.

### Housing Unit

The group of 5 housing units (Figure 04), perpendicular to the avenue, was designed between 1950 and 1954, based on a system of circulation galleries serving “accommodations on two levels” (Figure 05, 06). This interpretation of a “current solution in detached houses” is a compromise for the bourgeois and modern “custom and lifestyle of Lisbon’s middle class”. The result is a comfortable and rational independence of service circulation and a “complete isolation of day and night areas”<sup>11</sup>.

The main access to six apartments on each floor is solved with three private elevators serving groups of two apartments. This system is completed with a central core that includes a service lift and stairs, linked with “the kitchen access service galleries”. The roof terrace of each housing unit includes a concierge’s residence, a communal laundry area, and also a sheltered space for “recreation and leisure”. The height difference between the level of the avenue and the level of the garden platform is designed with an alignment of shops and support walls covered with tile panels, framing the stairs that connect the different levels of public space<sup>12</sup>.

The “metaphor of the housing machine” is determinant in the “conception of access and distribution systems”, in the “articulation of service areas”, in the “coordination of the structural system”, and in the “idea of type” which can be “codified” and repeated<sup>13</sup>.

### Mixed Use Tower

The low-rise housing buildings along the west side of *Infante Santo* Avenue were planned to be punctuated by a mixed use tower, 18 floors high. This tower was never built, and the architects ended up designing a lower housing unit, but the reconstitution of a computer generated image allows us to perceive the urban and architectonic conception of the tower (Figure 01). The 3 first floors were dedicated to shops, restaurants and offices. From the 3<sup>rd</sup> to 7<sup>th</sup> floor the tower had two grand apartments per floor, and in the upper floors there were 2 duplex apartments facing south, with a clear view over the river, and 2 smaller single room apartments facing east and west. This modern tower was planned to be part of a dynamic civic center, designed as a

cluster of 2 plazas next to each other (Figure 07), on both sides of the avenue, foreseeing an intense urban mixture of public space, housing, offices and shopping areas, as well as the new facilities of the Parish Council, including a health center and a police station.

### Hotel and Restaurant

The study of the intersection between *Infante Santo* Avenue and *24 de Julho* Avenue was also included in the first projects of public space and urban infrastructure developed by Alberto Pessoa while working for the City Council, 1945–1947. Thereafter, in 1950 the architect was commissioned to detail this intersection having proposed an architectural system where buildings incorporate a public space on different levels, including an “office block” with shops on its lower levels, along an “outdoor gallery” that potentiate the “commercial life” of the building and guarantee the public access between the upper and lower levels of the existent streets, now connected<sup>14</sup>.

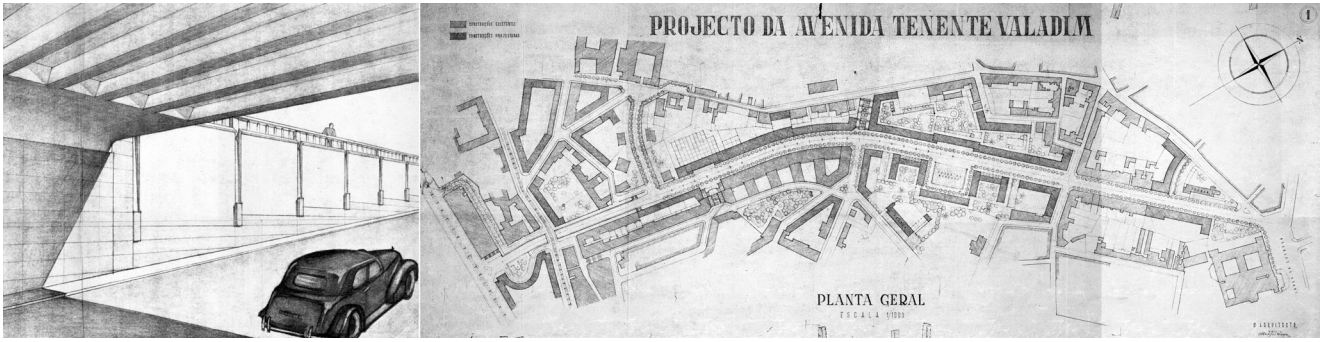
The “office block” was not built but the changes to the project led to the construction of *Infante Santo* Hotel, 1955–1957 (Figure 08). The Hotel is located at the end of a “main artery” of the city, near the new harbor, with “good orientation”, and “wide views” of the river. In the 6 upper floors there are the 27 hotel rooms and the 2 lower floors host a “public restaurant”, also for the use of hotel guests, a shopping area, with access from the “public gallery”, and the spaces for hotel services. The “aesthetic appearance of the building” arises from the “careful solution of the problems”, the “construction system”, and the materials adopted,<sup>15</sup> solving both the urban image and the public space of a dynamic location in the city.

### Construction Technology

In 1953 Alberto Pessoa published a study on the “Modulation of Construction”, developed in the National Civil Engineering Laboratory (LNEC), based on the international adoption of a 10 cm module that works as “coordinator of dimensions”, minimizing waste and enabling “a disciplined freedom in the technique and art of construction”<sup>16</sup>. This study confirmed the “conscience” of “economy and rationality” that dominated the practise of architecture in the 1950s, particularly the “standardization effort” related to multi-unit housing<sup>17</sup>.

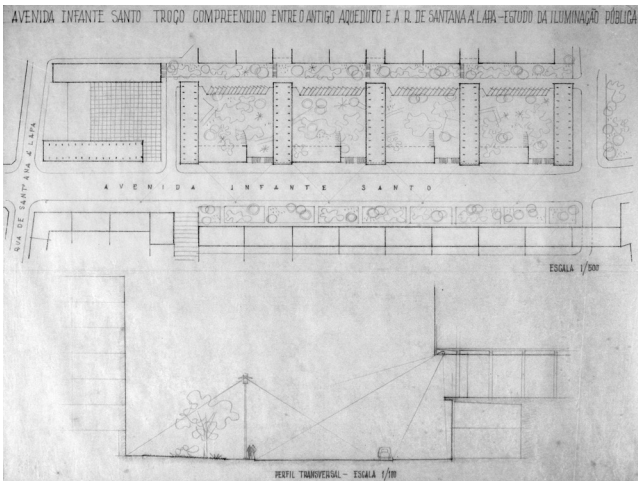
In the same year Lisbon hosted the 3<sup>rd</sup> Congress of the *International Union of Architects*, UIA, chaired by Sir Patrick Abercrombie, which involved about 550 architects, engineers and students from 35 countries around the world. The discussion was centered on the role of the architect, the engineer, the urbanist, and the collaboration between them, the theme of housing habitat and the theme of industrialization and modular nature of construction.

Between 1953 and 1955, the architects Alberto Pessoa, Hernani Gandra, and Joao Abel Manta, together with the engineers Jordao Vieira Dias and Antonio Alves de Sousa, detailed the projects of the 12 different building types in the central area of *Infante Santo* Avenue, fully subjected to a module of 10 cm, in plans, sections and elevations, according to

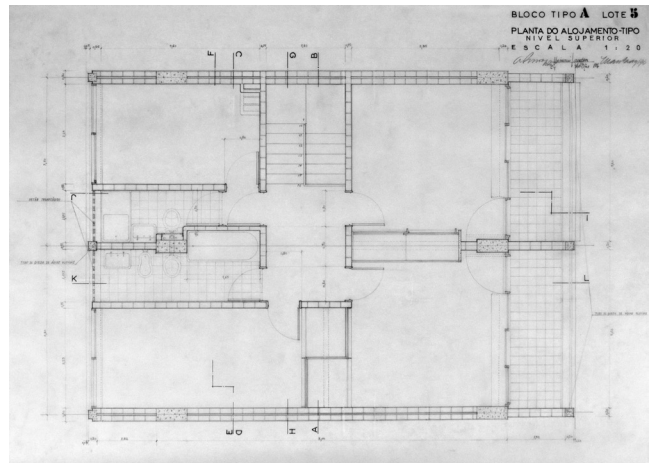


02 Alberto Pessoa, *Tenente Valadim Avenue*, masterplan, Lisbon, Portugal, 1945-1947. © Lisbon Municipal Archive, UROB\_PU\_10\_162\_01, folio 14+6.

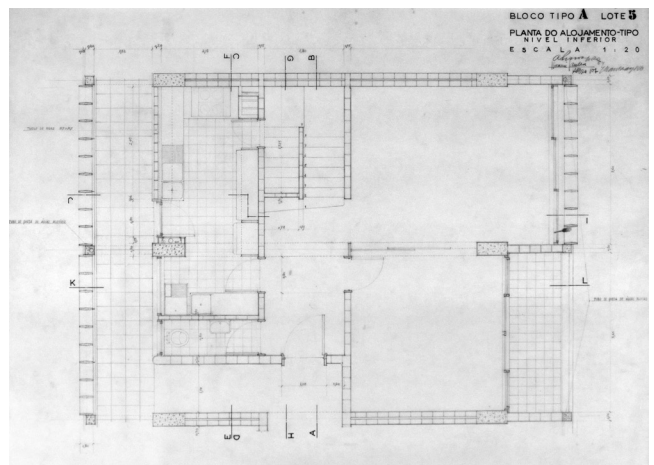
03 Alberto Pessoa, Hernâni Gandra, and João Abel Manta, *Infante Santo Avenue*, urban study, Lisbon, Portugal, 1953. © Alberto Pessoa Archive, lx49\_IMG\_4991, Tiago Farinha, 2013.



05 Alberto Pessoa, Hernâni Gandra, and João Abel Manta, *Infante Santo Avenue*, housing units, modular apartment, upper level, Lisbon, Portugal, 1953-1954. © Alberto Pessoa Archive, lx50\_IMG\_5070\_5074, Tiago Farinha, 2013.



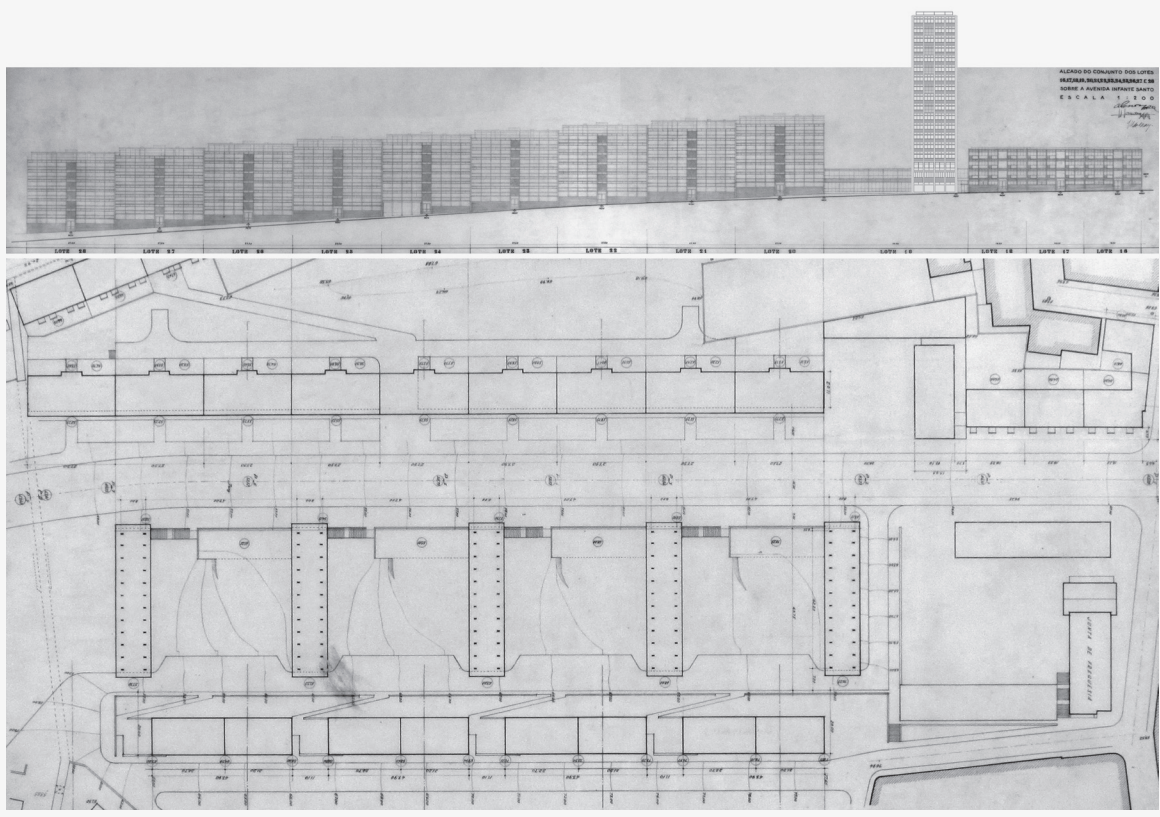
04 Alberto Pessoa, Hernâni Gandra, and João Abel Manta, *Infante Santo Avenue*, housing units, Lisbon, Portugal, 1949-1954. © Lisbon Municipal Archive, PT\_AMLSB\_MMJ\_000091, Manuel Mendes de Jesus, 1957.



06 Alberto Pessoa, Hernâni Gandra, and João Abel Manta, *Infante Santo Avenue*, housing units, modular apartment, entrance level, Lisbon, Portugal, 1953-1954. © Alberto Pessoa Archive, lx50\_IMG\_5070\_5074, Tiago Farinha, 2013.



**07** Alberto Pessoa, Hernâni Gandra, and João Abel Manta, *Infante Santo* Avenue, urban study, Lisbon, Portugal, 1953-1954, original drawings and digital collage with the mixed use tower facade. © Alberto Pessoa Archive, Lx52\_IMG\_6196-6198 + Lx50\_IMG\_5133, Tiago Farinha, 2013 (original digitalization), 2016 (digital collage).



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Essays



**08** Alberto Pessoa, *Infante Santo* Avenue, hotel and restaurant, Lisbon, Portugal, 1955. © Lisbon Municipal Archive, PT\_AMLSB\_SER\_I03737, Armando Serôdio, 1965.



**09** Alberto Pessoa, Hernâni Gandra, and João Abel Manta, *Infante Santo* Avenue, Lisbon, Portugal, 1945-1955. © Lisbon Municipal Archive, PT\_AMLSB\_AIB\_S01975, Artur Inácio Bastos, 1970.

the “Modulation of Construction” study that Alberto Pessoa had just published. This preoccupation with construction technology was based on what Mies van der Rohe would call “The Art of Structure”<sup>18</sup>, something of a rational and objective coincidence between form, construction and language.

### City Architecture

The modern conception of *Infante Santo*'s urban setting, its permeability between public and private space, was molded in a period when the disciplines of urban design and landscape architecture were consolidating. Urban designers were experimenting “compact urban housing, pedestrian-based neighborhood unit organization, greenway systems, and enclosed pedestrian civic plazas”<sup>19</sup>, while landscape architects were comprehending the wide green open spaces left by the Athens Charter since the 1930s.

In the meantime, the attitude of a site-specific realism was the outcome of a rational process that Alberto Pessoa, Hernâni Gandra, and João Abel Manta envisioned as “more as an architecture of city than properly buildings”<sup>20</sup>. The detail of the *Infante Santo* urban plan as an architectural project resulted in a modern proposal for living in a modern avenue, within the existing city (Figure 09). An atmosphere of urban comfort, neighborhood feeling and street life is supported by a continuous system of public and communal spaces, running from the sidewalk of the avenue to the main garden along the housing units, into the circulation gallery and the accessible roof top of the buildings.

### Notes

This essay follows the PhD investigation that the author is now concluding at Técnico — University of Lisbon, comprising a monographic study about the work of architect Alberto Pessoa (1919–1985) advised by Professor Ana Tostões, with a scholarship from *Fundação para a Ciência e a Tecnologia*, FCT-SFRH/BD/87384/2012.

- 1 Alberto Pessoa played an important role as an architect, urbanist, and professor, disseminating the architecture of the Modern Movement in Portugal. Graduating in 1943 at the Fine Arts School of Lisbon (EBAL), during the 1950s he integrated the direction of the National Syndicate of Architects, was director of the modern magazine *Arquitetura*, and was professor of urbanism and architecture at EBAL. In 1959, along with Pedro Cid and Ruy Athouguia, Alberto Pessoa won the competition for the Calouste Gulbenkian Headquarters and Museum in Lisbon. In 1962 he commenced working as a city planning consultant in *Figueira da Foz*, together with the landscape architect Gonçalo Ribeiro Telles.
- 2 Ana Tostões, *A Idade Maior: Cultura e Tecnologia na Arquitetura Moderna Portuguesa*, Porto, FAUP Publicações, 2015, 360.
- 3 Étienne de Gröer, “Introdução ao Urbanismo”, *Boletim da Direcção Geral dos Serviços de Urbanização*, Vol. I, 1945–1946, Lisboa, DGSU, 1946, 17–86.
- 4 Étienne de Gröer (1882–1974), professor at the *Institute of Urbanism* in Paris, was also studding the Masterplan of Lisbon, concluded in 1948.
- 5 The Athens Charter is the urban manifesto resulting from the 4<sup>th</sup> *International Congress of Modern Architecture* (CIAM) in 1933, published by Le Corbusier in 1943, and worldwide influent after WWII.
- 6 Report of the 1<sup>st</sup> *National Congress of Architecture*, Lisbon, SNA, 1948.
- 7 Lisbon Municipal Archive, UROB-PU/10/164. *Tenente Valadim* Avenue, central area, project description, March 1949 and December 1950, Alberto Pessoa.
- 8 Lisbon Municipal Archive, ADMG-N/02/04017.
- 9 Manuel Tainha, “Avenida Infante Santo. Troço entre a Rua de Santana à Lapa e o antigo Aqueduto”, *Binário*, 2, Lisboa, A. Palmares, Maio 1958, 10–23.
- 10 Ana Tostões, “Cidade e Natureza: Planos Parcelares como Instrumentos (de equilíbrio) da Paisagem Urbana”, *A Utopia e os Pés na Terra: Gonçalo Ribeiro Telles*, Lisboa, *Instituto Português dos Museus*, 2003, 137–146.
- 11 Lisbon Municipal Archive, UROB-PU/10/164. *Tenente Valadim* Avenue,

- central area, project description, March 1949 and December 1950, Alberto Pessoa.
- 12 Lisbon Municipal Archive, obra 35059, 26910, 26413, 26439, 26415, *Infante Santo* Avenue 64, 66, 68, 70 e 72, type A, project description, January 1954. Alberto Pessoa Archive, Lx50.
- 13 Ana Tostões, *op. cit.*, 361.
- 14 Cândido Palma de Melo; Francisco da Conceição Silva, “*Bloco de Escritórios*”, *Arquitetura*, 36, Novembro 1950, Lisboa, ICAT, 12–14.
- 15 Lisbon Municipal Archive, obra 28729, *Infante Santo* Hotel, project description, January 1955. Alberto Pessoa Archive, Lx01.
- 16 Alberto Pessoa, *Modulação das Construções: exemplos de aplicação*, Lisboa, LNEC, 1953, 3.
- 17 Ana Tostões, *op. cit.*, 306.
- 18 Werner Blaser, *Mies van der Rohe: The Art of Structure*, New York, Whitney Library of Design, 1994 (original contents arranged by Werner Blaser and Mies van der Rohe in 1964).
- 19 Eric Mumford, *Defining Urban Design: CIAM architects and the formation of a discipline, 1937–69*, New Haven and London, Yale University Press, 2009, 197.
- 20 Interview with the architect João Abel Manta, May 2011.

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