

DOI: <http://dx.doi.org/10.4995/LC2015.2015.978>

## Le Corbusier's legacy in the tropics: modern architecture in Angola and Mozambique (1950-70)

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**Abstract:** *Le Corbusier's work and thought are a predominant influence over the Modern Movement, and their worldwide spreading acquired a significant dimension during the Second Post-War period. Such predominance of the architectural models conveyed by Le Corbusier may have originated in the rationale enunciated in his written work, which clearly explains a set of doctrinaire parameters, or in his active determinant role in international organisations such as the CIAM, but particularly in his ability to become a global architect, which led to a large international publication of his work. This paper intends to analyse the significance of the Corbusian legacy in architectural production in Angola and Mozambique during the 1950s and 1960s. These two former Portuguese colonies, far away from the centre of power dominated by the dictatorship of the so-called Estado Novo, were tantamount to a land of freedom and were, for a significant range of young architects working and building there, a laboratory for testing new languages of the Modern Movement, particularly on the basis of the Corbusian vocabulary. Two of those young architects Vasco Vieira da Costa (1911- 1982) and Fernão Simões de Carvalho (1929-), who worked in Angola from the beginning of the 50s, were trainees in Le Corbusier's Paris ateliers. In addition to the work developed by those two architects, the specificity of the architectural production in Angola and Mozambique, particularly private order work, is clearly referenced to the Corbusian lexicon, whether in a more orthodox or a more hybrid way.*

**Keywords:** *Le Corbusier; Le Corbusier's legacy; Architecture in Lusophone Africa; Colonial; Tropical.*

### 1. Introduction

*"Le Corbusier, vous que j'ai vu ému par l'hommage filial du Brésil, voici l'hommage du monde..."*

*(...) Voici les architectes de la Grèce, et ceux de l'Inde.*

*Voici le message d'Aalto, qui a transformé la Finlande, celui de l'Angleterre, qui dit: "Il n'est pas un architecte de moins de soixante ans qui n'ait été influencé par lui." Voici celui des Soviétiques: "L'architecture moderne a perdu son plus grand maître". Voici celui de Neutra, celui des architectes américains qui regrettent ce que vous pouviez faire encore.*

*Voici la voix du président des Etats-Unis: "Son influence était universelle, et ses travaux sont chargés d'une pérennité qu'ont atteinte peu d'artistes de notre histoire...". (...)*

*Voici l'hommage des villes épiques, les fleurs funèbres de New-York et de Brasilia.*

*Voici l'eau sacrée du Gange, et la terre de l'Acropole" André Malraux<sup>1</sup>*

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<sup>1</sup> Présence d'André Malraux sur la toile (2008-2013) André Malraux [Em linha]. [S.l. : s.n.]. [Consult. 12 Jul. 2014]. WWW:<URL:<http://www.malraux.org/>>.

In his eulogy dedicated to Le Corbusier (1897-1965), André Malraux (1901-1976) stressed the universal nature of Le Corbusier's work and figure. It is a universal nature pointing to two ways: his knowledge of the world and the influence of his theoretical and built work on twentieth century architects. Le Corbusier's work and thought are a predominant influence over the Modern Movement, and their worldwide spreading acquired a significant dimension during the Second Post-War period. Such predominance of the architectural models conveyed by Le Corbusier may have originated in the rationale enunciated in his written work, which clearly explains a set of doctrinaire parameters, or in his active determinant role in international organisations such as the CIAM (Congrès Internationaux d'Architecture Moderne), but particularly in his ability to become a global architect, which led to a large international publication of his work.

This article's intention is to analyse the significance of the Corbusian legacy in architectural production in Angola and Mozambique during the 1950s and 1960s. These two former Portuguese colonies, far away from the centre of power dominated by the dictatorship of the so-called *Estado Novo*, were tantamount to a land of freedom and were, for a significant range of young architects working and building there, a laboratory for testing new languages of the Modern Movement, particularly on the basis of the Corbusian vocabulary<sup>2</sup>.

## 2. Dissemination and legacy of Le Corbusier's work

Within the framework of the Modern Movement, it is essential to understand which factors determined the dissemination of Le Corbusier's work and thought and the significance of his legacy. Firstly, we must consider the transnational dimension of his work, since, between non-implemented designs and built works, Le Corbusier designed all along his life projects for twenty-two countries in four continents, in lands as different as Russia or Brazil, Algeria or Japan. As Jean Louis Cohen expressed so well, Le Corbusier had "*the planet as his building site*"<sup>3</sup>. Such trans-nationality may be understood as well in the way he valued travelling, not only as a way of learning but also as *le voyage utile*, as he called it himself<sup>4</sup>, as a permanent element of reciprocity between the idea of knowing and the idea of disseminating. Le Corbusier's travels aimed at disseminating his work or spreading the modern doctrine (his own or the CIAM's) or procuring new projects have been often studied. Yannis Tsiomis, for instance, speaks about a "traveller's strategy" where we may find three constants: his contacts with the political or technical "authorities", the conferences he held for a more or less initiated audience, and his urban planning or architectural proposals for the places he visited, always procuring new orders<sup>5</sup>. The significance of international relations in his profession, both in the dissemination of his work and in the construction of a doctrinaire thought of a dominant nature, may also be seen in his decisive action in international organisations such as the CIAM. Additionally, we need to stress the extensive dissemination of his work in large circulation periodicals, notably through *L'Architecture d'Aujourd'hui* magazine with which he was always connected, and also the significance of the edition of an autobiographical narrative through his *Oeuvres Complètes*, which were published in eight volumes as from 1929.

In addition to his built work, Le Corbusier's vast written work, which cannot be dissociated from his creative process, was an essential means for the construction of a Modern doctrine. Within the framework of the Modern

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<sup>2</sup> This theme was developed in the Phd thesis: Magalhães, Ana: *Migrações do Moderno: Arquitectura na diáspora- Angola e Moçambique (1948-1975)*, directorship Ana Tostões; Fernando Hipólito, Universidade Lusíada de Lisboa, 2015.

<sup>3</sup> Cohen, Jean-Louis: *La Planète comme Chantier*. Paris : Textuel, 2005.

<sup>4</sup> Giedion, Sigfried: *Space, Time and Architecture - The Growth of a New Tradition*. 5<sup>a</sup> ed. Cambridge : Harvard University Press, 1997, p. 520.

<sup>5</sup> Tsiomis, Yannis (org.): *Le Corbusier – Conférences de Rio: Le Corbusier au Brésil. 1936*. Paris : Flammarion, 2006, p. 8.

Movement, as Alan Colquhoun explained, “it was Le Corbusier who built its most elaborate theoretical grounds. His theory is significantly different from the theory of other architects not only its type but also in its degree. While for Walter Gropius the theory was instrumental and the drawing its direct product, for Le Corbusier the theory was justification. Le Corbusier tried to justify architecture as an autonomous normative discipline (...)”<sup>6</sup>

His communication capacity allowed him to make his written work not only an essential means to disseminate his work and his way of thinking the world and architecture but also a form of consolidating his own knowledge. In 1920, he wrote: “To write a little puts ideas clearly, engages, compromises, constraints us to follow the strength of its theory. It is necessary to reflect constantly, all the time, at each pretext to be sensible. To be sensible, is to be conscious, the contrary to that which one attributes to sensibility. To write and to make the step of a giant and to cross clearly the underforces of his instincts and sensations.”<sup>7</sup>

Another essential feature of Le Corbusier’s written work (and also, in a way, his drawn and built work) consists in a constant return to the same themes; not only as a way of highlighting and disseminating his way of thinking and his work but also as a way of reflecting his own route: “Il n’est pas inutile, je le répète, de lire constamment dans son propre ouvrage. La conscience des événements est le tremplin du progrès.”<sup>8</sup>

Among his vast written work, we should highlight, first and foremost, the texts of “L’Esprit Nouveau” collection, particularly “Vers une Architecture”, a book published in 1923. “Vers une Architecture” was surely one of the most read, discussed and interpreted books on architecture all along the twentieth century. Originally published in instalments in the Esprit Nouveau magazine, and written in a pamphleteer manner, “Vers une Architecture” is a great manifesto that translates as a poetic vision of architecture for a new age and a new spirit. Two main themes rule the speech of the work: the assertion of a way of architectural production in tune in the Age of the Machine and a critical disruption in History.

Although “Vers une Architecture” and the set of books in L’Esprit Nouveau were widely spread, “Cinq Points pour une Architecture Nouvelle” (1927), the statement written in the context of the presentation of the Weissenhofsiedlung projects, will actually be the work that will universally disseminate and reproduce the Corbusian premises. This is perhaps the text that, due to its simplicity and objectivity, will more effectively be the basis for an architectural lexicon. To comply with the “Cinq Points” meant to comply with the mathematical formula that allowed for designing Modern Architecture in a new construction and synthesis spirit within an international framework<sup>10</sup>. An exhaustive and categorical application of the “Five Points”, and subsequently the Charte d’Athènes (1938-1941), was surely the way that was most identifiable with the globalized imagery of Modern Movement architecture, mainly in its production after the Second World War, both in the reconstruction of the European cities and in the construction in new lands.

During the post-war period, we should highlight the publication of Modulor (1950) followed by Modulor II (1955). The systematisation of a grid in proportions that try to establish a harmonic measurement in architecture based on the human body and mathematics that was presented in Modulor was widely used by architects and

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<sup>6</sup> Colquhoun, Alan: *Modernidade e Tradição Clássica, Ensaios sobre Arquitetura*. São Paulo : Cosac e Naify, 2004, p. 99

<sup>7</sup> Boyer, M. Christine: *Le Corbusier, Homme de Lettres*. New York : Princeton Architectural Press, 2011, p. 298

<sup>8</sup> Le Corbusier: *Précisions - Sur un État Présent de l’Architecture et de l’Urbanisme*. Paris : Éditions Vincent Freal, 1960, p. 136

<sup>9</sup> Under the *Collections de l’Esprit Nouveau*, Le Corbusier published seven books, all in the pamphleteer and propaganda tone of “Vers une Architecture” (1923): “Urbanisme” (1924), “Almanach d’Architecture Moderne” (1925), “L’Art Décoratif d’Aujourd’hui” (1925), “Peinture Moderne” (1925) com Amadée Ozenfant, “Une Maison, un Palais” (1928), “Précisions sur un État Présent de l’Architecture et de l’Urbanisme” (1930) and “Croisades ou le Crépuscle des Académies” (1933).

<sup>10</sup> Curtis, William J. R.: *Le Corbusier Ideas e Formas*. Madrid : Hermann Blume, 1987, p. 70.

architecture students in Europe and the Americas as from the beginning of the 1950s, mainly upon the dissemination of the construction of the Unité d'habitation de Marseille. And it should be stressed that the *Unité de Marseille* was perhaps one of the most published and visited 20<sup>th</sup> century architectural works. And that is why it became a universal, tested, repeated, copied model<sup>11</sup>.

Just like he did in Modulor, Le Corbusier published, in 1959, the second series of “Salubra, Claviers de Couleur” colour catalogue, in which he fulfils his need for systematising the architectural language and creating work instruments, and which results from the experiments he carried out all along his life, both in his architectural works and in his paintings. This second Salubra series acquires an expressive chromatic power that was tested in his second post-war works, such as the Unité de Marseille.

The significance of the extensive written work of Le Corbusier exceeds his doctrinaire assertion and its resulting dissemination within the framework of the Modern Movement. Beyond being a testimony of the times and History, the poetic dimension of Le Corbusier’s texts underlines the complexity and wealth of the Corbusian legacy.

### **3. The Corbusian heritage in the tropics: the case of architectural production in Angola and Mozambique during the 50s and 60s.**

After World War II, when Portugal was still living under a dictatorship, anachronistically valuing its empire and its colonies, a number of young architects went to Africa and affirmed a modernity that was far from the State-sanctioned architectural models. Such modernity was translated into freedom in a firmer appropriation of the modern movement codes in an international meaning.

It is permissible to establish that the first sign of flexibility and openness of Portuguese architecture to the forms and principles of international modern architecture was ensured at the 1<sup>st</sup> National Architecture Congress, in 1948. In Portugal, upon the end of World War II and the democratization of the European States, the strife against the Salazar regime became manifest, leading to the organization of the various oppositions, who believed in a swift fall of the so-called Estado Novo. The political crisis within the regime forced it to use efficient measures that led to a tougher, more consolidated government, and at the same time to a growing agitation among the various opposing sectors in the Portuguese society, branding it politically, socially, economically and culturally. A new generation of architects, trained in the Arts Schools of Lisbon and Porto, laid claim to a new social, ethical and political consciousness. If, on the one hand, they claimed a new vision of reality, on the other hand, they tried to theorize and reinforce an idea of architecture, international and orthodox, according to the premises of the Modern Movement. These young people were the ones who gave life to the Congress. At the outcome of the Congress, this “African generation”<sup>12</sup> went to Angola or Mozambique, surely motivated by different reasons: ideological or political, or simply looking for new work opportunities. In a less restrictive society away from the center of power, these architects had in common the possibility of building with a modern vocabulary.

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<sup>11</sup> Curtis, William J. R.: *Le Corbusier Ideas e Formas*. Madrid : Hermann Blume, 1987, p. 174.

<sup>12</sup> Fernandes, José Manuel: *Geração Africana- Arquitecturas e Cidades em Angola e Moçambique*, Lisboa: Livros do Horizonte, 2002.

### 3.1 Two Le Corbusier disciples

Two of those young architects, who worked in Angola from the beginning of the 50s, were trainees in Le Corbusier's Paris ateliers. Vasco Vieira da Costa (1911- 1982) worked at the Rue de Sèvres atelier between 1946 and 1948, and later Fernão Lopes Simões de Carvalho (1929) worked at the Boulevard Flandrin atelier, incorporated in the team coordinated by André Wogenscky that was developing large projects, between 1956 and 1959. This ten-year difference corresponds, however, to a period of intense work at Le Corbusier's ateliers. The post-war period was, as everybody knows, a particularly productive period in Le Corbusier's work: from the order of the first Unité d'Habitation, in Marseille (1946/1952), to large projects such as Firminy (1960) or Chandigarh (1950-1965) and also the Ronchamps Church (1950-1955) and the La Tourette Convent (1953).

Vasco Vieira da Costa finished his Architecture degree in Porto Beaux Arts School in 1945, and in that same year he was admitted to the Urban Planning Institute of the Paris Sciences College. Between 1946 and 1948, he worked with Le Corbusier. This direct experience with the master's postulates, in a period marked by large post-war urban reconstruction plans in application of the principle of the Athens Charter, shaped in a decisive manner his way of thinking and designing. Also an essential feature during his stay in Paris is the completion of the project of the Building of the Ministry for Education and Health, in Rio de Janeiro (1936/1945), by a team of Brazilian architects led by Lúcio Costa and having Le Corbusier as a consultant, in which the fitting of the dogmas of the Modern Movement to the conditions of a tropical climate is paradigmatic and ground-breaking.



1. Vasco Vieira da Costa – “Luanda Satellite Plan nº 3”. 1948. Civic Center Center detail and housing units. (Costa, 1984, p. 117)

His CODA, submitted after his permanence at Rue de Sèvres, “Design of a Satellite City for Luanda” (1949), applying the modern dogmas to the erection of a colonial town, is surely paradoxical: *“It is therefore incumbent on the European man to create in the native the need for comfort and a higher life, thus inciting him to the work that will lead him to settle down, and this will facilitate a more stable workmanship. The positioning of the houses and the location of native boroughs are the two main constituents that should govern the composition of the plan of a colonial town (...). In this way, we would rather place native boroughs around the central hub, taking due care to locate it, at all times, toward the lee of European housing areas, which must nevertheless be, at all times, isolated by means of a green screen wide enough to prevent the mosquito from passing over it. As it seems of necessity, under a health and social point of view, native populations should form various scattered groups that will embrace as small satellites the European hub, and so each sector of this hub will be served by a*

*native group. In this way, we will shorten the distance to be covered between work place and residence.*”<sup>13</sup> It should be noted, however, that this hierarchical social organization model is based perhaps more on Le Corbusier’s 1922 “Ville Contemporaine” project than on the Athens Charter postulates, in which the city was already thought for a “classless” society. In 1949, he returned to Luanda, where he had lived since his childhood, and was incorporated in the Technical Services of the Municipality, developed a set of remarkable projects of which we highlight the Kinaxixe Market (1950-1952), the building of the current Ministry for Public Works in Largo da Mutamba, the Karl Marx Student Hostel, the housing building for Public Servants, the Anangola building or the Pius XII Institute.



2. Mutamba building – Ministry for Public Works, Luanda (1968) - Vasco Vieira da Costa. (Ana Magalhães, 2008)

The work of Vieira da Costa brands Luanda’s built-up landscape and its Corbusian grammar has surely contaminated the city’s common and anonymous architecture. It is an architectural language expressed through multiple plastic features, such as grids and “brise-soleil”, protruding “boxes”, shadowing shelves, buildings on “pilotis”, circulations through long open air galleries, textures of glazed warm- and strong-colored tiles.

Fernão Fernão Simões de Carvalho, born in Luanda, completed his Architecture degree at Lisbon Beaux Arts School, in 1955, where he submitted, in 1957, his final paper on a Television Center project. After training at Gabinete de Urbanização do Ultramar (Overseas Urban Planning Office), he took an interest in urban issues, and in 1956 he decided to go to Paris, with a scholarship by the French Government, where he will incorporate Le Corbusier’s atelier until December 1959. At the Boulevard Flandrin atelier, under guidance by André Woscensky, he worked on the detail project of the Unité d’ Habitation in Berlin, and subsequently the Briey-en-Forêt Housing Unit. He further participated in the La Tourette Convent project and followed up, as “architecte de chantier”, the works of the Brazilian Pavilion in the Paris Campus. At the same time, he studies at the Institut d’ Urbanisme at Sorbonne with Robert Auzelle. These two vectors will be the basis of the consolidation of Simões de Carvalho’s training and will be a determining factor in the work he will develop in Angola. On the one hand, the stark imprint of the large projects developed at Le Corbusier’s ateliers during that period, not only those in which he takes part but also Chandigarh or Firminy, the building and “béton brut” plasticity experiences, applying the “Modulor” system; on the other hand, the teachings by Auzelle, a critic of the Athens Charter, who “(...) proposes that several social and economic factors be put into context in a more integrated and technical vision.”<sup>14</sup> His Urban Planning degree was completed in 1965 upon submission of a Master Plan for the

<sup>13</sup> Revista de Arquitectura. Fernando Távora (dir.) Nº 0. 1987. Porto : Faculdade de Arquitectura da Universidade do Porto. p. 24.

<sup>14</sup> Milheiro, Ana Vaz: *Luanda no Futuro: o Bairro do Prenda*. In SARDO, Delfim (org.): *Falemos de Casas: Entre o Norte e o Sul*. Lisboa : Athena, 2010, pp. 308-317.

Fishermen Borough in Luanda Island. While such project is based, on the one hand, on the study of a wider urban structure within the zoning principles of the Charte d'Athenes , on the other hand it reveals a sensitive understanding of pre-existences and an attentive study of popular housing of that site.



3. Rádio Nacional de Angola, Luanda (1963-1967) - Fernão Simões de Carvalho –. (Ana Magalhães, 2008)

One of his most remarkable works is the radiobroadcast centre, Centro de Radiodifusão de Angola (1963-1967), currently Rádio Nacional de Angola, an essential facility that is located in downtown Luanda. This is a large rectangular-located building at the center of the plot, away from the plot limits to create surrounding landscaping places. Upon location of the volume, the topography of the land is shaped in such a way as to make the building have a main floor at access street level and a semi-underground floor for technical and storage areas. In this way, the main volume is a large box within a concrete grid that rests on a base floor. The Northwest façade, where the main entrance is located in a central volume-bridge, ensures an asymmetric treatment of this large concrete shell: on the one side, a series of vertical concrete elements serve as “brise-soleil” extending the grid of the side façades, and on the other side, a large opaque surface covered with glazed brick tiles. Such volume-bridge would have been the connection to the central administrative building over the main street, but it was never built up. On the side façades, a long grid wraps up the rising volume and leans over the garden. This reticulate grid in concrete, away from the glass façade, allows simultaneously for inside shading and ventilation.





4. Rádio Nacional de Angola, Luanda (1963-1967)- Fernão Simões de Carvalho. Detail Brise-soleil. (Inês Gonçalves, 2008 in Magalhães, 2008, p. 156)

The building scheme is based on the *Modulor* harmonic measurements system. In this way, the rectangular plan is organised in 3.66m modules (corresponding to the base modules of *Modulor* blue series<sup>15</sup>– the module used for the width of the Unité’s apartments, for instance), and its overall sizes are 101.35m x 64.75m (corresponding to 27 x 17 3.66 modules added by a peripheral *brise-soleil* grid 1.265m wide). The 3.66 module is therefore applied to the dimension of the corridors or the open-air patio areas. Similarly, the most frequent net height of the building corresponds to 2.96m<sup>16</sup> (a measurement that, if you add the technical areas under suspended ceiling and the slab thickness results in the 3.66 size once again), a measurement that is also the base measurement of the composition of the external grid.

Other than applying the *Modulor*, references to Le Corbusier are a strong presence in this work. The design of the Centro de Radiodifusão is a clear reference to the research on the expression of the *béton brut* in the master’s late work, particularly in Chandigarh, in Ahmedabad or in the plasticity of the La Tourette Convent. In addition to the alternating square-lined geometry, Simões de Carvalho is at ease using the Corbusian lexicon in his expressive concrete gargoyles or in crossing materials: dominant concrete together with brick tiles and glazed surfaces.

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<sup>15</sup> Le Corbusier: *Le Modulor / Modulor 2*. Tradução, Prefácio e Notas Marta Sequeira. Lisboa : Orfeu Negro, 2010, p. 105.

<sup>16</sup> Red series of Modulor. Le Corbusier: *Le Modulor / Modulor 2*. Tradução, Prefácio e Notas Marta Sequeira. Lisboa : Orfeu Negro, 2010, p. 105.



### 3.2 Formal vocabulary

However, in addition to the work carried out by those architects who worked directly at the master's ateliers, the specificity of the architectural production in Angola and Mozambique, particularly private order works, is referred to Modern Movement works generally, and to the Corbusian grammar in particular. Although they knew some of Le Corbusier's written work (particularly *Vers une Architecture* and *Le Modulor*), it would be mainly through publications or periodicals that architects became aware of international projects and works. We highlight *L'Architecture d'Aujourd'hui* magazine, the most read international periodical among Portuguese architects (most of whom knew French as their first foreign language). The Portuguese magazine *Arquitectura* also played an essential role in disseminating the Modern Movement architecture, from the works of the founding Masters to a few fundamental texts. The Corbusian lineage and the influence of the principles of the CIAM are, however, the dominant, and the publication of the complete Charte d'Athènes, which started in 1948, the year of the Congress, merely stressed such dominance. Le Corbusier's Unité d'Habitation building in Marseille (1945), inaugurated in October 1952, would be published on the magazine immediately the next year.

This Corbusian vocabulary as applied, whether in a more orthodox or a more hybrid way, translates into an assertion of the "Cinq Points", a thorough exploitation of the "brise-soleil" vocabulary, the control of the technical capabilities and expressive qualities of the "béton brut". The search for the plastic expression and spatial qualification, the employment of colour, exhaustively studied in the *Salubra* and employed in Le Corbusier's post-war projects, as well as the search for the total work of art in the sense of integration or contamination between art and architecture, coming close to the Corbusian concept of "espace indicible", all these are elements that cross over such African works.

### 3.3 The *Unité* as an unavoidable model

The Marseille Housing Unit project, which was designed between 1945 and 1952, contributed in a significant and universal way to the definition of collective housing typologies after World War II. The "Unité d'habitation de grandeur conforme" developed as a prototype re-equating the functionalist dimension through the expression-manifesto of the *house as a living machine* will allow for a wide experimentation in the study of housing for the masses, by researching new forms of conjugation and internal organisation of the dwellings, circulation schemes or space hierarchy.

The Housing Unit model, a mixed repeatable block, will be thoroughly exploited, not only in the European reconstruction after the war, but also in other lands and geographies, seeking its adaptation to different climates, cultures and social contexts. But if "(...) as a prototype the Unité was unavoidable, the problem was to transform its fundamental lessons into a more flexible terminology attuned to particular cities, societies and climates."<sup>17</sup>

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<sup>17</sup> Curtis, William: *Modern Architecture since 1900*. 3<sup>a</sup> ed. London : Phaidon, 1999, p. 443.



5. Universal building, Lobito (1957-1961) - Francisco Castro Rodrigues. (Ana Magalhães, 2008)

The Angolan and Mozambican cities, which predominant model was characterized by the sectorial city having a design inspired by the Garden City, based on a radial and axial composition, with wide avenues and extensive low-density residential areas, favour the single house. However, here and there, particularly in Luanda or Maputo, one can find a few detail plans that fall within the conceptual and formal framework of the urban models based on the Charte d'Athènes and foster the construction of collective housing units.

Such housing buildings addressed to an urban colonial middle class started to be designed at the end of the 50s and are a significant mark of the largest Angolan and Mozambican cities of the 60s. Although in a much lesser size than the Marseille Housing Unit, such buildings are mixed housing, service and shop blocks, which are based on the premises of the reference model and test new housing typologies as appropriate for the tropical climate.



6. Montepio de Moçambique building, Maputo (1955-1960) – Alberto Soeiro. ((Inês Gonçalves, 2008 in Magalhães, 2008, p. 226)

In Maputo, the Tonelli building (1954-1958), designed by Pancho Miranda Guedes (1925-), the Montepio de Moçambique building (1955-1960), by Alberto Soeiro (1917-?), or in Lobito, the Universal building (1957-1961), designed by Francisco Castro Rodrigues (1920-2015), are exemplary cases of interpretation of the Corbusian prototype. A circulation through an external peripheral gallery, a skilful composition of the housing cell conjugation structure and a rational sense of the internal organisation of the dwellings are common

denominators of all three projects and reflect not only an appropriate response to the characteristics of the climate but also the colonial society's desire for modernisation.

Such works, which are the heirs of the *Unité* and the modern premises, are, however, late examples, developed between the end of the 50s and all along the 60s, at a time when, in Europe, architects were acquiring a critical conscience over the dogmas of the Modern Movement.

#### 4. Conclusion

The Corbusian legacy understood in the meaning of absorption of his vocabulary, fulfilment of his postulates or comprehension of his doctrine exceeds the geographies and the territories of his own work. The huge impact of such work created by the Master's communication and dissemination ability has permitted new readings and interpretations, and respond to different social cultural or geographical contexts. The architectural production in Angola and Mozambique during the 1950s and 1960s is basically marked by the acceptance of the Corbusian models, in addition to a direct contact with Le Corbusier's ateliers that was experienced by the Angolan architects Vieira da Costa and Simões de Carvalho. As a general rule, the interpretations of architecture as implemented followed a line between orthodox and hybrid models, but the fascination (love or hatred) with Le Corbusier's figure also permitted more eclectic and ironical readings, such as the rewriting of a sentence in "Vers une Architecture" proposed by Pancho Miranda Guedes (1925-): "*I claim for architects the right and liberties that painters have held for so long. Architecture is not apprehended as intellectual experience but as sensation*".<sup>18</sup>

In the celebration of the work and figure of Le Corbusier fifty years after his death, knowing the extension of his legacy in geographies and cultures as different and faraway as, in this case, Angola and Mozambique means to understand better his dimension as a global architect.

#### 5. Acknowledgements

This work is financed by national funds by FCT - Foundation for Science and Technology under the UID Project / AUR / 04026/2013 and also to CITAD - Research Centre for Territory, Architecture and Design.

#### 6. Bibliography/references

Boyer, M. Christine: *Le Corbusier, Homme de Lettres*. New York : Princeton Architectural Press, 2011.

Cohen, Jean-Louis: *La Planète comme Chantier*. Paris : Textuel, 2005.

Colquhoun, Alan: *Modernidade e Tradição Clássica, Ensaios sobre Arquitectura*. São Paulo : Cosac e Naify, 2004.

Costa, Vasco Vieira: *Luanda - Cidade Satélite nº 3. Concurso para a Obtenção do Diploma de Arquitecto (1948)*. Porto: Escola Superior de Belas Artes do Porto – Curso de Arquitectura, Departamento de Arquitectura da Faculdade de Engenharia de Luanda, 1984.

Curtis, William J. R.: *Le Corbusier Ideas e Formas*. Madrid : Hermann Blume, 1987.

Curtis, William: *Modern Architecture since 1900*. 3ª ed. London : Phaidon, 1999.

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<sup>18</sup> Santiago, Miguel: *Pancho Guedes, Metamorfoses Espaciais*. Casal de Cambra : Caleidoscópico, 2007, p. 130-131.

- Fernandes, José Manuel: *Geração Africana- Arquitecturas e Cidades em Angola e Moçambique*, Lisboa: Livros do Horizonte, 2002.
- Giedion, Sigfried: *Space, Time and Architecture - The Growth of a New Tradition*. 5ª ed. Cambridge : Harvard University Press, 1997.
- Le Corbusier: *Le Modulor / Modulor 2*. Tradução, Prefácio e Notas Marta Sequeira. Lisboa : Orfeu Negro, 2010.
- Le Corbusier: *Précisions - Sur un État Présent de l'Architecture et de l'Urbanisme*. Paris : Éditions Vincent Freal, 1960.
- Magalhães, Ana; Gonçalves, Inês: *Moderno Tropical, Arquitectura em Angola e Moçambique- 1948-1975*. Lisboa: Edições Tinta da China, 2009.
- Magalhães, Ana: *Migrações do Moderno: Arquitectura na diáspora- Angola e Moçambique (1948-1975)*, directorship: Ana Tostões; Fernando Hipólito. Universidade Lusíada de Lisboa, 2015.
- Milheiro, Ana Vaz: *Luanda no Futuro: o Bairro do Prenda*. In SARDO, Delfim (org.): *Falemos de Casas: Entre o Norte e o Sul*. Lisboa : Athena, 2010.
- Présence d'André Malraux sur la toile (2008-2013) André Malraux [Em linha]. [S.l. : s.n.]. [Consult. 12 Jul. 2014]. WWW:<URL:http://www.malraux.org/>.
- Revista de Arquitectura. Fernando Távora (dir.) Nº 0. 1987. Porto : Faculdade de Arquitectura da Universidade do Porto.
- Santiago, Miguel: *Pancho Guedes, Metamorfoses Espaciais*. Casal de Cambra : Caleidoscópio, 2007.
- Tsiomis, Yannis (org.): *Le Corbusier – Conférences de Rio: Le Cobusier au Brésil. 1936*. Paris : Flammarion, 2006.