

# Housing and urban continuity: The 1930s urbanistic experiments in Oran

Sofiane TAIBI<sup>1</sup>, Mohamed MADANI<sup>2</sup>

<sup>1</sup> sofiane.taibi@univ-usto.dz • Department of Architecture, Faculty of Architecture and Civil Engineering, University of Science and Technology of Oran, Laboratoire Métropole Architecture Urbanisme Société (LAMAUS), Oran, Algeria

<sup>2</sup> mmohamed.madani@univ-usto.dz • Department of Architecture, Faculty of Architecture and Civil Engineering, University of Science and Technology of Oran, Laboratoire Métropole Architecture Urbanisme Société (LAMAUS), Oran, Algeria

*Received: January 2019 • Final Acceptance: August 2020*

## Abstract

By drawing attention to the beginnings of Urbanism in France, this work aspires of replying the problems experienced by today's Algerian cities, which fail to produce a coherent and harmonious urban tissue, and whose urbanism instruments replicate models copied on the 1950s Grands-Ensembles. The 1930s in France correspond to a period of theoretical and regulatory upheavals in the making of towns, where a new generation of city thinkers, the urban planners, develop for the first time Urban Plans for French agglomerations. Considered revolutionary, their concepts will be better received on the southern shores of the Mediterranean, especially in Oran, where a new world is under construction. This article's objective is to verify the following hypothesis: the 1930s Oran's urban tissue was built in a context favorable to experimentation, in a logic aiming the city's homogenization and its urban continuity, through the design and construction of autonomous housing agglomerations. Having exposed the Oran's first enlargement urban qualities, I'll reduce the field of study to the Choupot district, located between the city-center and the ZHUN Yaghmoracen. These three urban strata will be then compared through their forms, their history and their mutual articulations, applying many tools such as maps and aerial photographs analysis, revealing for the urban tissues designed in the 30s, a high urban density and a typological diversity of housing and urban forms, which integrate with the city-center. Conversely, the Yaghmoracen district, whose scale and functioning are evocative of the Grands-Ensembles, generates social and spatial segregation of the urban tissue.

## Keywords

Housing, Social habitat, Suburbs, Urban fabric, Urban growth.

## 1. Introduction

*The Habitations à Bon Marché (H.B.M)* or low-cost housing of Paris, recognized today for their urban and constructive qualities, were part during the 1900s, of a conceptual approach where housing and its implanting participate in the construction of the urban tissue (Bigorgne et al., 2017; Dumont, 1991). The promulgation of the law for the realization of *H.B.M* housing was voted in Algeria on July 22, 1922, and was followed by the introduction of Henri Sauvage's processes by the President of the Algerian federation of *H.B.M*, in companies and offices which wore this designation<sup>1</sup> (Almi, 2002).

Jean-Baptiste Minnaert's work on Sauvage's patents (1997) exposes the visionary nature of this architect's works and the difficulty he encountered in France in putting them into practice. The case of this architect illustrates a period rich in experimentation where the pioneers of modern architecture and urbanism, a new science at this time, found themselves confronted with the conservatism of corporations and political leaders (Jelidi, 2014; Almi, 2002). At the same time, this work and its experimentation received a favorable response in North Africa.

*The Plan d'Aménagement d'Embellissement et d'Extension d'Oran* or Plan of Beautification and Extension (*P.A.E.E*) was part of a set of experiments carried out in the North African countries where a continuous back and forth had settled between mainland France and its colonies. Promulgation of Laws, development of theories and operational experiments carried out on less restrictive territories in terms of lands availability and troublesome activities have multiplied (Benkada, 2004). This ideology will mark a late theoretical renewal in France, giving an avant-garde character to the big cities of the *Maghreb* and to colonial urbanism (Saidouni, 1995; Chaouch, 2013). The pioneers of this current were, for the most part, former engineers of the Military Engineering and of the French Society of Town Planners (*S.F.U*) (Picard, 1994). In the latter case, writings, collaborations<sup>2</sup> and common influences<sup>3</sup> have made it possible to outline the main lines of urban planning, both scientific and landscaped.

Thus, the city of Oran produced its first extension in application of the Cornudet law, outside its outlying walls, in the 1930s. The agency for the regulatory plans of the Danger brothers and sons was then committed by Paul Ménudier, mayor of Oran, to take up, between 1931 and 1936, the plan drawn up in 1927 by Georges Wolff, architect of the city and member of the *S.A.M*<sup>4</sup> (Almi, 2002 ; Merit Heddi, 2016). The work carried out by the Danger brothers made it possible to standardize a heterogeneous whole with a landscape vision forming, in a way, a synthesis of the theories of urban planners Eugène Hénard, Jean Claude Nicolas Forestier and Henri Prost<sup>5</sup> (Frey, 2004 ; Bennani, 2012 ; Labii, Bensaad, 2015). Indeed, the design of the Oran *P.A.E.E*, in which the multidisciplinary nature of spatial planning intervenes for the first time, was the result of decades of research on Cities.

As for the cities of Aleppo, Beirut, Alexandretta, Antioch, Damascus and many others, the design of the Danger plan starts from the existing and integrates the pedestrian and the motorist simultaneously (Friès, 1994). The districts of the first crown of Oran gravitate around roundabout<sup>6</sup> garden squares and are connected to the town center by a *Tour de ville*, a tree-lined promenade of several kilometers. Oran appeared at this time to be one of the most successful cities in town planning in France (Frey, 2004). The innovative character of this initiative lies in the use of housing and habitat as tools for building the urban tissue. Likewise, the multidisciplinary vision of the Danger brothers considerably enriched this approach. As such, the first crown of Oran which extends the town center beyond its former perimeter walls does not mark at any moment an urban rupture. Hence the interest in the careful study of this experience. The diachronic urban analysis of the *Choupot* district carried out in this contribution illustrates my demonstration.

This research emphasizes the experimental nature of the first extension of Oran while showing the conditions and the actors that allowed the

conception and the realization of this socio-spatial evolution. It is a question, in particular, of bringing out the elements of understanding of the phenomena of urban continuity / rupture by housing through the comparison of three urban strata, including *Choupot*, crossed by the first and second peripheral boulevards of Oran. The studied area is marked by the 1930s *P.A.E.E's* Urbanism, this of the 1950s *Habitations à Loyer Modéré* or low-income housing (*H.L.M*), and that of the model erected after the independence of Algeria in 1962, the *Zones d'Habitat Urbain Nouvelles (Z.H.U.N)* or New Urban Housing Areas, a model that reproduces the same pattern as their French counterparts in the 1950s. Indeed, the rural exodus and a very significant demographic growth led the State towards the adoption of urban forms modeled on those of the *Grands-Ensembles*, where the *H.L.M* building constitutes a democratic model, remodeled today according to the implemented town planning instruments (Frey, 1988; Madani, Kadri, 2015).

The problematic developed here is concerned with the frenzied sprawl experienced by the Algerian cities on the outskirts of former town-centers and whose unique function is reduced to housing. The method used analyzes the extension of the urban tissue by housing with its various components: public spaces, urban roads, gardens and parks, economic activities, urban density, public facilities, public transport networks, typology of the land to be urbanized and layout of buildings. Mapping constitutes, from the start, an important tool for visualizing the hypothesis developed in this research. The demonstration carried out in this contribution is structured in three sequences: the first part examines the conditions and the actors of the growth of Oran; the second takes a look at the articulation between the *P.A.E.E* of Oran and the housing achievements while the last part is devoted to the case study. The names of streets and districts used in this contribution are those in use during the period when the first extension of Oran took place<sup>7</sup>.

## 2. Urbanistic and architectural experimentation of the 1930s in Oran

History is present in this analysis: we appeal the past to support my hypothesis, looking for the internal and external factors underlying the development of the city of Oran outside its former walls. Indeed, the writings and works on the gradual birth of the current town center, which have existed for almost a century, constitute precious materials for retracing the urbanization dynamics of the city under construction. This approach allows understanding the chronological progress of the spatial stratification of the extensions of Oran.

The French colonies, of which the city of Oran is a part, became, at the beginning of the 20th century, a field of experimentation where a generation of young architects and entrepreneurs upset the bedrock of the discipline. The possibilities allowed by reinforced concrete and steel in crossing large spans, and the relative ease of implementation (pouring - assembly by rivets or bolts) frees buildings from spatial and sanitary constraints. The emergence of new conceptual approaches and the birth of a Scientific Architecture are becoming possible (Dumont, 1998).

The elements of architectural composition are separated and then arranged according to an organizing logic. Load-bearing structure, fenestrations, frame elements and partition walls are used according to their ornamental possibilities, making obsolete any added decoration: moldings, embossings, veneer elements, etc. A deep schism is established between the old and the new generation. The position of the architect Auguste Perret - considered to be the father of the modern movement - reflects this divide (Laurent, 1998):

“We find the modern facades too bare, and yet those that make this effect are generally dressed - dressed with coatings or veneerings; they are more naked than naked. So let's no longer hide under these coatings or veneerings the important parts (posts, beams) which are the noblest elements of architecture and its most beautiful, its most legitimate ornaments” (Fabiani, 1925).

This revival in architecture was followed by a large-scale reflection on cities and their sprawl, and by the vote of the Cornudet law in 1919<sup>8</sup>. In addition, other sciences such as sociology have been integrated into the territory planning process. Today's Urbanism owes much of its multidisciplinary nature to the changes that took place at that time. This revolution was initiated by engineers and geographers of military engineering, who had carried out an exploratory phase rich in lessons during their missions in the colonies (Vacher, 1999).

On this occasion, they did not fail to realize the importance of built heritage matters, its conservation and its physical integration into the city in construction<sup>9</sup> (Malverti, Picard, 1988). Then, the logical and functional dimension of the city is articulated with a landscape approach in which the theorists of the *S.F.U* have acted (Paquot, 2013). Some have worked for a long time in the Maghreb and were therefore deeply marked by Mediterranean cities.

The Danger Brothers Planning Agency<sup>10</sup> is undertaking the revision of the first Plan for the extension of Oran drawn up in 1927 by Georges Wolff, Oran city official architect and member of the *S.A.M*. The Danger had at that time devised the Extension Plans for Bône, Constantine, Alger, Tripoli, Alexandrette, Antioch, Beirut and Aleppo. A complete planimetric and altimetric survey of Oran, on triangulation and polygonation, was started by the Danger on the 24th of February 1931, and was completed in 1932. It was finally reviewed, completed and delivered in 1934. This new version of Oran's *P.A.E.E* is distinguished by the socio-demographic analysis of the population, neighborhood by neighborhood, and the establishment of building regulations. The present and future zoning of the city, the opening up of Planteurs district, the development of the first outlying boulevard and an alignment plan which provides for the layout of a second crown<sup>11</sup> (Frey, 2004), are also included in this document.

The *P.A.E.E* of Oran aims to connect the suburbs and the town center by means of a crown through a hierarchy that allows physical transition during

passages from neighborhood to neighborhood and when the old meets the new. The land is divided into plots, of which must imperatively maintain an empty part reserved for green spaces and gardens. Danger brothers designed the following urban composition modular system for the Oran *PAEE*: the urban tissue evolves on blocks of 150 m by 50/60 m divided into plots of 12 x 20 m nearby the town center and 15 m x 25 in the suburbs. The width of the sidewalks is set at four m for boulevards and avenues and only two m for streets. This configuration allows 40 m wide boulevards, 16 m wide avenues, and streets of 10 m wide. Public squares represent multiples of a module of 40 m x 40. But the ingenuity of this intervention lies above all in the use of housing as a constructive unit of the periphery based on the establishment of a dialectical relationship between housing and the workplace.

The complementarity and interconnection of the elements that make up the city of Oran, and the connections between the former and the new, are made possible by its *tours de ville* or outlying boulevards (Lespès, 1938). The radioconcentric shape of the contemporary city is a result of the reviewed *P.A.E.E* by Danger brothers. However, at first glance, it seems to evolve from the multiple pre-existing conditions. This impression is partly true because the vision adopted by René Danger is part of the continuity and integration of all of the site's data in the conceptual approach. All the strata of the city are taken into account: old urban tissue, local population way of life, agricultural areas, natural water resources, and local management of land rights.

In this context, the agency does not deviate completely from the *hygiéniste* trend of the *S.F.U*, but tends to divert the tools favored by the latter towards the well living in the city. Many sciences are involved in the inventory: climatology, demography, economics, geography, geology, history, hygiene science, jurisdiction and administration, local physiology and aesthetics, politics (Labbii, Bensaad, 2015). An importance is given to the traffic plan in the management of the economic activities of the city but also in the succession of

the planned urban sequences. In this context, René Danger tends neither towards the urbanism of perspectives nor towards that of the curved line, but rather prefers to adapt to the specifications of the site and the possibilities it offers through its topography, its trails, its nature and its inhabitants.

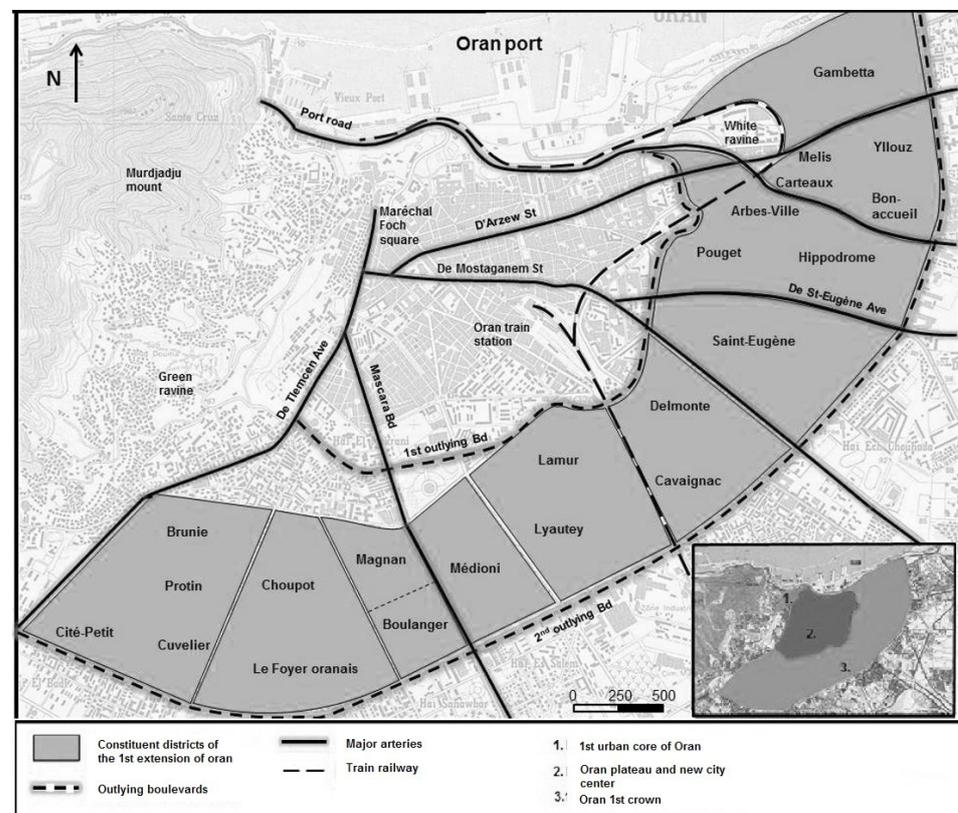
### 3. The urbanization of the first crown of Oran by housing

The chronological and cartographic analysis, the cross-checking with post-cards and photography, allow observing the city in motion. The first urban core of the French colonial period was established in *Sidi-El-Houari* below the *Karguentah* plateau<sup>12</sup> [Figure 1]. It became, with the radioconcentric spread of the city, its geometric center. We must remember the importance of this site by the passage of *Oued Rehhi* and the many water springs (including Ras El Ain, Ain Blal, Cherchara) which determined the anchoring of the city in these places and not in *Mers El Kebir* (Bekkouche, 1998). Its forced extension at the end of the 19th century and the physical constraint represented by the *Murdjadju* Mount led the growth of

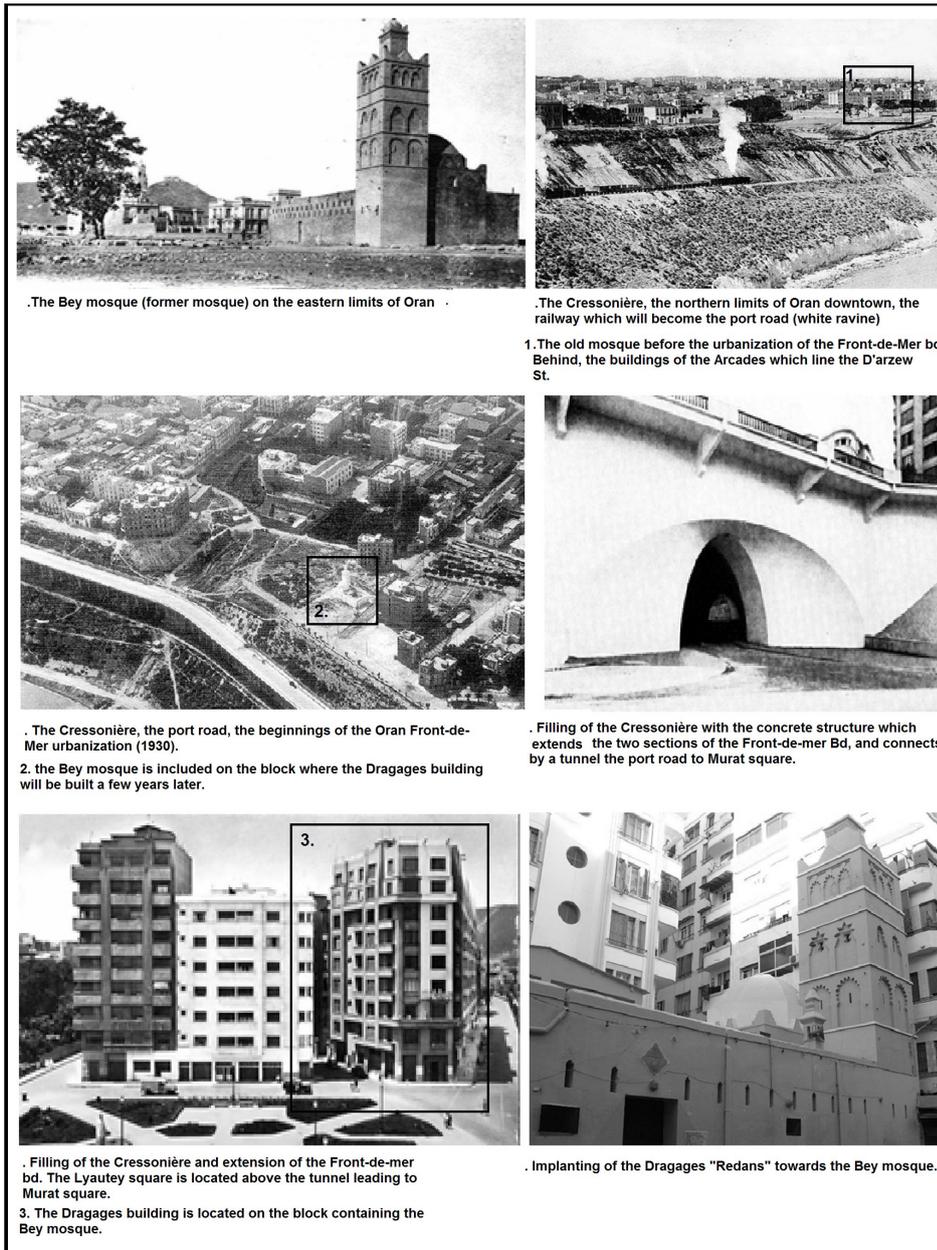
Oran to climb on the *Karguentah* plateau, a triangular portion included between the cliff overlooking the White Ravine on one side and the other's Green Ravine<sup>13</sup> (Lespès, 1938).

These two ravines connect Oran to the cities of *Aïn Témouchent* and *Tlemcen* to the west, on one hand, and *Mostaganem / Orléansville / Algiers* to the east, on the other. They guarantee it a first-rate geographical position between Spain on the one hand and Morocco on the other<sup>14</sup>. By connecting its extensions as it is urbanized with outlying boulevards, a consistent spread is made possible. Towards the end of the 19th century, the commercial development forced the municipality to provide the city with a railway line connecting the port of Oran to that of Algiers [Figure 2]. The arteries of the city, their ramifications and crossings with the two crowns of Oran, punctuate the new peri-urban districts of which *Choupot* is a part, the case study in this contribution.

The planning project on Oran's first outlying boulevard begins at the city's former physical limits, on the railway road from the commercial port to the



**Figure 1.** Articulations between town center of Oran and its 1st outlying crown. Shaping: Taïbi (2019). Background: Map from the *Guide bleu* (1942).



**Figure 2.** Progressive construction of the urban tissue surrounding the Bey mosque between 1900 and 2019. Shaping: Taïbi (2019). Retrieved from Oran des années 50 : <http://forгалus.free.fr/LE%20COIN%20DE%20GEORGES%20VIEVILLE/index.html>

new *St-Michel* Plateau train station<sup>15</sup>. Aerial images from the 1930s show an urbanized waterfront around the construction project that connects the port road to *Murat* square [Figure 2], at the place where a few years later will be built the *Dragages* housing building and a set of *H.B.M* prototypes. At the same time, the neighborhoods adjoining the *Plateaux* civilian hospital are growing at a similar rate. These areas are connected by the large 40 m tree-lined boulevard called *bd De Lattre De Tassigny*. As it spreads out, this outlying circuit will connect the suburbs

with the indigenous districts, in a global project of beautification and homogenization of the urban tissue, building an urban belt which extends the town center.

The land typologies of Oran first crown are declined in time and space according to the proximity with the Hyper-centre. It should be remembered that the first belt of the Oran plateau begins at *Lamoricière* high-school and the Square *De la Victoire*, to stop at *Fort Saint-Philippe* and *Oujda* avenue. The second crown, meanwhile, starts from the former location of the

*Batterie Gambetta* and ends at *Fort-de-Vaux Boulevard* and *Cité Petit*. The area between these two circle arcs encompasses the first extension of Oran but in reality represents a heterogeneous whole reorganized by the Plan of Danger brothers<sup>16</sup> (Frey, 2004).

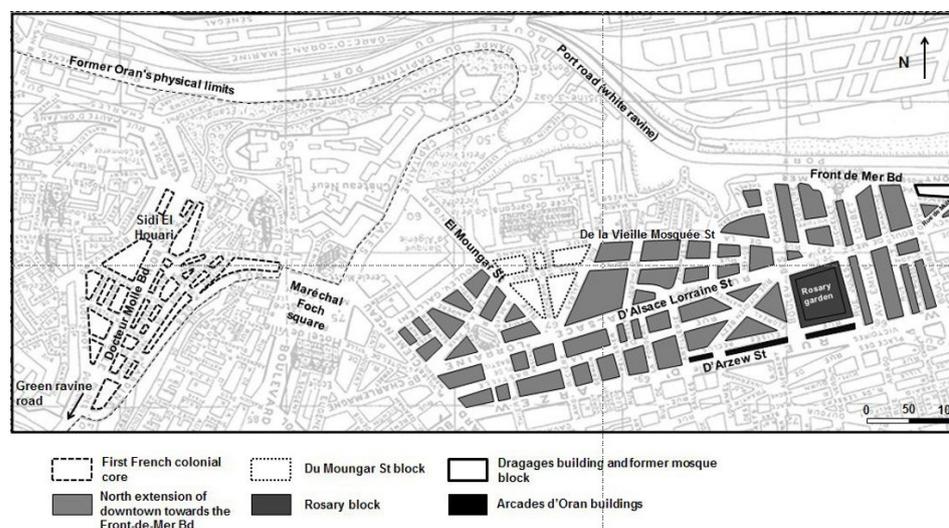
The blocks first typology in the extension of Oran dates back to the beginning of the 20th century and is found on a band included between the streets of *De la Vieille Mosquée* and *Alsace-Lorraine* [Figure 3]. Spatial distribution's done on radiating axes, not on the orthogonal ones. The streets of *El-Moungar*, *De Montauban*, *De Mulhouse* and *De Besançon* are part of this scheme, constructing blocks entirely occupied by housing buildings. In fact, we are coming out of a parsimonious management of the land in favor of a town planning engendered by a landscape and aesthetic vision. This orientation is reminiscent of the first prototypes of hygienic housing à *Bon Marché* of Paris former outlying crown (Dumont, 1991). Urban parks and public spaces are also given great importance by including them in housing operations. The most representative example in Oran is the former Artillery Park which has become the *Rosary Experimental Garden*, a green rectangular area surrounded by buildings, offering residents a view and calm (Bekkouche, 2010).

More imposing, the *Dragages* housing complex is another variant of this blocks planning [Figure 2]. Built in the late 1930s by the maritime works com-

pany of the same name, the *Dragages* is part of a serie of real estate operations intended to accommodate housing for executives working on major shipyards of that time (Oran's port extension in 1930 for that example). The block hosting this building is trapezoidal. This geometry of the land allows in its establishment to multiply the perspectives and facades of the building, in addition of including an ancient monument of the city of Oran: *the Bey mosque*<sup>17</sup>.

Stepped facades enlightened by a courtyards system are grafted onto a bar which runs along the *Front-de-Mer* bd for 80 m. Built on a marble-plated base entirely dedicated to commerce, this complex promotes a certain participation in the life of the city.

The second land typology of the 1930s peripheral Oran is an area made up of old Spanish neighborhoods and suburbs. Serviced at the beginning of the 20th century during public works, all empty land will be integrated by the *P.A.E.E* to the first crown. They are then urbanized during the settlements policy which tends to encourage the acquisition of individual property (Lespès, 1938). The municipality built *H.B.M* complexes and *H.B.M* Public Offices in *Delmonte* and *le Foyer oranais*<sup>18</sup>. The surface of the plots varies between 240 m<sup>2</sup> close by the center and 600 m<sup>2</sup> on the outskirts of the first belt. The work undertaken in these districts aims to harmonize the new settlements planned, with private one-storey housing buildings and Spanish *Maisons de ville*.



**Figure 3.** Plot division of the urban tissue of Oran before 1930. Shaping: Taïbi (2019). Background: Monumental plan of Oran (1951).

The multifunctional complexes combining workplaces and housing constitute the third and last urbanization model of the first crown of Oran. The former *H.B.M* cities of *la Garde Mobile* (motorcyclist gendarmerie) and the navy are among them. These complexes include individual houses, three to four storeys buildings, administrations, barracks, etc. Some of these buildings, depending on their size and program, are masterpieces of urban composition and balance of the masses, such as the unit built in Oran in the mid-1940s<sup>19</sup>. The *Art-Déco* buildings designed by the architects G. Wolff and F. Bienvenu revolve around a monumental square where access and traffic are skillfully sequenced. Thus, in *Saint-Hubert*, this big complex is integrated into the plots division of the settlements district. This diversity of land and typology of housing makes the first extension of Oran one of the best urban planning experiences in this city until today.

#### 4. The choupot district: A condensate urbanistic coherence example

After this presentation of the historical construction of Oran, the emergence of its first extension and its experimental nature, as well as the key characters and events in the genesis of this project, we will now take an area from the first crown of Oran in order to analyze it basing on the criteria already presented. The objective is to demonstrate by facts the hypothesis advanced in this contribution. The working method is to select an area of the extra-mural city which includes, within it, the limits of the first, second and third peripheral circuits of Oran, in order to compare the stratifications and articulations of urban tissues built in different eras. Proceeding this way allows us to check the consistency of the extension of the town center on the outskirts. We naturally choosed the *Choupot* district for the following reasons:

- Its location at the entrance of the city by the the green ravine western gates.
- The richness of the architectures and the typological variety of the habitats that constitute this place,

its important urban density and its social mix between natives and migrants (Spanish, Italian, French, and Portuguese).

- The economic importance of this territory on a city scale.
- The physical continuity and articulation of this district with the hyper-centre, in particular by an efficient network of buses and trolley-buses [Figure 4] .
- The financial crisis which affected France and, consequently, Algeria, during and after the Second World War, did not tuch the operation of this district, which was urbanized from the former works of Oran first crown.
- Finally, the comparison of urban tissues built during the application of the *P.A.E.E* and the *H.B.M* policy - in the case of the *Choupot* district - with those of the *Z.H.U.Ns* for *Yaghmoracen* district, both articulated through the second outlying boulevard, allows identifying elements for understanding the extension of cities by housing from two different scenarios.

Thus, the physical crossing beyond the former perimeter walls of Oran, towards Choupot, is not felt between the town center and the periphery<sup>20</sup>, which allows urban continuity by the roads and consistency of the buildings design. Likewise, the districts constituting the first extension of Oran become autonomous thanks to the presence of facilities, public spaces and a diversified commercial economy. Despite this superficial analysis of the different construction mechanisms of the first crown, the determining role of housing (in particular *H.B.M*) prevails. Finally, it should be noticed that the general conception of the *P.A.E.E* of Oran anticipates the future sprawl of the city in its landscape dimension from its original design.

The Choupot district is bounded by the avenues *Jules Ferry* at the west and *Albert premier* at the north, national road No 6 at the east and the second peripheral circuit at the south [Figure 5] . The construction mode of the urban space which connects *Choupot* to *Maréchal Foch* square - heart of the city of Oran, is developed in the following

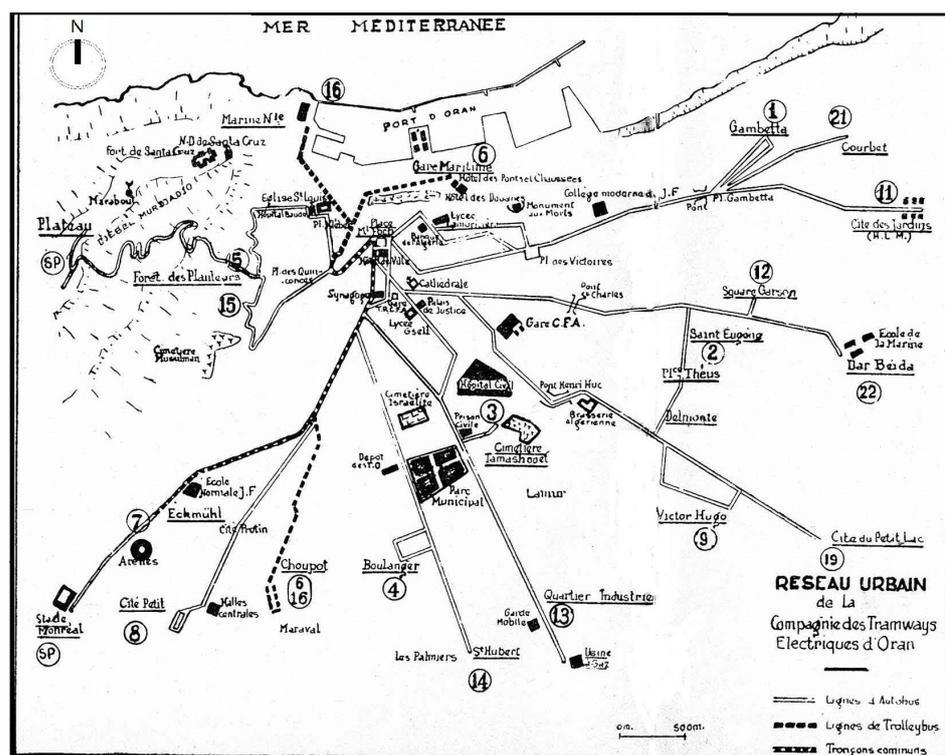


Figure 4. 1940s Oran's urban transport plan. Retrieved from Archives of the Company of Electric Tramcars of Oran : [http://lesruesdemontpellier.fr/imaginer/eckmuhl/carte\\_transports.htm](http://lesruesdemontpellier.fr/imaginer/eckmuhl/carte_transports.htm)

way<sup>21</sup>: buildings constructed on plots including housing and commercial activities, align with the urban roads and public space, and fit on a linear axis of perspectives directed towards the natural reliefs of Oran, in particular Mount Murdjadju and Santa Cruz fort.

In addition, facilities tend to guarantee the autonomy of the Choupot district<sup>22</sup>, with a rhythmic life during the French occupation of Algeria (and even today) by the commercial activity of Aristide Briand Ave. The typological diversity of the habitat built on this axis and its crossing with *du Foyer oranais* Ave - where are also a whole O.P.H.B.M<sup>23</sup> and the H.B.M of Protin and la Ruche P.T.T (Posts, Telegraphs and Telephones), offer a global vision of the housing policy of the 1930s in Oran.

Le Foyer Oranais H.B.M housing complex contrasts with the plots housing system in the Choupot district. Indeed, this set of buildings and pavilions evolves on a series of blocks instead of following the surrounding urbanization scheme. The 45° plotting of the blocks from the main axis of Choupot - which is oriented north-south, determines the implanting of the pavilions of

the complex and gives it its uniqueness. The 5000 m<sup>2</sup> double-square blocks are occupied by housing units with a gangway distribution system, articulated by interior courtyards, totaling eight pavilions per block and four apartments per pavilion. The subtle layout of the buildings on the diagonals of the plots [Figure 6] breaks with the alignment of housing estates and ancient Spanish *Maisons de ville*<sup>24</sup>. The coherence of the town planning regulations of the Oran P.A.E.E allows a varied urban landscape and a typological diversity of housing without causing disorder.

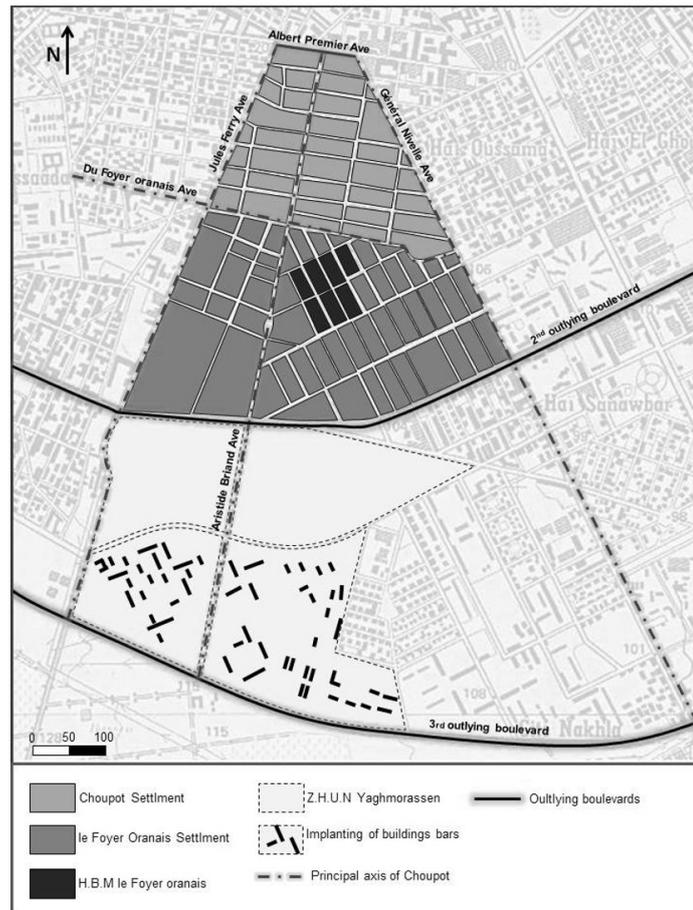
The H.B.M complex of *le Foyer oranais* contains 188 apartments. It was built at the same time as the *Delmonte* O.P.H.B.M. These two housing complexes (Delmonte and *le Foyer oranais*) were enlarged in the 1950s. In fact, the urban density of the district was increased by the municipality thanks to the construction of H.L.M bars within the H.B.M sets. Two four-storey buildings and two other bars long of 75 m will be built beside to this H.B.M complex. These *Grands-Ensembles* complex built in Choupot give a proportioned use of the density of housing and its location: sets of 300 dwellings designed

in dense urban cores, which respect the regulation of town planning, and create public spaces due to the implanting of the building, avoiding an excessive sprawl and an urban rupture (Chemotov, 1991).

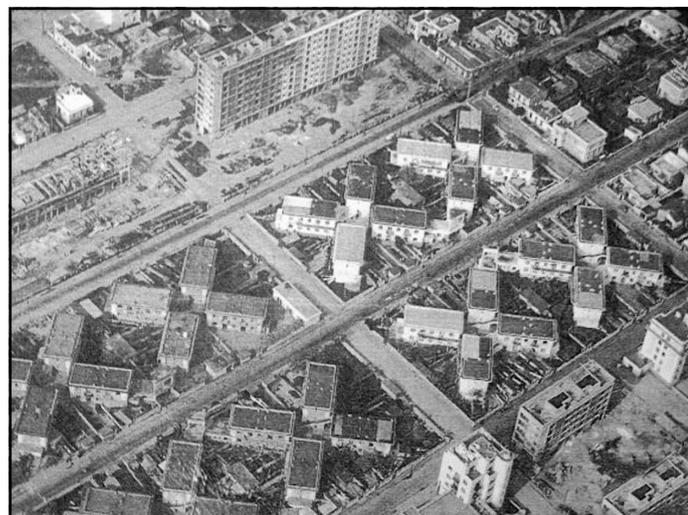
The program of the *H.B.M* complex includes 32 one-storey Pavilions, two four-storey buildings, and the Public Office. The administration bureaus are located on the street in the groundfloor. Each building includes six apartments with four *T4* (three bedrooms, a living room and a bathroom) arranged on the wings and two *T3* in the center with the stairwells. The four apartment's pavilions each are located on the diagonal of the blocks, along the cardinal axes. As a result, interior courtyards (one large and two small) and private gardens contribute to the enrichment of the urban landscape. The groundfloor access is on the street side, while gangways carried on the interior courtyards lead upstairs. The implanting on diagonals of buildings affects the rest of the houses in the neighborhood (aligned on the street); this arrangement generates a multiplicity of urban sequences. The architecture of the *H.B.M* complex of *le Foyer oranais* results from geometrically proportioned masses as well as from a thoughtful layout of the buildings. Clearly, the enrichment of the urban tissue and the enhancement of public space are sought.

The enlargement of the *Aristide Briand Ave* planned in the second extension of Oran, is carried out after the independence of Algeria. The urbanization of the districts adjoining this axis was done in the 1980s on the model of the *Z.H.U.Ns* [Figure 5] : “the change of cape in 1979, the new policy of economic openness, attentive in the first place to catch up with social needs, housing in particular, initiated a major national program of housing construction, from which the wilaya of Oran benefited a fairly appreciable slice” (Benkada, 2001).

Five *Z.H.U.Ns* are urbanized in Oran: *U.S.T.O* (201 ha), *Seddikia* (90 ha), *Maraval-Yaghmoracen* (252 ha), *Hai Khémisti* (112 ha) and *Dar El Beida* (147.5 ha) (Benkada, 2001). The *Yaghmoracen* district, in the image of the *Z.H.U.Ns* of Algeria, is main-



**Figure 5.** Connections between the Choupot district with the *Z.H.U.N Yaghmoracen*. Shaping: Taïbi (2019). Background: Map of Oran established by the National Institute of Cartography (1986).



**Figure 6.** Aerial view of the *H.B.M le Foyer oranais* and their enlargement with *H.L.M bars* in 1950

Retrieved from Oran des années 50 : <http://forgalus.free.fr/LE%20COIN%20DE%20GEORGES%20VIEVILLE/index.html>

ly made up of housing buildings (four to five storeys) built on vacant land or near to *Grand-Ensembles* complexes realized before independence, arranged according to the sunshine requirements

and an outline suggested by the crane path. The land occupation coefficient (*C.E.S*) of the urban tissue in town center of Oran and *Choupot* is 88%, for only 10% for the *Z.H.UN* Yaghmoracen (Musy, 2011), whose low urban density expresses the radical change in urban planning instruments as well as a lack of reflection on the urban landscape. In contrary to the many elements of composition of the urban tissue proposed by the *P.A.E.E* (wealth and hierarchy of the public road, plots adaptable to multiple scenarios, landscape reflection on the built / unbuilt articulations), the traffic routes in the *Z.H.UN* complexes are the result of gaps created by the purely functional implanting of buildings, neglecting the urban form.

Thus, the buildings seem to be located at random in this district. Very quickly, a physical and visual rupture manifests itself with the immediate environment and with the town center. If, instead of the *Z.H.UNs*, the urban tissue of *Yaghmoracen* had grown beyond the second outlying ring, as an extension of *Choupot*, following the urbanization scheme of the first extension, the expansion of the town center and the changes generated within this district<sup>25</sup> would have generated an urban tissue similar to that of *Arzew St*, which is located in town center and whose length is 1643 m, while the principal axis of *Choupot* is 2113 m long on a straight line.

## 5. Conclusion

The difficulty encountered by the urban planning instruments adopted by the Algerian authorities, since the country's independence, in controlling and managing the urbanization of cities (Madani, 2002), is a sign of their inability to regulate the frenzied sprawl of Algerian cities outskirts. The development of laws and models for town planning copies the schemas initiated by France in the 1950s, which later resulted in a dismal failure. Indeed, France emerging from the Second World War adopts in Algeria new models of regional planning and industrialized construction, giving no interest to the attempts of French architects and urbanists in Algeria to think differently about the city and the housing issue (Picard, 1994).

The spatial discontinuities characterizing today's Algerian cities express this impossibility of the current urban planning instruments to bring up complex realizations with a global vision of the city's future (Chaouche, 2013). Current urban outskirts projects can be summed up to dormitory towns. The negation of the site's identity and the anonymity engendered by the unfolding of standard plans accentuate this rupture between the former and the new. The role of the authorities is to establish a plots layout system, create institutions and equipment, and harmonize buildings exteriors with public spaces, for the benefits of an urban aesthetic (Frey, 1988). Conversely, through standard plans and standardization, the Algerian authorities favor quantity and urgency and abuse of housing as an element of social peace, to the detriment of the beauty and quality of urban tissues (Safar-Zitoun, 2012).

As a first experience, the extension of Oran beyond its outlying former walls marks the genesis of this theoretical approach as well as its development in a global context favorable to experimentation. The generation of modern architects and urban planners perceived in the French colonies, including Oran, the place where the 20th century technological and ideological advances could be put to the service of a new vision of the city and architecture. The synchronic articulation in the first extension of Oran between *H.B.Ms* and *P.A.E.E*<sup>26</sup> is a positive example in this city of the design of the urban tissue by housing: "We can regret the not much research works concerning *H.B.Ms* in Algeria, especially as this ancestor of *H.L.Ms* and other housing in *Z.U.Ps* (Zones to Urbanize in Priority) and *Z.H.UNs* offered properly architectural qualities which have unfortunately been lost since" (Frey, 2004).

Thus, the Oran first crown construction works, in particular through the execution of the *Front-de-Mer* project, show the complexity of this operation, the objectives of which tended towards the realization of major housing programs while taking care of maintaining a coherent structure of the city as well

as an urban aesthetic. To this, a thorough reflection on the parcel divisions is carried out, in order to fall in adequacy with the desired programmatic richness.

Let us note the revolutionary character of this approach by replacing it in its time, where applied concepts result upon following the architectural competition organized by the Rothschild Foundation in 1906 (Dumont, 1991). Since then, the housing complexes realizations for large numbers of people through urban development operations, using concepts such as those of the “open courtyard”, have shown since their urban qualities. The typological multiplicity of housing in *Choupot* and the *H.B.M* complex of le *Foyer oranais* which was the subject of a brief analysis here, give an overview of the first extension of Oran urban qualities and the construction mechanisms of the urban tissue by housing.

The *P.A.E.E* drawn by the Danger brothers is an intelligent assemblage of several dissimilar urban tissues, separately executed and articulated through urban parks in the form of gardens and planted boulevards. This dissimilarity of the urban tissue is felt in the typological richness of the built housing complexes during Oran’s first extension, varying between individual houses on the outskirts and housing complexes whose density increases as we get closer to the city-center. The *H.B.M* housing complexes Art-Deco style adds to the quality of the designed districts, where moderate height buildings adapt to the identity of the site, and articulate around urban spaces combining private and public, whose geometry and dimensions vary according to the needs, and where the activities that are planned there promote urbanity and autonomy.

The 1930s French and Algerian urban policy, in synchronic adequacy with that of H.B.Ms, has since shown its superiority in comparison with the urbanization models adopted after the Second World War. This period in the history of Oran conceals a significant in-situ experiential potential, for the thinking on the cities sprawl, and the future planning and extension projects through housing.

## Endnotes

<sup>1</sup> Sauvage is one of the founding members of the Society of Modern Architects *S.A.M* and of the magazine of the same name. In 1925, he created the rapid construction company and patented, between 1924 and 1931, 14 innovative construction systems, in particular prefabricated steel cells, or *the immeuble à gradins patent*.

<sup>2</sup> Henri Prost, Eugène Hénard, and Jean Claude Nicolas Forestier, founders of the *S.F.U*, theorize around urban and architectural regulations and the landscape vision of the urban tissue. The plans devised by the latter, notably for the city of Paris and its embellishment by a system of public parks, results from the influence of Mediterranean flora and fauna on the ideas of these urban planners during their stay in North Africa (Mehdi, Weber, Di Pietro, Selmi, 2012).

<sup>3</sup> René Danger and Henri Prost, both members of the *S.F.U*, gravitate around Hubert Lyautey, general resident of the French protectorate in Morocco in 1912 and Minister of War during the First World War.

<sup>4</sup> Structure founded in 1923 by H. Sauvage, Frantz Jourdain, Hector Guimard, Joachim Richard, Pierre Sézille, Louis Brachet, and Tony Selmersheim. Many of its members will work in Algeria until its independence, among which are Auguste Perret, Marcel Lathuillière, Charles Montaland, Albert Seiller, Léon Claro, Camille Lopez, Francois Bienvenu, Xavier Salvador, Jean Paravisini, Georges Wolff, Pierre Marie, José Ferrer-Laloë and Pierre Bourlier.

<sup>5</sup> The plans drawn up by the Danger are responses to a specific context. They do not reproduce any standard plan. An importance is given to the traffic plan in the management of the economic activities of the city but also in the succession of the urban sequences. The conceptual approach of this agency starts from the existing taking integrating headlands, natural lookouts, axes of sunrise and sunset, by subsequently projecting in these sequences gardens and architectural orders. The curve is used to absorb the slopes while being dedicated to the pedestrian promenade. Conversely, the right perspective

is used to facilitate cars movement. The Oran plan was developed into linear walks, roundabout public squares and urban parks - concept of J. C. N. For-estier.

<sup>6</sup> Invention of Eugène Hénard (Alonzo, 2005).

<sup>7</sup> The materials used in this article mostly date before 1962. The reader will find by clicking on the link ending this footnote, a document drawn up by the association *Bel Horizon d'Oran*, which presents an inventory of the names carried by the streets and districts of Oran over time. <https://www.guideoran.com/index-des-rues-quartier-oran/index%20oran.pdf>

<sup>8</sup> The vote of the Cornudet law imposing a *P.A.E.E* to cities with more than 50,000 inhabitants comes out of a set of theories and research carried out at the beginning of the 20th century by the members of the *S.F.U*. Among them, one of the founders, Henri Prost, worked notably in Morocco on the implementation of laws and instruments for the management and the construction of the urban tissue (Frey, 2004). The need to expand cities beyond the former limits and the increase in population draw attention to the need of building housing for the bigger number and the difficulty of doing so with plots as a marking tool (Dumont, 1991). Here, housing becomes an instrument around which all the functional and landscape elements necessary for its autonomy are built. The urban policy of the 1930s is elaborated in close collaboration with this of the *Habitations à Bon Marché* (Carriou, 2005).

<sup>9</sup> Among which is René Lespès, author of one of the most complete works on the city of Oran, which denounces the behavior of the French authorities with regard to the cities of the Maghreb, and the *Néo-Mauresque* architecture style that he finds grotesque.

<sup>10</sup> This company employed at this time more than 60 people, including: René Danger - member of the *S.F.U*, his brother Raymond - *D.P.L.G* land surveyor and Professor at the School of Public Works, Thérèse Danger - Power plant Engineer, and Paul Danger - Professor at the School of Public Works and the Conservatory of Arts and Crafts.

<sup>11</sup> The innovation of the Danger plan lies in the equitable distribution of the facilities which participate in the social life of the various districts.

<sup>12</sup> Location of the former market named after the Arabic origin name's place. A study relating the conditions of realization of this public building describes precisely the geological and land nature of this plateau (Curtet, 1888).

<sup>13</sup> Current *Planteurs* slum.

<sup>14</sup> Oran is 303.9 km from Alicante, on the other side of the Mediterranean.

<sup>15</sup> Building designed by the chief architect of Algeria Albert Ballu, and built by Perret Brothers Company.

<sup>16</sup> Heterogeneity expressed by housing: There are private real estate, *Offices Publics H.B.M*, Medium Rent Buildings *I.L.M*, housing built by public companies, vernacular housing, and housing settlements - tool used mainly for urbanization on the outskirts.

<sup>17</sup> 18th century listed monument.

<sup>18</sup> The Public Office of *Habitations à Bon Marché* O.P.H.B.M is the authority responsible for the construction, supervision, and regulation of housing production at the regional level.

<sup>19</sup> The barracks of the *Saint-Hubert* motorcyclist gendarmerie were remodeled in 1944 following the April first decree of the reorganization of the 19th legion. Everywhere in Algeria, the units of the gendarmerie corps, and in particular of departmental ones, are undergoing enlargements in order to welcome more recruits within the troops, and to modernize at the same time the image of the corps of the French gendarmerie.

<sup>20</sup> A few statistics show the size of the first extension of Oran in relation with the town center. The area of the intramural city is 378 ha. That of the first crown: 973 ha; and the area including *Choupot* and *le Foyer oranais*: 78 ha. The distance roamed from *Maréchal Foch* square via *Maréchal Joffre* Bd, *De Tlemcen* Ave, *Jules Ferry* Ave, to the gates of *Choupot*, is 2060 m. As for the *Aristide Briand* Ave, commercial axis crossing *Choupot* - actually *Lieutenant Smain*, it offers a straight line perspective of 2113 m, the limit of which is the Oran third ring.

<sup>21</sup> The former *Choupot* trolleybuses line follows the same route.

<sup>22</sup> Indeed, *Choupot* of the 1950s is already autonomous towards the town center. The urbanist *Gaston Bardet* identifies there during a study of the social topography of the city, the following facilities: schools for girls of *Eckmühl* and boys for *Magnan*, teachers training school, college on *Pierre St*, *Maraval* high school, the covered market of *Eckmühl*, the central market of *Cuvelier* and a church on *José St*. Also found in this area are the municipal park, the *Hammam Bouhadjar* train station, *Le Mondial* cinema hall actually *Tassili* and the new torero arenas in Oran (1948).

<sup>23</sup> The *O.P.H.B.M* is built at this location to supervise the production of West Algerian housing wearing the designation *H.B.M*.

<sup>24</sup> *Choupot* in particular and Oran in general were inhabited in the 1940s by a predominantly Spanish population during the French occupation.

<sup>25</sup> In particular by an urban renewal of the first outlying crown (absorption by the town center and replacement of the houses by dwelling buildings).

<sup>26</sup> In 1913, the municipality issued a vow for the application to Algeria of the law of July 22, 1922 on hygiene regulations for private roads and the compulsory establishment of owners unions. Almost at the same time, another wish was presented to the Council for the creation of an *Habitations à Bon Marché* public office, in accordance with the laws of April 12, 1906 and December 23, 1912. The decree of January 5, 1922, which made applicable to Algeria the law of March 14, 1919, came about very aptly to determine the Municipality to design a *P.A.E.E* of the city, as prescribed by this law (Lespès, 1938).

### Acknowledgement

I, Sofiane TAIBI, would like to extend my sincere thanks to my research director, the Professor Mohamed MADANI, for his availability and his commitment alongside me during my research. I would also like to thank the entire Laboratoire Métropole Architecture Urbanisme Société team (LAMAUS) as well as the Direction

Générale de la Recherche Scientifique et du Développement Technologique (DGRSDT), who supported me and provided me working conditions favorable to my advancement.

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