

# From urban planning instruments to produced urban forms: Analysis of the eastern extension of Oran (Algeria)

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## Abstract

This article starts from an observation, that of an urban and architectural production in the eastern periphery of Oran which is strongly criticized. In this research, we examine the choices that governed the urban development of Oran, favoring the production of large complexes. We highlight the excesses that result from the quantitative option chosen by public authorities to the detriment of urban form. Thus, the examination of the process of urban development as well as the urban forms produced in the eastern extension of Oran constitute the problem addressed in this article. Based on morphological analysis, we were interested in the components of urban space. Town planning documents, city maps, aerial images, photographs, on-site observation were used to carry out our research work.

The main gaps in urban production in the eastern periphery of Oran lie in the manufacturing of urban extension, then in detailed urban development. Indeed, recent urbanization, even if it is framed by urban planning documents, namely the Master Plan for Development and Urban Planning (PDAU) of Oran and the various Land Use Plans (POS) which result from it, seems to escape the logic of the coherent city in the sense that the city develops according to overall provisions guaranteeing homogeneous treatment. Even if we admit that these town planning documents are necessary for planning, they remain largely insufficient, to support the urbanization of the outskirts of Algerian cities.

## Keywords

Oran, Periphery, Urban extension, Urban form, Urban planning instruments.

## 1. Introduction

Our problem is part of the register of urban studies interested in the methods of making cities and the repercussions of urban planning instruments on the city. The first reference event was the international conference on urban policies in the Arab world, held in Lyon in 1984 (Metral, 1985). It was an opportunity to establish an inventory of development plans and their effectiveness and urban planning. During the 1990s, urban research explored new themes and fields (appropriation of space, ways of living, etc.). This new direction of research is easily explained by the profound changes that these cities have experienced and the important role of the population in urban production (subdivisions, real estate cooperatives, self-construction). Later, work explored other avenues of research interested in the space/actor dialectical approach and the role of decision-makers and citizens in development projects (Bendjelid et al., 2004a; Signoles et al., 1999), and the gaps produced between the project and reality in the making of cities (Boumaza, 2005).

Historically linked to urbanization, the question of urban expansion is understood as being a consequence of demographic growth combined with industrialization and rural exodus (Chaouad & Verzeroli, 2018). Urban extensions constitute a global phenomenon which begins with the industrial revolutions, but it was especially after the Second World War that large urban areas of collective housing appeared (large complexes) and that the process of urbanization accelerated (Choay, 1979, 2006; Paulet, 2009).

The economic development policy of independent Algeria (after 1962) had the effect of accentuating migration, the rural exodus in particular. The massive creation of jobs in industry and the concentration of equipment and services in cities have accelerated the phenomena of urban densification (Yamani & Trache, 2020). A considerable increase in population growth followed. A few decades later, the phenomenon of demographic urbanization is increasing.

According to the World Urbanization Prospects published by the United Nations Department of Economic and Social Affairs (2019, p.21, 22, 24), 73% of the Algerian population lived in urban areas in 2018. This rate is very close to that of European countries (74%) and higher than the African average (43%). Projections indicate that Algeria's urbanization rate will reach 84% in 2050, identical to that of Europe (84%), compared with 59% for Africa.

In this sense, Algeria after independence faced the challenges of this problem of urban expansion to implement its economic and social development policy. If during the first years, the urban population was "absorbed" by "the vacant properties" left by the Europeans after their departure, this was no longer the case during the 1970s. The city had to respond to enormous needs in terms of housing, equipment and jobs, which led institutional actors to adopt an urban policy which resulted in the establishment in 1974 of an urban planning tool which defines land uses, road rules and construction standards. This is the Urban Master Plan (PUD) which prepares the city as a receptacle for the decisions and actions of the State (Sidi Boumedine, 1999). Operational town planning procedures accompanied it to allow the realization of an urban housing program within the framework of the ZHUN (New Urban Habitat Zone) procedure (Guerroudj, 1980; Mutin, 1985) and subdivisions for the construction of individual houses (Belguidoum & Mouaziz-Bouchentouf, 2010). State policy aimed to provide every citizen with decent, healthy and equipped housing within the framework of vast programs.

After the expiration of the PUDs widely applied to manage the urbanization of Algerian cities and towns during the 1970s and 1980s and in the absence of an urban plan during the 1990s, the land proposed for urbanization was allocated to beneficiaries by location reports issued by a land selection commission. Cities display a particular urban dynamic marked above all by the establishment of major individual housing programs in the form of social lots and real estate cooperatives (Semmoud & Aït Amirat, 2009;

Souami, 2003). The fragmentation of urban space through zoning produced by town planning in the 1970s was affirmed and reinforced during the 1990s by the creation of housing estates bringing together people from the same social category (Bendjelid, 1997). This urban pressure, combined with the laxity of central and local authorities, has led to a breakup of the city and a swelling of peripheral urban cores.

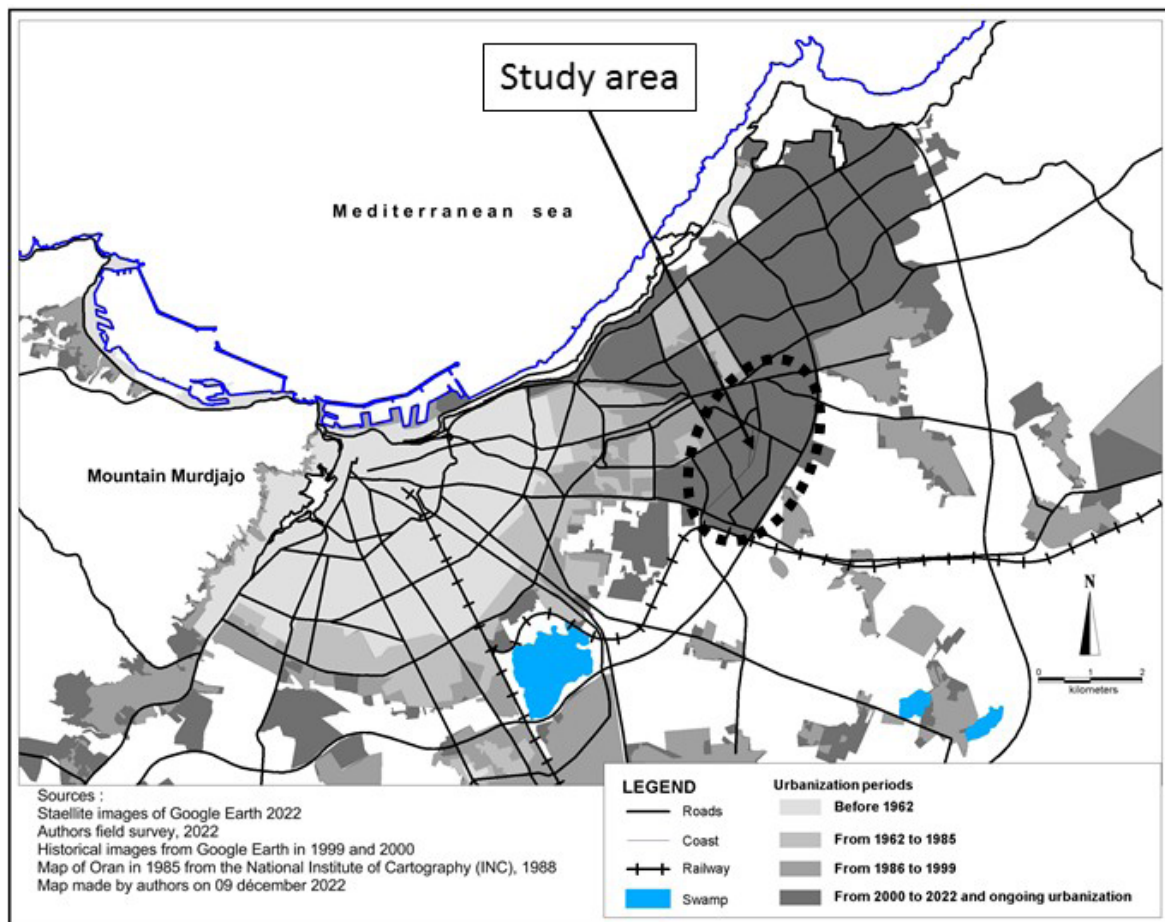
The end of the 1990s marked a decisive turning point in urban planning in Algeria which resulted in significant changes compared to the previous period. It is a new era of urban planning, that of the establishment of new legislation (law 90-29 of December 1, 1990 relating to development and town planning) which introduces two town planning instruments, the Master Plan for Development and Urban Planning (PDAU) and the Land Use Plan (POS), replacing the PUD. Also, a policy of massive production of housing in all its forms is being put in place with the multiplication of new housing formulas [1] which accompany the old formula (social rental housing). The improvement in the financial situation brought about by the increase in the country's oil resources has encouraged a strong redeployment of the State in the housing sector throughout Algeria (Safar-Zitoun, 2012). For this reason, several stakeholders in project management [2], project management and financing were called upon to carry out a gigantic housing program thus causing a profusion of spatial extensions of cities on areas virgin sites.

The National Economic and Social Council (CNES) published reports in 1998 and 2003 on the Algerian city and the consequences of excessive urbanization. The main characteristic of this urbanization lies in the emergence of new fragmented urban spaces breaking with the existing city, causing dysfunctions in the management of these urban areas (Yamani & Trache, 2020). Algerian cities are then marked by considerable transformations (Belguidoum, 2021). This is also the case in our field of study, the eastern extension of the city of Oran.

Analyzing the process of formation of these new urban fabrics and evaluating the resulting urban quality constitute the central object of our article. Urban quality translates into functional convenience and better appropriation of urban spaces by residents. It is ensured by the design of a simple and continuous network and the buildings which structure the street. This formal coherence carried by overall architectural arrangements creates urban continuity and a close relationship between the different districts, and above all a legibility which makes the spaces understandable (Bentley et al., 1985; Lynch, 1964).

## 2. Scope of the study

Port city located 432 km west of Algiers, Oran is the second city in Algeria with a metropolitan role, capital of a heavily coastal wilaya (prefecture) which has 9 *dairas* (sub-prefectures) and 26 *communes* (municipalities). On a local scale, Oran, Bir El Djir, Sidi Chahmi, Es-Sénia and El Kerma are municipalities today in permanent interaction where social developments and economic issues crystallize. The recent urban expansion of the city has taken place in the territories of the communes of Sidi Chahmi, Bir El Djir and Es-Sénia (Figure 1). In recent years, the urbanization of Oran continues to dilute by developing spatially towards the east and the south, the only directions which offer land potential without constraints. This, of course, according to urban planning where the law of the greatest number of housing units-built reigns. We distinguish that the entities which have marked the urban evolution of Oran over the centuries are at odds with each other in their spatial structure and their urban form. This is how in Oran several disruptive urban forms coexist: a tight historic center (before 1830), a structured colonial city (1830-1962), a juxtaposed post-colonial city (1962-1997) and a recent periphery (from 2000) unstructured. The main characteristic of urbanization in recent years lies in the emergence of large extensions which have spread out on the outskirts in the form of vast housing areas.



**Figure 1.** Situation of the zone studied (extensions at the east) compared to the city of Oran.

The scope of our study is the eastern outskirts of Oran, an area encompassing most of the beginning of the recent extension of Oran guided by new urban planning instruments (2000 to the present). We will define as a field of observation and analysis the area located between the USTO site and the 4th ring road, National Road No. 11 and Wilaya Road No. 46 (Figure 2). Straddling the territories of two municipalities (Bir El Djir and Sidi Chahmi), this area saw the birth of the first housing programs, all types combined. The communes of Bir El Djir and Sidi Chahmi experienced the highest growth rates during the period 1987 to 2016, respectively 1676.6 and 850 hectares in terms of surface area (Smahi & Remaoun, 2019). This perimeter was chosen for the following reasons:

- It is the product of the superimposed application of the new law 90/29 relating to development and town planning and the new housing policies through its multiple formulas.
- It represents the beginning of the

recent extension resulting from new urban planning instruments, which presupposes the existence of sufficient perspective to evaluate these urban forms produced in this new periphery.

- It is the starting point of spatial fragmentation and a new urban form of the city generated from extensive urbanization carried out in a hurry.

Urbanization in this part of the city begins with the construction of the major project of the University of Science and Technology of Oran (USTO) designed by the famous Japanese architect Kenzo Tange. Although the project was designed in the early 1970s, it could only be completed in 1988. The first housing programs in this area were launched in the early 1990s (collective social housing and individual housing). At the same time, the construction of a Convention Center was launched, but although the project is almost complete, the site has been abandoned to this day.



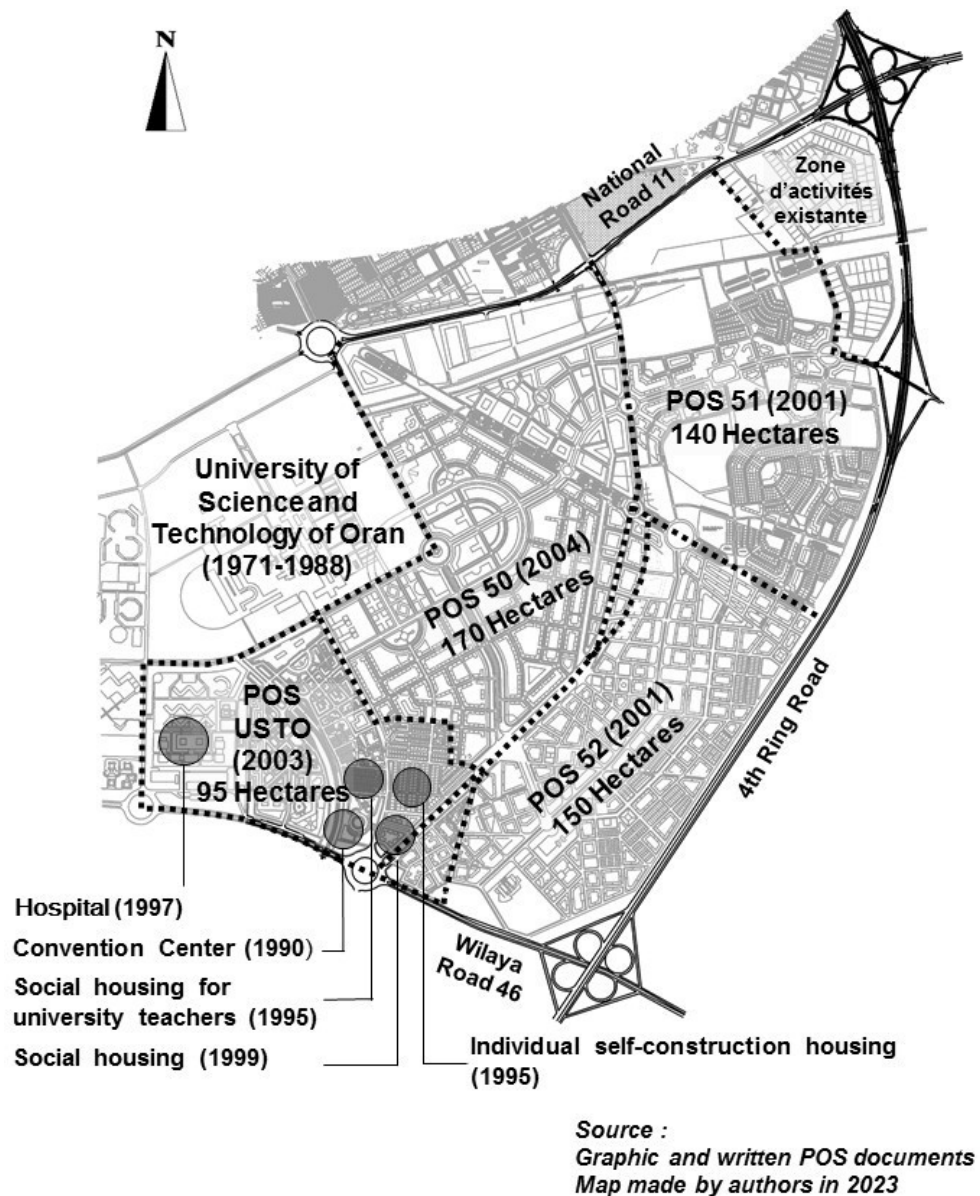


Figure 2. The study area.

### 3. State of the art

The urban extension of Oran has been approached by researchers from different disciplines of the human and social sciences from several angles. Recent changes in the urban form in Oran are reflected more particularly in the process of urban sprawl. Early research focused on spatial fragmentation (Bendjelid, 1998) and socio-spatial differentiations in new urbanized spaces (Bendjelid et al., 2004b). At the same time, sociological work has been devoted to urbanity and the deciphering of practices and imaginations in these spaces (Lakjâa, 2009). As for historians, they have observed urban expansion through different periods of successive

development to decipher the processes of change which link politics, urban space and society (Benkada, 2001).

Recently, various research projects have focused on the issue of land and peripheral housing (Messahel, 2008; Mouaziz-Bouchentouf, 2012, 2014, 2016). Demographic dynamics favor the periphery and to the detriment of the mother city, leading to residential mobility (Trache, 2010; Trache & Khe-lifi, 2020) and shaping an expanding urban space confirmed by the use of remote sensing and GIS (Bendraoua et al., 2011; Smahi et al., 2015; Smahi & Remaoun, 2019). The dialectical relationship between urbanization and peri-urban agriculture (Maachou, 2012; Missoumi et al., 2019; Nemou-

chi & Zeghiche, 2021) has been widely developed and has shown the nature of the issues and joint transformations.

The point of view of urban architects examines aspects linked to urban form and composition (Huet, 1986; Levy, 2005; Pinon, 1988, 1994). The amount of research worldwide on the physical form of urban areas has increased significantly in recent years thanks to the growing number of publications on urban morphology and the built environment (Oliveira, 2022). This is not the case for new urban spaces in Algeria and Oran. Despite the considerable challenges posed by the recent expansion of the city of Oran, studies on morphological aspects have focused on urban planning inherited from colonization (Mazouz, 2015, 2018; Taibi, 2021; Taibi & Madani, 2021). Without calling into question the interest of these writings, our contribution therefore sheds a different light on the recent extensions of Oran, capturing and deciphering the urban form produced by urban planning instruments in the periphery based on morphological analysis.

#### **4. Theoretical framework (literature) and working method**

In order to understand the form of a city or a fragment of a city, it is necessary to examine urban form by means of urban morphology. Genestier (1988) raises the question of the ambiguity of urban form as an object of analysis and considers that the spatial configurations of the city are one of the meanings of this term. In the same vein, Levy (2005) considers that urban form is complex and polysemous. He defines five registers of urban form as: urban landscape form; social form (or social morphology); bioclimatic form; urban fabric form; urban layout form. Based on morphological analysis, we are interested in the components of urban space, the physical expression of urban form.

The morphological analysis in question here is based on that of the urban fabric, a concept for which several definitions have been proposed (Allain, 2004; Pinon, 1988). One of the factors behind the emergence of this approach was the reaction against the abuses of the modern movement following the

International Congresses of Modern Architecture (1928) and the Athens Charter (1933). From the 1960s onwards, critics denounced the neglect of the spatial dimension and urban form by urban planning, which was essentially concerned with economic, social and demographic data. According to Huet (1986), the modern movement gave a new expression to architecture by assigning it mass housing and urban planning conceived as an instrument for managing quantity, even though these two objects by their very nature fall outside the scope of the work of art. In order to develop a more qualitative approach, the morphological approach originated within the Italian school. In France, Castex et al. (1980) are the precursors of the French school of this approach, known as the “Versailles school”.

Several authors have developed this approach. Borie and Denieul (1984) break down the urban fabric into four systems: the parcel system, the road system, the built system and the open space system. For Panerai, Depaule and Demorgon (1999), the urban fabric is made up of the superimposition or interweaving of three elements: the network of roads, the land divisions and the buildings. With regard to the system for analyzing urban forms, Borie et al. (2006, p.31) distinguish three main levels: the urban envelope, the fabric made up of roads, plots of land and buildings, and lastly the individual elements (solid and void). In our research field, we are therefore examining the three constituent parts of the urban fabric: roads and public spaces; land subdivision; built and unbuilt.

Our analysis is based on various publications (books, articles, papers, reports, laws, etc.) dealing with urbanization and its development in Algeria and Oran in particular. Maps of the city and aerial images (Google Earth) enabled us to understand the urban dynamics of the conurbation as a whole and to target changes in the newly urbanized peripheral areas. Photographs were used to support our analysis of the area in question.

Oran's various urban planning documents, written reports and graphics (PUD, PDAU, PDAU Revision, POS),

gave us a clearer idea of the directions and choices made, and helped us to describe the processes and identify the effects resulting from the implementation of the plans. Field surveys carried out in 2021 enabled us to verify and update the map of the eastern urban extension of Oran. For a qualitative approach, we relied on direct observation of projects in the field. We compared the results with data from our interviews carried out in 2021 with the project owners responsible for managing the POS studies and their application (the Department of Urban Planning and Construction and the Housing Department).

### **5. Overview of developments in the legislative framework for urban planning in Algeria**

Urban planning is a set of studies, approaches and procedures that enable public authorities to understand the development of urban environments and to define development hypotheses. Urban planning documents are part of urban planning (Merlin & Choay, 2010, p. 586). The post-First World War period was the starting point for urban planning in France (Merlin, 2010) and its colonies. The Cornudet Law (1919-1924) introduced the Development, Beautification and Extension Plans (PAEE), which became applicable to Algeria in 1922. It made the production of an Urban Development Plan compulsory for any town with more than 10,000 inhabitants. This was bureaucratic urban planning (Deluz, 1980), also known as regularization urban planning (Almi, 2002, p.81-82), which consisted of transforming urban space by adapting it to modern hygiene and traffic requirements.

In 1958, the French government drew up a plan for economic and social development in Algeria, known as the Constantine Plan (1958-1963). It enabled the introduction of new urban planning instruments to meet the needs of mass urban development. The PUD promulgated by the decree of 31 December 1958 became the main tool for the urbanization of Algerian cities and paved the way for a series of urban planning instruments in independent Algeria. Upon independence, the new

Algerian state opted to renew these regulations, in particular the PUD extended to Algeria by the decree of 6 September 1960. Algeria promulgated the law of 31 December 1962, followed by the ordinance of 1965, which confirmed the town planning and construction legislation in force, subject to progressive Algerianization in this area before 1975.

The Algerianization of urban planning instruments began in 1974, with the introduction of centralized urban planning based on the monopoly of the State as builder (Sidi Boumedine, 1997; Sidi Boumedine & Taïeb, 1996). State policy aimed to provide citizens with decent, healthy and well-equipped housing. Instituted to control the growth of towns with more than 10,000 inhabitants, the PUD therefore remained the essential urban planning tool (Mutin, 1985) until 1990, when a law on town planning and development was adopted.

From the 1990s, a series of laws and texts governing the act of urbanization in Algeria were promulgated. This concerns the introduction of Law No. 90-29 of December 1, 1990 relating to development and town planning which establishes the PDAU and POS procedure. The latter are instruments that each municipality across the national territory must equip itself with to regulate its urbanization carried out or to be carried out. They are established at the initiative of the president of the Municipal Popular Assembly (APC) and adopted by deliberation, after the opinion of the commission made up of all the stakeholders and subject to public inquiry (opinion of the population).

As an instrument of spatial planning and urban management, the PDAU sets out the fundamental guidelines for development and defines the terms of reference for the land use plan (article 16 / law 90-29). According to article 18 of this law, the PDAU: determines the general use of land by sector; defines the extension of human settlements, the location of services and activities, the nature and location of major facilities and infrastructure; determines the areas for intervention in the urban fabric and the areas to be protected. In its approach, the PDAU proceeds by zon-

ing, dividing the territory into parts that are homogeneous from a regulatory point of view, known as sectors (urbanized, to be urbanized, future urbanization, not urbanizable) (article 19 / law 90-29). In short, the PDAU defines the general shape of the town and “sets out the overall urban planning approach and compositional rules that should enable the town’s image and unity to be preserved or enhanced” (Guerroudj, 2013).

The POS is drawn up for an urban area in line with the guidelines of the PDAU. It sets out detailed land use and construction rights (article 32 / law 90-29). For urban development areas, the POS: defines the urban form, organization, building and land use rights for the sector concerned; defines the minimum and maximum number of buildings authorized, their types and uses; determines the rules governing the external appearance of buildings; defines the public space, green spaces, sites reserved for public works and installations of general interest, as well as the layout and characteristics of traffic routes; defines easements.

## **6. Urban planning instruments and urban development in the city of Oran since independence (1962)**

The city of Oran developed at a relatively slow pace over the ten years following independence. The operation known as the “carcass” [3] enabled work to be completed on the apartment blocks that remained under construction after decolonization. Oran benefited from a PUD drawn up between 1973 and 1976 and approved in 1977. The broad outlines of the spatial expansion around the city were planned according to a radioconcentric scheme inherited from colonial town planning. The programs planned under the PUD made a fundamental contribution to the spatial transformation of the outskirts of Oran. This is measured in terms of the many projects located around the city and grafted onto existing neighborhoods.

As part of the ZHUN procedure (1977-1986), the city was surrounded by a series of housing projects spread over 800 hectares (Smaïr, 2004), with identical volumes and shapes. At the

same time, the policy of planned housing estates also helped to generate a different image of the urban landscape of Oran through the allocation of 32,000 building plots (13,000 in Bir El Djir, 10,000 in Es-Sénia and 9,000 in Sidi Chahmi) (Messahel, 2000). At the same time, so-called spontaneous or illegal housing estates continued to develop, and the years of insecurity (1990s) only exacerbated the problem.

In the second half of the 1980s, the urban development sectors provided for in Oran’s PUD had already been consumed, and the urban space within the 3rd ring road was reaching saturation point. Urbanization of the city took place over the following decade (1988 and 1998) in the absence of town planning documents. Land proposed for development was allocated on the basis of location reports issued by a land selection committee. This way of producing the city led to the consumption of vast areas of land, resulting in a disruption of the urban landscape.

The Oran conurbation has a PDAU approved in 1997. In addition to the mother city of Oran, it covers three neighboring municipalities (Bir El Djir, Sidi Chahmi and Es-Sénia). Its objective is the spatial restructuring of these communes by ensuring coherent and balanced urban development in the short and medium term (2005) and in the long term (2015). As envisaged in the PDAU guidelines, Oran’s expansion has tended towards the east, both because the other directions are more or less blocked (to the west, the Murjadjo mountain; to the south, the Sebkha (saltwater lake) and poor soil quality; to the north, the Mediterranean Sea), and because this is where the main land potential lies. The physical setting lends itself to this, and the existence of a diversified primary network has enabled the town’s expansion to continue in this direction (Bensafir, 2011). A conurbation has sprung up, stretching over some fifteen kilometers and bringing together more than 705,000 inhabitants (Bendjelid, 2004). The built-up area of the city increased from 4,480 hectares in 1977 to more than 7,500 hectares in 2000, representing an increase of more than 68% in its relative size (Bendjelid, 2005).



Before reaching its long-term deadline (2015), the PDAU was already obsolete, and its revision was necessary in 2012. This revision includes a fifth municipality (El Kerma) and adds nothing new to Oran's urban planning; it confirms its trend, notes and adopts the urbanization underway (URBOR, 2014). At the same time, since 2016, on the site of Ain El-Beïda, a gigantic collective housing program for hire-purchase (15,000 homes) called "the new Ahmed Zabana Town" has been under construction over 1,400 hectares.

### **7. POS and urban form: Multiple logics, lack of overall vision**

Following the approval of the PDAU in 1997 and the finalization of the POSs, known as POS USTO, POS 50, POS 51 and POS 52, several housing construction programs were launched. These are huge housing projects that form part of the various housing policies implemented in recent years, according to the formulas outlined above. It should be noted that in the case of the USTO POS, a large part of its territory was already urbanized before 1997 (Collective and individual housing, Hospital, Convention Center), in the absence of any town planning instruments. The preparation of each of these documents was entrusted to an urban planning consultancy working separately, without any coordination being ensured by the project owner. This was the case in the junction area between the POS USTO-POS 52 and POS 50-POS 52, as shown in Figure 2. As a result, overlaps or areas not covered were noted. This situation was remedied once the POS had been approved.

Our approach to analyzing urban form is based on breaking down the constituent parts of the urban fabric. In order to do this, we have identified the main thoroughfares in order to understand the logic - if any - behind their layout and whether they correspond to clear development and urban planning options. Analysis of the land parcels and the built and unbuilt areas was essential in order to characterize the urban fabric and, consequently, the urban form.

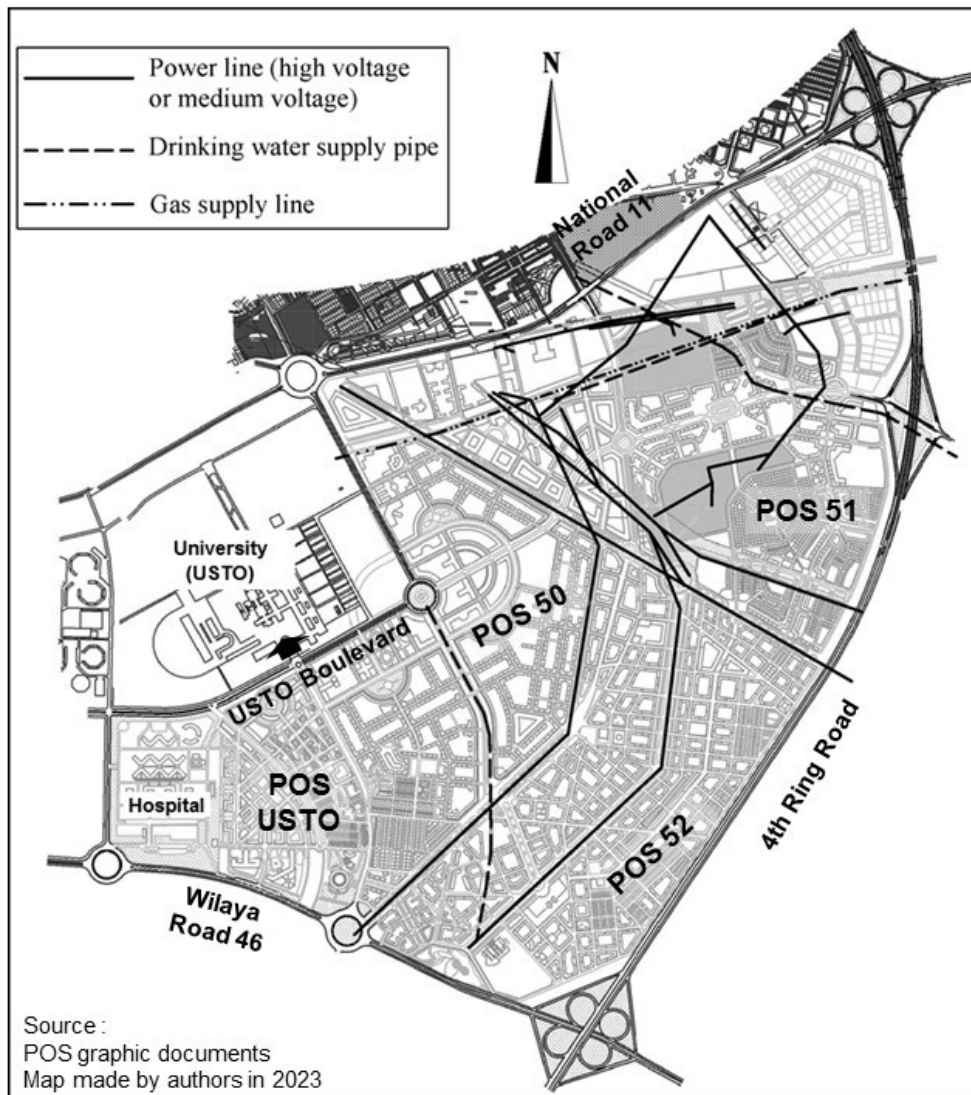
### **7.1. Roads and public spaces**

Roads and public spaces form the structure of the city, determining the skeleton of the urban fabric and ensuring urban continuity through different forms of grids, patterns and layouts. The hierarchy of public spaces, and of roads in particular, makes the unity of the city possible (Panerai et al., 1999, p.156). The intelligibility of the urban structure makes it possible to rediscover the correlation between architecture and the city (Lucan, 2009, p. 516).

The starting point of the urban meshes in the study area is the penetration road that crosses the USTO POS from south (Wilaya Road No. 46) to north (University), serving the area and leading to the main access to the university from the USTO boulevard. In the area covered by POS 50, 51 and 52, the urban structure is heavily impacted by easements for the passage of gas, drinking water and electricity lines (Figure 3). This part of the outskirts of Oran was originally agricultural land and was crossed by numerous power lines. Once this area had been incorporated into the urban development perimeter as part of the PDAU, the POS studies were forced to retain these power line routes, as relocating them proved costly at the time. The result of this approach shows that the planned roads are oversized and very wide - up to 50 meters - with the result that most of them represent major breaks between the urban fabrics they separate (Figure 4). The solutions recommended by design offices involve exploiting them by creating boulevards and green spaces on their sites.

The large rights-of-way generated by the easements, in addition to the original lanes, create large meshes. Inside, the lanes are often narrow and identical almost everywhere. The system of lanes is characterized by a lack of hierarchy, an important element in the urban composition.

As far as public spaces are concerned, the absence of streets, squares and public squares is indicative of the neglect of the urban composition. The outdoor spaces observed are more like spaces created after the buildings have been erected. They are more like ur-



**Figure 3.** Various networks and easements.



**Figure 4.** View of the boulevard separating POS 50 and 52 (Photos taken by the authors, 2024).

ban wastelands [4] whose existence is the result of haphazard development. Despite the planting of trees or the creation of a play area, these spaces remain residual because they were designed with this premise in mind.

The urban structure resulting from the juxtaposition of disparate housing and development programs reveals to

us that each program has its own logic for organizing roads, which function in isolation and ignore their surroundings. We have noted a number of initiatives designed to stitch together these new urban fabrics through the development of green spaces along the boulevards and a tramway line in part of the easement zones.

## 7.2. Land and parcel divisions

The division of land and parcels is “the negative of the road network” (Panerai et al., 1999). In this zone, it is guided by land constraints or choices made by urban planning consultancies which often lack references in urban planning.

The USTO POS saw the birth of projects prior to law 90-29, the largest of which are the Hospital and the Convention Center, which cover 24 hectares and 2.5 hectares respectively. The remainder of the area was developed as part of a large-scale hire-purchase housing program, as well as service facilities. This part has been produced by adding projects side by side without overall coordination.

The land division at POS 50 level shows a layout based on blocks of different shapes, ranging from semi-circles to triangles of different sizes, resulting in very large blocks that are difficult to manage. All the institutes, faculties and administrative offices are planned on large plots. In the north-eastern part of the site, there is a different configuration, with a development of small (100/120 M2 plots) individual housing units currently being built (in 2024) alongside gigantic private property development projects, creating confusion in terms of overall urban form.

The POS 51 poses a particular problem in terms of its division. A difficulty in reading a clear logic of the divisions is noted. This is primarily due to easements for the passage of gas and electricity line networks (Figure 3).

The other reason lies in the fact that an area of 30 hectares was allocated to a private real estate developer for the construction of 1772 collective and individual housing units. This project is designed autonomously surrounded by fences ignoring the environment. The last reason lies in the presence of an activity zone to the south of the POS, along national road 11 according to the subdivision logic. The rest of the area allocated to POS 51 was allocated in the form of blocks to private developers whose only concern is to create as many housing units as possible, resulting in an exaggerated density.

The land division at the level of POS 52 is focused on blocks of shapes ranging from triangle to trapezoid (Figure 5), of cramped dimensions inevitably giving rise to the principle of the closed block. The spatial configuration, as it is projected, does not meet current requirements in terms of parking spaces and play areas.

The divisions at the level of all the POS show the absence of global reflection on this entire area. Different cutting methods are juxtaposed. Each POS expresses its own option, its own development logic, which is logical since the development of each of these town planning documents was entrusted to a particular design office. And according to Huet (1986), “The fact that architects working side by side, completely ignoring each other, causes a mosaic and a fragmentation of the urban form; with this logic, we no longer make the city, we make two parts of the city”.

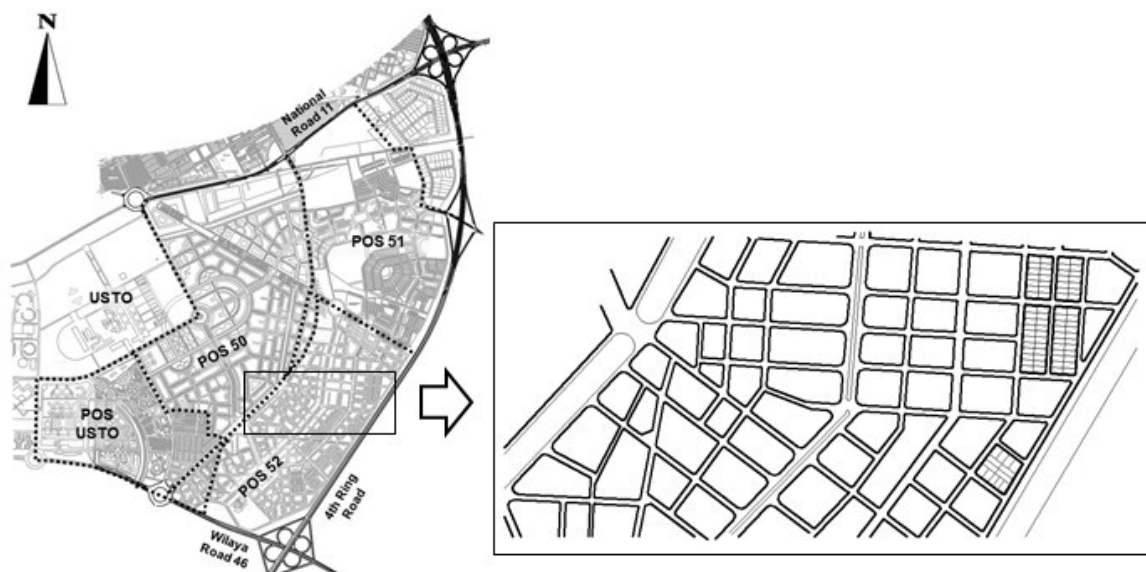


Figure 5. Land division of part of POS 52 (POS graphics document. Map made by the authors, 2024).



### 7.3. Built (Constructions) and unbuilt

Collective housing is the most widespread in the part analyzed. It comes from two formulas, one is produced by the State (Collective housing for rental purchase, Collective social housing...), and which presents

a basic architecture meeting the sole operational requirement (Figure 6). The buildings are characterized by repetitiveness generating an identical and monotonous urban landscape. The other formula is buildings created as part of private real estate development. The architectural result is very eclectic.



**Figure 6.** Repetitive buildings (POS 50). Collective social housing (top) and Collective housing for rental purchase (bottom). (Photos taken by the authors, 2024).



**Figure 7.** High building, low building (Photos taken by the authors, 2024). Photo top left: Individual housing on the left (POS USTO), social housing buildings on the right (southern part of POS 50). Photo top right: Individual housing on the left, collective housing building on the right (northern part of POS 50). Photo bottom: Collective housing for rental purchase and semi-collective housing (POS USTO).



We are also witnessing a very noticeable fragmentation of the urban form caused by the proximity of tall buildings and low constructions (Figure 7). This conflicting juxtaposition of forms of housing where very low heights (individual or semi-collective housing) rub shoulders with considerable heights (collective housing) generates templates where the lines of the roofs break the overall harmony and generates an illegibility that has become a main feature of this extension.

Concerning the equipment, the POS generally allocate them to plots surrounded by roads which form them into islands. This situation makes their integration with the rest of the urban fabric very difficult. The systematic use of endless series of fences surrounding the equipment considerably accentuates the barriers in the city and the discontinuities (Figure 8). Their presence has compromised the search for urban quality and results in a poverty of urban and architectural forms. In this sense, the facades are already obstructed from the urban landscape of the city. Along the fences, a break is established in the urban animation which must be ensured by the facades bordering the tracks.

The limit of this action system highlighted the lack of urban diversity in the study area. The latter is a factor ensuring urban dynamics within an urban fabric. Its absence has been one of the main criticisms addressed to urban planning resulting from functionalism in its vision based on zoning and the differentiation of city functions.

Concerning the building-road relationship, two aspects emerge; alignment and respect for the topography. Here too, we often see a lack of coordination between urban planning and architectural projects.

Respecting the alignments ensures coherence and continuity along the street and further materializes it, but in the area studied the alignments are random. The siting of the buildings fits neither with the land in which they are located nor with the rest of the environment (Figure 9). The neglect of the topography of the land reveals buildings below the track and others on embankments (Figure 10).

Urban composition is a means of ensuring urban continuity, its absence in the initial projection logic means that the result is necessarily a fragmented space as the essential elements guaranteeing its continuity are absent. These recent constructions give the impression that in any location maximum density is sought to the detriment of architectural dimension. The appearance of the projects is a mosaic of urban and architectural forms giving rise to an entropic and amorphous urban fabric.

## 8. New urban planning instruments: limits and inadequacies

This work allowed us to deduce that the main characteristics of the eastern extension of Oran reveal an illegibility at the level of the urban form whose effects are omnipresent and mark the urban landscape in question.

Concerning the urban form of this extension, the inadequacies observed are mainly due to the supports put in place. They are also reflected in the weakness of the structures that govern the urbanization process. Thus, at a time when the State is committed to meeting the needs of the population in terms of housing, we note the lack of effectiveness of the structures and means which are in charge of this task. The PDAU and POS are created on the ini-



**Figure 8.** Faculty area (POS 50). (Photos taken by the authors, 2024).

tiative and under the responsibility of the President of the APC (the mayor). The insufficiency of the technical supervision of the APCs, and the absence of clear ideas limit the involvement of the municipalities (which are supposed to be the most aware of the problems of their locality) and delegate the control of the works to the Directorate of the Urban planning which is departmental.

The shortcomings of the POS also lie in their development. These documents are generally prepared under conditions such that their chances of being of quality are reduced. Working in a hurry and haste, the teams in charge of the studies do not have the time to gather the data necessary for a precise definition of objectives and a relevant identification of the problems.

In addition, a large part of the available time is spent holding meetings to present and approve documents. These instruments, although they provide timetables, never specify who is responsible for the urbanization of this or that area (State, public operators, local authorities, private real estate developers or individuals).

Furthermore, the limit of the horizon of these urban planning instruments to 20 years, at a time when land potential can be consumed at dizzying speeds, makes these urban planning instruments most often expire before even the first years of their existence. The saturation of certain municipalities in terms of land potential has reduced town planning instruments to a simple regulatory urbanization document.



**Figure 9.** Siting of buildings without alignment (Photos taken by the authors, 2024).



**Figure 10.** Site topography not taken into account (Photos taken by the authors, 2024). Photo left: Buildings on embankments (POS 50). Photo right: Buildings below the track (POS 52).



## 9. Conclusion

This article starts from an observation: urban and architectural production in the eastern periphery of Oran is the subject of multiple and strong criticisms. The main deficiencies obviously lie in the construction of the urban extension, then in the urban development itself. This development is certainly difficult, especially in the outskirts which are growing (in number of inhabitants) and expanding (in surface area) very quickly, but that is not enough to explain this situation. If we only consider planned extensions, a major source of difficulties comes from the continuous juxtaposition of collective and/or individual housing projects, such that they are only distinguished from each other by the number of housing. The result of these methods is to make a city made up of pieces that do not fit together. It often happens that once these projects are completed, we notice the existence of a hiatus. Indeed, recent urbanization, even if it is framed by urban planning documents, namely the PDAU and the various POSs which result from it, seems to have lost the meaning of concepts as fundamental as the street, the square, the continuity, landmarks, public spaces, green spaces, etc.

The projects initiated in the eastern extension of Oran have neglected spatial organization on a human scale, urban composition and the articulation between the produced areas. However, the first contact of society with its space is materialized by an image and a perception which refer to aesthetics, coherence and well-being, and it is this dimension which precisely makes a space appreciated or rejected.

Even if it is admitted that town planning documents are necessary for planning, they remain largely insufficient, at least on their own, to take charge of the urbanization of the outskirts of Algerian cities.

Our conclusions are not very optimistic. It cannot be ruled out that, in the near future, the excesses linked to the choices of public authorities for massive production of housing to the detriment of urban quality will have aggravated effects. It is enough to note the current result: the eastern outskirts

of Oran is a standardized space, similar to that of all the outskirts of cities in any region of Algeria. The multiplication of towers, carried out within the framework of the rental-purchase program or the construction of identical social housing buildings, cannot fail to challenge urban stakeholders and their future inhabitants. We therefore believe that it is time to understand that the production of an urban space cannot be limited to the number of housing units alone, but that it involves sustained efforts to promote the quality of the place and that of the image which it conveys.

## Endnotes

<sup>1</sup> Participatory social housing which has become subsidized promotional housing, rental-purchase, promotional public housing, free promotional housing, scalable housing for the reduction of precarious housing, real estate co-operatives, private housing developments.

<sup>2</sup> The Land Agency, the National Savings and Provident Fund (CNEP-Banque), the National Real Estate Promotion Company (ENPI), the Real Estate Promotion and Management Office (OPGI), the Agency of Housing Improvement and Development (AADL), the National Housing Fund (CNL), banks, public and private design offices, real estate developers and national and foreign companies.

<sup>3</sup> Name given to the operation which consists of completing the construction of housing left in a state of carcasses by the departure of the Europeans in 1962.

<sup>4</sup> Urban neglect refers to empty or abandoned land, but also to fringes, embankments and urban gaps. These are spaces devoid of official use, transitional places presenting, due to irregular or even non-existent management, spontaneous vegetation (Soulier, 2006; Brun et al., 2017).

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