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Study of the Historical Urban Evolution of Bejaia City (a Mediterranean City in North Algeria)

Taous Messaoudi<sup>a</sup>\*, Said Mazouz<sup>b</sup>, Bernard Fritsch<sup>c</sup>

<sup>a</sup>Phd student on urban management techniques of cities", option: cities and environment. Institute of management of urban techniques, Oum El Bouaghi University, Algeria. Phd student on spatial planning, urban planning at the Institute of Geography and Regional Development, Nantes, France

<sup>b</sup>Professor at the faculty of Architecture and Earth Sciences, Oum El Bouaghi University
<sup>c</sup>Professor of spatial planning, urban planning at the Institute of Geography and Regional Development

<sup>a</sup>Email: taousoni@hotmail.com

<sup>b</sup>Email: s\_mazouz\_dz@yahoo.fr

 $^c$ Email: Bernard. Fritsch@univ-nantes. fr

**Abstract** 

Most studies made about civilizational poles don't always determine their evolution mechanisms. Our investigation aims to identify the characteristics of the Bejaia city's historical tissue evolution, from the Phoenician period to nowadays. A Mediterranean city located in north of Algeria, who knew several civilizations. Our question is what are the elements who participated in the development of the urban fabric of Bejaia?

To identify the elements that led to the latter's mutation; we'll study the mutation process of Bejaia, by threating the historical data of the city's stratification. Then, we'll describe the city's urban elements; especially morphological elements of social communication and spatial articulation. Finally, we will threat the land morphological divisions. That allows us to understand the city as a whole, in a dynamic perspective, revealing the fixed points, the structure's details and the logic of urban management to identify the strong ones that have modeled urban fabric.

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\* Corresponding author.

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#### 1. Introduction

The city is a system composed of elements in perpetual evolution, giving it its structure and forging its identity. A constant mutation, that differs according to the plurality of spatiotemporal contexts. This research synthesizes the first practical part of our doctoral thesis called "the influence of the urban form on the users' behavior, the case of the neighborhoods of collective housing of Bejaia". It takes up the part of the evolution of Bejaia's urban fabric, which is the context of the study in question. The city of Bejaia, rich in history, has had a succession of civilizations; who's the most exhaustive imprint is the stratification of its urban fabric. This last led to the formation of the current city characterized by the predominance of more characteristic elements and disparity of others, which constitute the highlights of the formation and transformation of its urban fabric. The aim of this research is not to make history on the city of Bejaia, but to carry out a retrospective reading to even lead us to understand its mutation process.

### 2. Presentation of the studyed area

The present investigation will be based on the northern region of Algeria, precisely on the city of Bejaia, a coastal town located at 230km in east of Algiers.

### 2.1. Limits of the province

The province of Bejaia is limited by the wilaya of Jijel in the East, Tizi-Ouzou in the West, Bordj Bou Arreridj in the South, the wilaya of Setif in the South-East and Bouira in the South-West [1].

### 3. Diachronic reading of the urban evolution of the city of Bejaia

As explained above, the retrospective reading of the evolution of the urban fabric of Bejaia aims to define its evolution. In this part we will discuss the different historical periods of the city with an emphasis on the evolution of public space through time and space.

This study encourages us to better identify the highlights as well as the operating concepts that have generated the logical transformation of the urban public space of the city.

# 3.1. The fortress city: Bejaia intra-muros

This period extends from the Phoenician period to the beginning of the French one. It is categorized by the domination of some urban characteristics.

Bejaia evolves according to its relief; it has experienced a long period of stratification resulting from a succession of civilizations that have contributed to its formation. Over time, all the civilizations settled in the béjaouis' territory overlaid on its precedent and reproduce certain principles of urbanization process.

#### A. Bejaia, Phoenician Companion (7th century BC)

Through the reading of the map (FIGURE 1) we find that the installation of the Phoenician counter in the bank bordered by the two natural headlands Boak and Carbon was the first urban installation in this region. It is the result of a succession of similar installations along the south shore of the Mediterranean sequenced from 30 to 40 km.

The natural data of the city favored commercial exchanges; this location was essentially motivated by two major points: The nautical qualities of the places and the existence of the protective caps (Cap Bouak and Cap Carbon).

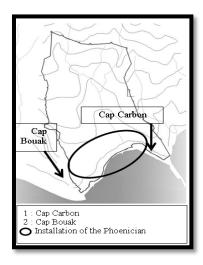


Figure 1: Bejaia Phoenician period

Source: [3]

### B. Saldae, Roman period (33 BC)

The analysis of the map (Figure 2) shows that the Romans' setting up was place over the vestiges inherited from the Phoenician period. The Roman settlement at Saldae (ex Bejaia) was characterized by the construction of a fortress town circumscribed into a 3 km long enclosing wall, which is conforming to the curvatures of the bearing structure of the site.

It was the first civilization that injected the principles of inside and outside materialized by the wall, as well as the principle of thresholds materialized by three great doors (The Sarrasine gate, the El Fouka gate, the Gouraya gate). They figure the two principles which were adopted by all the civilizations which succeeded them.

Another operational concept specific to Roman town planning is taken up in Saldae, we are talking here about the creation of two major axes the Documanus superimposed on a wadi and the Cardo Maximus superimposed parallel to the contour lines and which intersection is materialized by urban public spaces as: forum, place of business, administration and religious life.



Figure 2: Saldae roman period

Source: [3]

# C. Naceria, Hammadite period (1067 - 1152)

At that time, Bejaia became the new capital of the hammadite dynasty and gained the name of Naceria. The map in (Figure 3) illustrates that the Hammadite installation is overlaid on the Roman remains with a major extension eastwards and northwards until the Gouraya Mountain, which forms a natural growth barrier for the town and which is still impassable up to the present day. The hammadites adopt the Roman operative principles of thresholds and of the inside / outside, whereas for the roads and the parcels, the layout resumes the principles of the medieval winding and dense cities. The construction of several places of prayer, schools and palaces, the most famous is the "palace of l'étoile", as well as two military forts that survive till nowadays, in an architectural style proper to this civilization. Concerning public spaces, we note the existence of several markets that constitute the prevalent meeting places by the inhabitants, which are generally found in the urban centers and in front of the mosques.

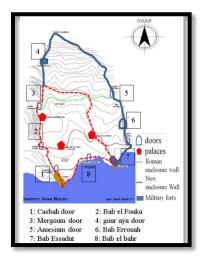


Figure 3: Naceria hammadite period

Source: [3]

## D. Buggia, Spanish Period (1510 - 1555):

According to the map (Figure 4), the Spanish installation in the town of Buggia was based on stratification on existing old vestiges. The Spanish settled on the old urban core of the city with a revival of the same operative concepts. This superposition is characterized by a decrease in the walls and by the reconversion of major buildings functions. The public space remains authentic and does not undergo any modification.

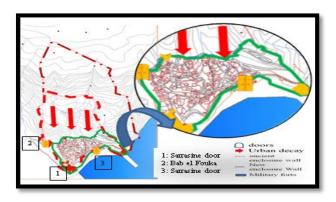


Figure 4: Buggia Spanish Period (1510 -1555)

Source: [4]

# E. El Medina, Turkish period (1555-1833)

The Turks liberated Buggia and nicknamed it el medina in 1555 [2]. They are superimposed on the ancient Spanish city with an extension towards the North-West (Figure 5). This period changes the bays of the public urban space by integrating a new operating mode which is that of "the hierarchization of distribution spaces". In fact, the creation of bigger and better structured streets, whose intersection is materialized by the location of meeting, places including markets and squares as well as the arrangement of others of the latter at the Mosques' sites.

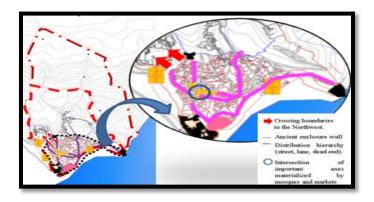


Figure 5: El Medina; Turkish period (1555-1838)

Source: [5]

## F. Bougie, French Period (1833-1871)

The French first settled on the site of the Turkish city by delimiting two distinct sites for the indigenous to north and for the settlers to the south, articulated by the place Philippe (Figure 6). It was not until 1848 that they embarked on a new project of major restructuring of the urban fabric, adopting the principles of the military genius giving a new urban arrangement with haussmanian type. This initiative includes several new operating principles: Creation of orthogonal paths, widening of roads, and creation of public squares.

Following this, two new constants appear clearly: The location of the new urban core at the intersection of the Trezel Basse Street and the Rue Du Vieillard, and the link between the nucleus and the Place De L'arsenal (former Turkish square) by the Trezel Haute street.

What is to be emphasized is the importance of the new concept of public places that articulate between the different parts of the urban fabric and structure it, giving rise to real highlights in the city.

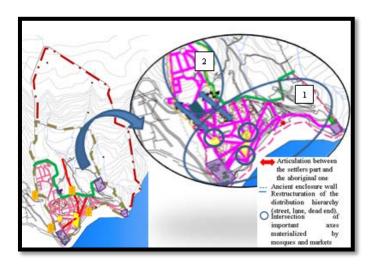


Figure 6: Bougie, in french period (1833-1871)

Source: [10]

# 3.2. Bejaia, city extramuros

This period is divided into four major stages:

# A. The French period (1871-1890)

The important facts to highlight during this phase, following the reading of the map (Figure 7) are; the integration of the indigenous Sidi Sufi district into the city, the spontaneous development of the district of Les Cings Fontaines, and finally the projection of the new wall extending to Sidi Touati to the north.

Urban Facts: -Crossing of the limits and extension towards the sea; -Superposition on the agricultural frame and

new road layout; -New growth barrier (railway); -New threshold of the city (square).



Figure 7: Bejaia French period (1871 -1890)

Source: [7]

# B. Densification and extension 1890-1958

The map (Figure 8) figures the growth of the city on the sea side by pushing back its natural limit and the establishment of two poles, new elements that generating urban development.

Urban Facts: -Densification and extension to the west and north along two axes of growth: old farm road to the west and La Rue Des Vieillards street to the north; -Superposition and stratification on the agricultural frame; - Crossings of the limits of the Bois Sacré wadi; Appearance of the illicit quarter of Houmat Bab Ezzine.

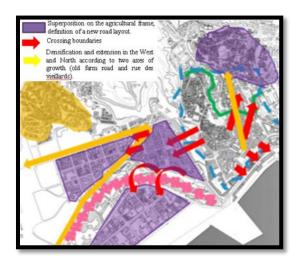
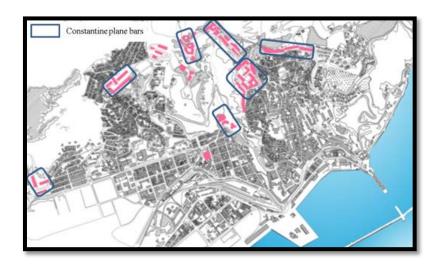


Figure 8: Bejaia French period (1890 -1958)

Source: [6]

## C. The Constantine plan 1958 -1962

With the advent of the Plan of Constantine the city experienced a breakdown due to the negation of the bearing structure of the soil (axes and agricultural framework), hence the notion of the elements of social communication (the street and the Place), and management and forecasting elements (island and plot) (Figure 9).



**Figure 9:** Bejaia French period (1958-1962)

Source: [8]

# D. The post-colonial era

After independence, the Algerian state adopted a succession of plans and strategies relating to territorial and urban planning, drawing on the lessons received by the north countries.

### 1. Urban Extension 1974 - 1990

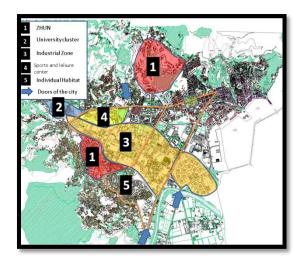
After urban stagnation, which followed independence, national policy gives priority to production activities.

In 1974, Bejaia became a wilaya, and is endowed with a PUD (Urban Master Plan), according the following actions modeled in (Figure 10):

-The realization of collective housing group ZHUN: ZHUN of IHADDADEN and SIDI AHMED;

-The projection of the industrial zone (the 3rd industrial pole of the East) on the plain, the university pole and the Omnisport Park in the eastern zone, the administrative zone along the Boulevard de la Liberté;

-The realization of individual housing in self-construction in the form of subdivisions to alleviate the pressure on the old districts.



**Figure 10:** Bejaia between (1962-1974)

Source: [11]

# 2. Current statue: 1991-2016

A new development policy oriented by the PDAU and the POS, with the liberalization of the land situation and the creation of a real estate market driven by competition between real estate promotions with the return to the block and the plot as moments of decision and definition of the new architecture.

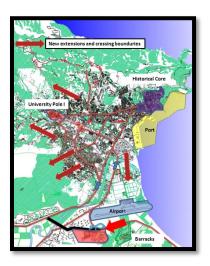


Figure 11: Bejaia nowadays

Source: [9]

According to the map (Figure 11) we note those urban facts: -Crossing of the limits: the extension to Iriyahen and crossing of the Soummam wadi due to the attractiveness of two generating poles namely airport and university, and illegal constructions on the west forest area. We also note a displacement of city thresholds at both ends of the new interchange spanning the Soummam.

Urban Facts: -Loss of notion of limit and concept of threshold; Negation with the bearing structure of the ground; -Spread of the city; -Loss of the morphological elements of the city; -Concept of zoning which causes the loss of the notion of public space concretely defined and generating dysfunctions and imbalances within the city. All those negative facts are specifics of the modern urban fabric.

#### 4. Constraints \limitations of the study

Throughout this research, we encountered multiple barriers to documenting. Firstly, the old urban maps of the city of Bejaia have been for the most part neglected, buried in unclassified archives and very difficult to access. We have therefore resorted to multiple solicitations within different public services of the city in order to gather the maximum of these cards in order to study them. Secondly, the few available cards were mostly damaged, which made it far more difficult to read them. In the end, the last obstacle to collecting our data was that these maps, for their heritage and historical value, were closed to the public. Nevertheless, after a long time, we were able to carry out our project with the collaboration of the different organizations, having helped us to access the information sought.

### 5. Conclusion

The city of Bejaia, rich in its long history of three millenniums, inherits a constantly changing urban fabric. All the civilizations which have succeeded in this city have modulated space by injecting certain specific characteristics into it for each period. Bejaia has undergone two major phases in its history:

- 1. Bejaia: the **city intramuros** of the Phoenician period from the 7th century BC to the French 1871, characterized by the following Urban facts and operational concepts:
- The relief shapes the city; it determines the location or the shape of the structural elements of the urban space (ramparts, gates, routes, important buildings, particular developments); -Differentiation of the "outside" and the "inside" by ramparts; -The threshold: which is formed by the doors; -Identification of important moments in the city by the intersection of the courses.
- 2. Bejaia: the city **extramuros** from the French second period to nowadays, characterized by those concepts:

1)On the city scale:

-The relief dictates the course of the territorial routes and the natural elements participate in the delimitation of the urban space; -The extension of a territorial axis in the city becomes boulevard; -The thresholds of the city materialized by peripheral equipment; -The intersection of the routes marked the highlights in the city, reinforced by specific functions (square, market, mosque, ...); -Squares and streets are public spaces par excellence, they are defined by their dimensions, their function, their position in the tissue and their walls; -The recurrent elements of the city contribute to the structuring of the urban space; -The limits become articulations (junction moments) after their crossing; -The public space takes precedence over the private one (urbanization takes place from outside to inside)

### 2) Neighborhood scale:

Isolation is a means of division and management of urban space; -The subdivision of the urban soil is done by superposition on the agricultural plot; -Orthogonality and alignment are means of achieving regularity; -The extension of the tracks ensures the continuity and the welding in the city.

#### 3) Island scale:

Parceling is a means of dividing the block; -The plot is the elementary unit in the urban space, with legally recognized limits.

#### *4)Scale of the plot:*

The facades are marked by a pattern (horizontal and vertical), they are treated in three parts: basement, body and coronation. In conclusion, we can say that the public urban space of the city of Bejaia modulates the fabric and continues to be the key to its singular identity.

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