

# Architectural Ornaments of Colonial Towns in Algeria: The Case of Mostaganem

Beldjilali Said<sup>1</sup>, Bougara Abdelkader<sup>2</sup>, & Bouhamou Nasr-eddine<sup>1</sup>

<sup>1</sup>University of Abed Hamid Iben Badis, Algeria

<sup>2</sup>University of Hassiba Ben Bouali, Algeria

## Abstract

The colonial heritage of the 19<sup>th</sup> and 20<sup>th</sup> century is an invaluable treasure in Algeria. It is considered as one of the important landmarks where it occupies a significant part of the Algerian housing stock. The wealth of this colonial portfolio is clearly seen on how their facades are built. They are very decorated and embellished with architectural ornaments according to the styles of art deco and art nouveau. These two styles contribute strongly to the definition of the urban image of Algerian cities. Mostaganem city like many Algerian cities, is characterized by two types of building facades. The first one is decorated by architectural ornaments. However, the other one is smooth and plain with a modern style. In the latter, the notion of ornamentation is considered as a crime as reported by several architects. This research is a part of a reflection to respond to the lack of means for an analytical study of architectural ornaments, indicating the principles and the steps to follow in order to deduce the characteristics of these ornaments. All the results obtained in this study demonstrate that the necessary steps for a reliable analytical study of architectural ornaments requires the establishment of an associated document that includes two essential steps. The first one is to give a global reading of the façades, considered as support for the architectural ornaments and the second focusing on an analysis of ornament firstly associated with its support and then separated.

**Keywords:** architectural ornaments - colonial heritage - facade - Mostaganem city centre.

## Introduction

The word ornament is derived from the Latin term *ornamentum*, which means a suit. There is also an ornament of a speech and a text, distinction and honors. The multiple meanings of this term have been kept until the contemporary period where the term ornament comes to designate what is used to decorate a thing (Thomas, 2012). Alberti (1987) suggested that the support of the ornament can be a wall or an object, which plays its role without the presence of the ornament considered as an addition.

Since the age of Vitruvius, ornament has become a serious subject of discussion, where the notion of ornamentation has undergone various changes in their functions and forms. It reflects the mentality of people and their way of life; it is translated by architectural styles (Loos, 2003).

According to a stylistic study, Bahloul (1996) confirmed that the notion of ornamentation has reached its peak in style art deco, art nouveau and eclecticism. These three styles have invaded the world and they are considered as a new architectural vocabulary. These styles are widespread on the Algerian scene during the French colonial period.

The scope of this research relates to the French colonial period in Algeria, between the 19<sup>th</sup> and 20<sup>th</sup> century. This period corresponds to the emersion of art deco and art nouveau styles and the eclecticism, known by rich facades in terms of ornamentation. It extends geographically to the French colonial fabric of Algerian cities, particularly the city centre of Mostaganem as a representative sample. Hence, the French colonial heritage constitutes an important part of the built environment.

Despite many attempts to enhance this heritage by rehabilitation operations in several Algerian cities such as Oran, Constantine, Sidi-Belabes and Mostaganem, the lack of a scientific methodology and knowledge is demonstrated in the failure of these works and especially the sensitive elements like the architectural ornaments. The absence of a rigorous analytical study often leads to an inappropriate restoration in term of formal aspect. A correct comprehension and a positive identification of the architectural ornaments contribute to a real assessment in order to avoid making errors related to the aesthetic, which leads to a historical falsification.

Therefore, the analysis of architectural ornaments is a complex activity. It will result in a decision that will be useful for the restoration projects (Mitrache, 2012). Hence, the main problem of our research is: what are the steps to follow for an analytical study of these architectural ornaments? Which criteria and characteristics of architectural ornaments should be employed to deduce from this analysis? This analysis requires a multidisciplinary team (historians, urban planners, architects ...). It must go systematically through an inventory operation. The problem raised led to suggest some steps to follow included in an accompanying document for an analytical study of the architectural ornaments.

### **Research Methodology**

This research is based mainly on descriptive, analytical and practical approaches. It is divided into three parts. The first part is devoted to the vocabulary of the architectural ornaments of colonial facades; a historical overview of the concept of ornamentation in architecture is presented. The second part suggests some steps to follow for an analytical study of architectural ornaments, which will be included in an accompanying document.

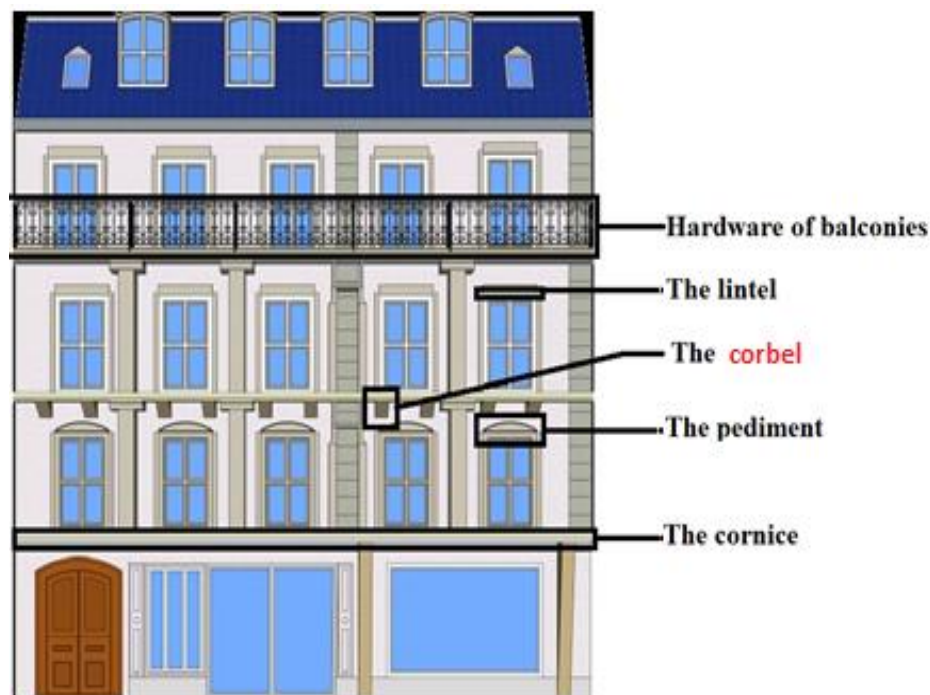
The third part is an investigation in situ; it is the application of this analysis on architectural ornaments of the colonial facades situated in the city centre of Mostaganem town. From this investigation, the first objective is to deduce the characteristics of these facades, which are considered as a support for the ornaments. The data are collected by various means such as historical researcher, pictures and metric readings. The height of the façade is determined, followed by the detailed drawing of the ornaments and their features.

### **Vocabulary used for the architectural ornaments in the colonial facades**

Ornament indicates the shapes, and points out the elements that contribute to link the different parts together. Its presence can reinforce the feature of the object to which it is applied. This object represents the support that bears the ornament (Blair & Bloom, 2003). There are several objects or supports of ornaments. The facade is one of these supports. It is

not just a simple wall pierced with openings, but it is an envelope, a membrane, the place of multiple exchanges between the outside and the inside, the natural environment and the building. Deilmann (2009) in his work defines three functions for the facade. The first one is a protective function against the other. They include the foreigners and enemies and the public. However, being against severe weather is the primary function. The second is a transitory function, where the façade assumes the transition, gives light and protects them from straight looks and heat loss (while enabling visibility as much as possible). The third is a representative function. This need has given birth relatively early to the history of construction, trying to highlight the functions of the façade and to strengthen them with the sign of wealth. This development started with the constitutive elements of the façade, which is extended to the decoration of windows, balconies and doors. It has been known as a marked development much more in the Baroque period than to go up to their graphical and bodiless representation (Finance, Liévaux, 2010).

- Hardware of balconies: Balconies, transoms and grids of windows are always used in the facade for protection. These elements are characterized by a very contrasting design.
- lintel: The lintel is an architectural element, which role is to support the construction materials of the wall above a bay, a door or a window.
- Corbel: a protruding element, which is above balconies.
- Cornice: usually ornate which protrudes on the upper part, it is often horizontal.
- Pediment: a coronation compound from a frame decorated with moldings and a tympanum  
(see Figure 1).



**Fig. 1: Elements adorned with the facade.**

Source: author

## Procedure for an analytical study

According to the literature, there are various studies in the field of heritage, which offers several types of analysis: (fabric, urban and architectural composition, and facades) (Beldjilali, 2018). However, there are a few which have explored the architectural components such as the architectural ornaments, especially the ornaments of oriental façades. In this context, Elrayies (2018) has conducted an analytical study on the architectural ornaments of the 21st century including 35 recent buildings (2006-2016) and of a broad geographical situation. Thus, such studies are quite difficult, so the work undertaken is an attempt to answer this lack of analysis by suggesting an accompanying document, which is objective and simple to use. It is divided into two large parts.

**1-Reading of the facade:** it is considered as a support for the architectural ornaments, so its reading is an essential step. It requires a logical reading, ranging from a simple visual observation to the classification of the typologies of the facades going through a historical overview to select the different features of the colonial facades.

**2-Analysis of the ornaments:** according to Heidelfolt (1844) the ornament is an essential element of the architecture and he insists that the ornaments are proportional and in harmony with each other and with the whole.

2.1-Analysis of the ornament with respect to the facade: the architectural ornament represents only a component of the facade. Its importance is reflected on its harmony between them, which causes a feeling of pleasure while examining the facade. To analyze this harmony, the ornaments are firstly examined as an entity in the facade by studying their number, their position, and the type of repetition.

2.2-Separate analysis of ornamentation: it analyzes isolated architectural ornaments, out of context and support, by classification based on formal aspects, proportions, dimensions and types of patterns as well as characteristics of the patterns and the construction materials and the different types of pathologies observed.

Table 1: New steps for an analytical analysis of the ornaments

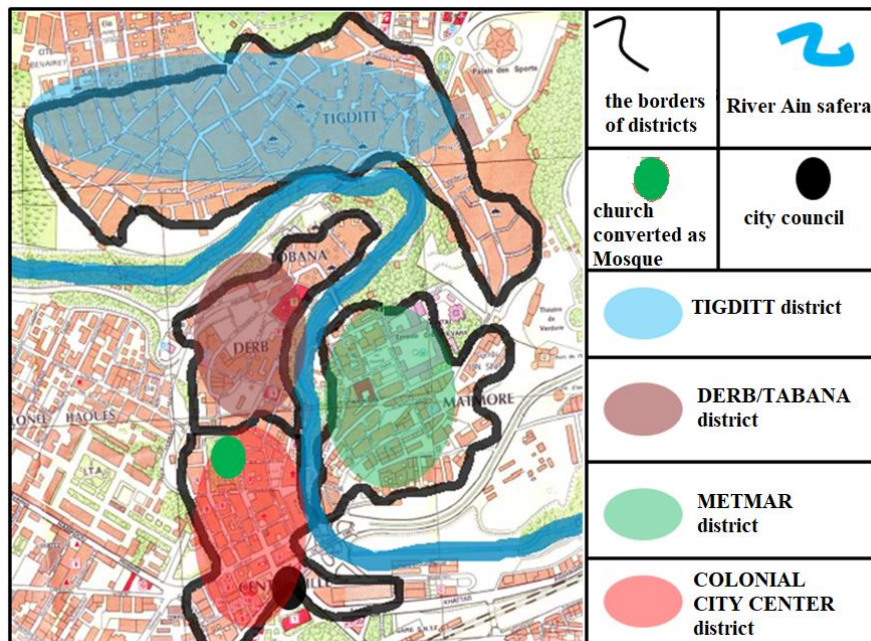
Step of the analysis	Domain	stages of domain	details	
Reading of the facade	historical Domain	history	initial occupation	
		date of realization		
		style of realization	néo classical /eclecticism decorative art / new art	
	Architectural domain	location		
		number of facades		
		breadth of the facade		
		height of the facade	Number of floors	
		Characteristics of the facade	Symmetry / asymmetry	
			Presence of a central body	
			metaphor	
		Type of openings dimensions	dimensions	
Form				
module				
Analysis of ornaments in comparison with the facade	Architectural domain	Number of ornaments	Even / odd	
		Position of ornaments on the facade	High / Bottom	
			The quoting / central	

		Type of repetition	Symmetrical / on group	
			Simple/complex	
random				
Central				
Analysis of isolated ornaments	Architectural domain	Size of the ornaments	Low relief / average / statu	
		Dimension of the ornaments	Length / width / thickness	
		Type of the motives	Geometrical - writing	
			Vegetable-animal	
			human	
		Characteristics of the motives	Size-position	
	Type of organization			
	The surface covered on the ornament			
	Constructive domain	pathologies	Build material	rock- plasters -stuc-staff
			Deletion of the drawing of motive	
Appearance of microphones cracks				
Appearance of the big cracks				
Partial detachment				
Complete detachment				

**Analysis of the architectural ornaments and case study:  
The facades of the city centre of Mostaganem.**

This section aims to apply the proposed procedure for the analysis of architectural ornaments of the facades of the city centre of Mostaganem.

Mostaganem is a coastal town located 360 km west of Algiers. As many Algerian cities, it underwent a change in its architectural landscape where the French occupant had initiated the urban dogma of the city by changing it into a western city.



**Fig. 2:** Spatial planning division of the city districts of Mostaganem

Source: author

It can be noted that there is some sense in term of component localization of the city in which two urban tissues are identified and separated by a natural gate of the river *Ain safera*. Thus, the typology of the whole is meaningful of the expression of a kind of integration to the physical data of the site. This river represented a resource of water for the inhabitants and at the same time, it was used to irrigate the gardens and to run the mills (Yamani, L. 2009). These two urban fabrics each correspond to a particular period and much more distinctive; one pre-colonial compound by the district of El-Metmar dareb-tabana, Tidjeditt and the other, colonial city centre of Mostaganem. The centre represents an important component of the city, where the colonial heritage of the 19<sup>th</sup> and 20<sup>th</sup> century is a vital part of the built environment of the city centre (see Figure 2).

### Reading of the facades:

According to Boulkroune (2017), under French colonization, Algeria has seen a new vocabulary with architectural languages, imported from the metropolis, so Mostaganem like other Algerian cities, has known during the colonial period the diffusion of the following styles.

Neoclassicism: (between 1730 and 1925) expresses the traditional elegance, which means the search for the nobility of Greco-Roman buildings, characterized by the use of stone ornaments often in the upper part.

-Eclectism (between 1830 and 1870) is borrowing its elements from schools often very different and characterized by an overload of ornamentation.

-Art nouveau (between 1890 and 1914) was against the industrial production, using curves inspired by nature, it introduced facades ornamented by motif of flowers, birds, and statues of women. The use of iron as a structural and decorative element has ceased and then a return to Nature is declared.

- Art Deco (between 1925 and 1937) is the stage of the transition to the modern movement, the essential innovation of this style is the right, the decoration is always present but it remains very simple. The ornaments are inspired from the ancient Egypt architecture.

-Modern (between 1920 and 1960) is characterized by the rejection of the ornamentation, which is considered as a veneer.

The present study focuses on the facades of ornamented style. The city centre includes a large number of colonial buildings (Bettoutia, A. 2013).

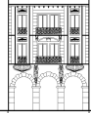
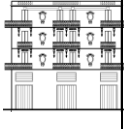
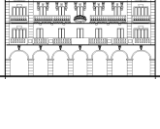
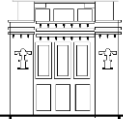
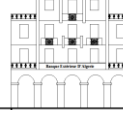
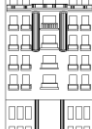
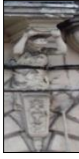











For a better analysis, the buildings considered as the most representative samples for our work (rich in ornament materials of style art deco and art nouveau) are selected. Three flats (1-2-3) and three buildings of equipment (4-5-6) are studied for this research (Figure 3).

**Fig. 3:** Location and façades of buildings  
Source: author

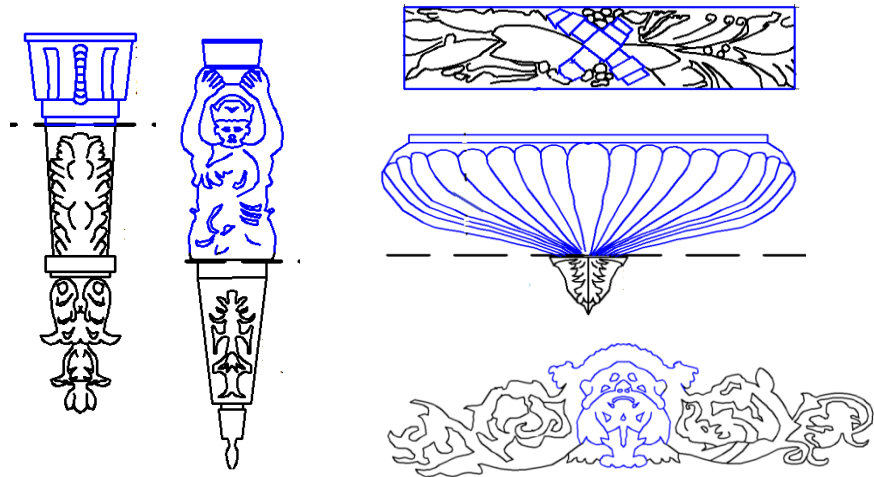




Table 2: Analysis of the ornaments case of Mostaganem town (Algeria)

			1	2	3	4	5	6	
									
Reading of the facade	historique	style	art deco	art deco	art deco	néo classical	art nouveau	art nouveau	
		Completion date	1895	1915	1914	1938	/	1932	
	height of the facade	Number of floors	R+2	R+3	R+3	R+2	R+3	R+5	
		Height(m)	14	18.00	18.00	18.00	18.00	28.00	
	breadth of the facade	span	A	3	4	5	3	5	3
			B	1	1	2	2	/	/
		Breadth (m)	13.00	18.00	25.00	18.00	19.00	18.00	
	the windows	Form	rectangle	rectangle	rectangle	rectangle	rectangle	rectangle	
		number	08	12	21	09	13	25	
		height (m)	2.40	2.40	2.40	3.60	2.40	2.40	
Breadth(m)		1.20	1.20	1.20	1.80	1.20	1.20		
ornaments in comparison to the facade	Raven	illustration							
		Number	2	14	12	2	10	13	
		Type of repetition	/	by series	Linear/ by series	/	Linear/ by series	linear	
	Pediment	illustration							
		Number	4	6	10	3	8	20	
		Type of repetition	linear	by series	linear	linear	by series	by series	
isolated ornaments	Raven	Type of the motives	humane	plant	plant	animal	geometric	geometric	
		dimension	height (m)	1.60	1.30	1.30	3.00	1.30	0.60
			Breadth(m)	0.30	0.30	0.30	1.00	0.30	0.30
			Thickness	0.45	0.45	0.45	0.20	0.45	0.15
	Build material	staff	staff	staff	stone sharpened	staff	stuc		
	Pediment	Type of the motives	animal	plant	plant	humane	geometric	geometric	
		dimension	height (m)	0.90	0.90	2.00	2.00	0.90	0.90
			Breadth(m)	0.30	0.30	0.30	1.00	0.30	0.30
			Thickness	0.03	0.03	0.03	0.30	0.03	0.03
	Build material	stuc	stuc	stuc	stone sharpened	stuc	stuc		





## plant motives

**Fig. 4:** Motives of ornaments

Source: author

## Discussion and Conclusion

### 1- Reading of the facade

After identifying the architectural styles of colonial facades, it is found that the dominance is for the art deco style. From The results found, following characteristics can be deduced:

a)–The tri-partition is a kind of metaphor of the treatment of the facade by the human body (base, body, head). Aristotle defines this notion by the beginning, the middle and the end of the facade (Fahnestock, 2000). The colonial facades of the city centre (except for the consular palace) are characterized by a tripartite organization, which defines a beginning, continuity and a completion according to three sections. The first is a starting section: which establishes a relation with the urban and undergoes generally a distinctive treatment (gallery with arches). The second central section is animated by the balconies, the rhythms and sometimes the oriel windows). The last section of arrival reveals a relation to the sky.

-The boundaries for all the facades are marked by vertical strips that set the ends of the facade. They are always present even if the building occupies the entire plot, while the horizontal boundaries are provided by a set of pilasters.

-Types of openings (vertical openings) for the four styles must have a rectangular shape with a module from where the height is twice the width.

-The spans are the same width 8.5 m length and are marked by looted arches except for the two buildings from which the end of the arches has a wider width.

-The symmetry characterizes all the facades.

### 2-Analysis of the ornaments of facades

Ornaments are considered as components of the facade. For this, they are analyzed as an entity or a grouping on its support (the facade). From the analysis of the architectural ornaments in relation to its support, following results can be drawn:

- Originality: Each building has its own architectural ornamentation. Identical ornaments are not found in all the six buildings analyzed (Originality).

- Number of ornaments: The residential buildings have a large number of architectural ornaments. However, the equipment has only a few number (Number of ornament).
- Beautiful floors: Each floor is different to others, they differ in halachic way, usually the top floor is the most ornamented. Beautiful floors include high density of ornaments; it is subjected to the most decorative and luxuriant treatment (Beautiful floor).
- The repetition: A linear repetition can be distinguished according to the typology of elements (Repetition).

### 3-Analysis of isolated architectural ornaments

Ornament is analyzed separately from its context and support. A representative type (lintel, corbel, cornice, pediment ...) is chosen in which its sizes, thicknesses, proportions, patterns and characteristics are studied.

From a deep analysis of the collected data, the obtained results enable to establish a list of the characteristics of the architectural ornaments; the similar and different characteristics are presented. It is to be noted that the predominance of the plant motifs, especially the geometrical floral patterns that are less used since the dominance was oriented strongly towards organic forms. On the other hand, the absence of animal motifs is noticed except a lion head in low reliefs and few human faces. There are neither standard typologies nor distributional ornaments.

Similar characteristics can be summarized as follows:

- Symmetry is one of the most shared characteristics and used either at the level of the design of the facades, or at the level of the ornaments and its motifs.
- Architectural ornaments usually have identical dimensional proportions.
- Crows are the most used architectural ornaments exploited and decorated.
- The *bas reliefs* are considered as a type of architectural ornaments widely used at pediment level, because of their very small thicknesses, the yellow to be a light weight. It provides a good adhesion on the façade. This is why they are always in good condition.

The pediments are often made in bas-relief. The Different characteristics can be also summarized as follows:

- The use of a single type of pattern in the different equipment .However, there is a combination of the pattern buildings for residential use (see Figure 4).
- Five pathology forms of architectural ornaments are classified notably, appearance of large cracks and holes, erasure of pattern design, appearance of micro cracks, total and partial detachment of architectural ornaments, where the lower part remains bonded.

The identification of these pathologies opens a perspective to future search for innovative materials for restoration for these architectural ornaments.

### References:

- Ali Bettoutia (2013)Mostaganem, decorative arts" Edition Edilivre-A Paris July
- Bahloul, J. (1996) The architecture of memory: a Jewish-Muslim household in colonial Algeria, 1937-1962, Vol. 99, Cambridge University Press.
- Beldjilali, S. (2018) 3D Rebuilding of a Heritage Construction: Case of City Hall of Mostaganem  
Journal of Architectural Drawing Volume 3 Issue 3

- Bloom, J. M. (2008). *Arts of the City Victorious: Islamic Art and Architecture in Fatimid North Africa and Egypt*. Yale University Press.
- Dastjerdi, M. S. (2014). Symbolic use of traditional architectural features on contemporary mass housing facade in North Cyprus (Doctoral dissertation, Eastern Mediterranean University (EMU)-Doğu Akdeniz Üniversitesi (DAÜ)).
- Deilmann, C. (2009). Urban metabolism and the surface of the city. In *Guiding Principles for Spatial Development in Germany* (pp. 1-16). Springer, Berlin, Heidelberg.
- Elrayies, G. M. (2018). Architectural ornaments in the twenty-first century: An analytical study'. *Cities' Identity Through Architecture and Arts*—Catalani et al.(Eds), Taylor & Francis Group, London
- Fahnestock, J. (2000). Aristotle and theories of figuration. *Rereading Aristotle's rhetoric*, 166-184.
- Finance, L.D., & Liévaux, P. (2010). The vocabulary of the ornament. *Perspective. News in art history*, (1), 123-129.
- Hedrick, D. K. (1987). The ideology of ornament: Alberti and the erotics of Renaissance urban design. *Word & Image*, 3(1), 111-137.
- Khelifa-Rouaïssia, S., & Boulkroune, H. (2017). The Architecture of the Town Halls of the French Colonial Period in Algeria: The First Half of Nineteenth Century. *International Journal of Historical Archaeology*, 21(2), 420-432..
- Loos, A. (2003) *Ornament et crime* Lidia Breda
- Mitrache, A. (2012). Ornamental art and architectural decoration. *Procedia-Social and Behavioral Sciences*, 51, 567-572.
- Thomas, E. (2012). *Vocabulary illustrated with ornament: by the decor of architecture and other arts*. Vo1844n Heidehoff, C. A. (1844). *Collection of Architectural Monuments of the Middle-ages in the Byzantine and Gothic Styles* (Vol. 1). JA Stein (Conrad Geiger).
- Yamani, L., Brahim, K. (2009). Social evolution and spatial reconfiguration: the city of Mostaganem. *Insaniyat / Algerian Journal of Anthropology and Social Sciences*, (44-45), 175-193.