



Fig.13. Nomad rug Middle Atlas, Source: Mojabi, 2009.



Fig.15. Moroccan crochet design, Photo: Shohreh Javadi, 2016.



Fig.14. Namur carpet, Source: Mojabi, 2009.



## Endnote

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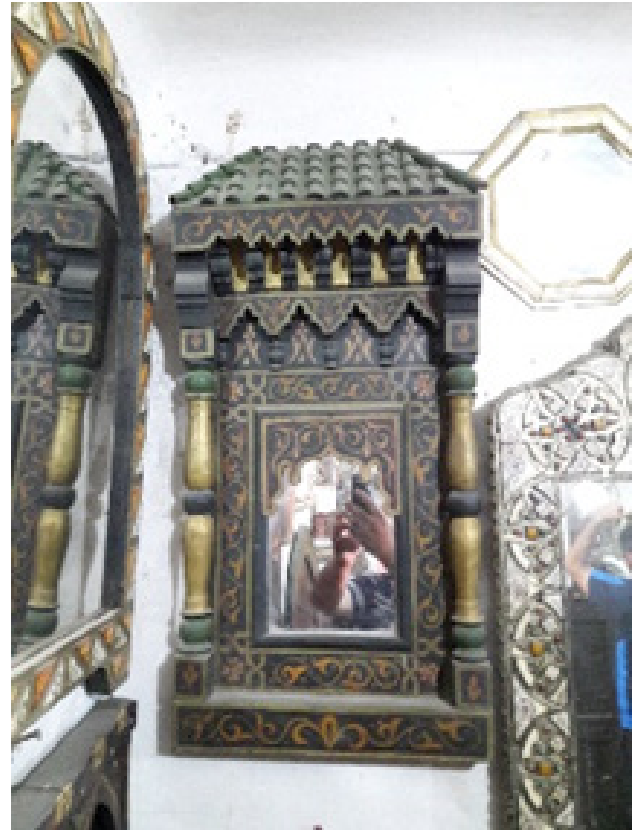
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Figs. 9 & 10. use of crenel in Moroccan knitted products pattern. Photo: Danesh Taherabadi, 2016.

Figs. 11 & 12. Use of crenel pattern in Moroccan handicrafts. Photo: Danesh Taherabadi, 2016.

beauty indicators or motifs in Moroccan art. Despite of removing the functional role of this element in defensive era, attachment and repetition of crenel element in this country's architecture, municipal

engineering and art can be seen in the role and motif of crenel in decorative and functional way of today's Moroccan art and architecture.





Figs 5 & 6. Use of creel in Moroccan tiling. Photo: Danesh Taherabadi, 2016.



Figs. 7 & 8. use of crenel in woodcrafts. Photo: Danesh Taherabadi, 2016.

#### A- Nomad carpet with middle atlas (Fig. 13)

Diamond and zigzag patterns are known to be sequent from urban carpet of Rabat in these patterns.

#### B- Nomad carpet of Zemmour (Fig. 14).

Therefore, the pattern of crenel with its special position in original Moroccan carpets that are rooted in pre-Islam era, were not being used and didn't have a place. The crenel motif appears in all arts and handicrafts of Islamic era which are exhibitivie on carpet borders, kilim, dishes and objects and sometimes in the context and ground of the carpet and other arts.

Moroccan knit works (pre-Islam) include kilim and carpet which have simpler geometric patterns and mostly diamond shapes (Fig. 15).

## Conclusion

The beginning in universal use of crenel element in Moroccan decoration goes back to the era that Moroccan people gained the capability of providing security for their cities against the historical invaders of their country, this matter was at most in Islamic era. In addition to military fortification, during time this decorative element became common in other buildings and also arts and handicrafts of native people and gained the identity as a motif. Regarding the vast functional and decorative use of crenel element in Moroccan art, and also its use in decorating various kinds of materials such as tiles, wood, knitted products and stone, it can be concluded that crenel is one of the

most significant examples of what is left from their art is in the buildings of Berbers which are in form constructions left since before Islam in Morocco and are related to military buildings. In Berber architecture, crenels are often used in non-continuous forms and only include the edges of roof corners and they are used in a way that even in corners of the walls that have perpendicular plan, only half of each complete crenel motif is observable.

The mysterious patterns of tattoo that are rooted in the most original and primal beliefs of Berbers as the original residents of Morocco.

The role of crenel can't be seen in knit works and other handicrafts of the region, therefore decorative crenel and its trending can be related to Islamic era.

### **Crenel in decoration of Islamic era's architecture**

The motif of crenel in inward and outward decorations of buildings in the Islamic era was used very often. The presence of this element can be vividly seen in tiling which is one of the trending arts of the Islamic era.

Crenel is very useful as a decorative motif in Moroccan tiling. The use of crenels in this cases owns 4 features:

- Crenel is used only in vertical surfaces (like a wall) and not in horizontal surfaces.
- Crenel is used with a high color contrast with its background.
- Crenels act as ending lines of the tiled surfaces as borders.
- Different shapes of crenel are used in tiling (Figs.5&6).

### **Use of crenel in woodcraft decorations**

Wood has a lot of uses in Moroccan architecture that they build the ceiling of mosques, arches in the bazaar and even important parts of façade with dark brown colored woods. Paravans, fences and semitransparent screens are built with wood in mosques. Whenever crenels are used in woodcrafts as forms, they are located at the top part and whenever they are used

as pattern, they are located at turning points of decorations and in places where the rhythm of the decoration has changed. Crenels can be seen in minor order like decorations of skyline or in major order like a whole shape in arches in buildings (Figs. 7&8). Use of crenel in the decoration of other Moroccan handicrafts

Crenel is also used in other Moroccan handicrafts as form and pattern, such as in candelabrum, candlestick, mirror frame, window, dishes, prayer rugs, which the candelabrum in Molay Edris monument is an example of this type of function. This pattern can be seen in other handicrafts such as mirrors (Figs. 9&10).

### **Use of crenel in decoration of Moroccan knitted products**

With stock raising popularized in Morocco, pelt, Leather and textiles such as cloths, rugs and carpets are known to be the important products and handicrafts of this country. Crenel is used in this products as the turning point in the pattern and in a repetitive way at the edge of rhythm changes. Sometimes they appeared in the web border or the central bergamot of the carpet and acted as frames. Generally, border is an inseparable element from the decorative surfaces in decorations and architecture and handicrafts which is exhibitivite on carpet, dish and architectural surfaces (Figs. 11&12).

Urban carpet of Rabat has basically impacted other original and produced carpets in the area. The influences of urban carpet of Rabat on pattern and drawing of 3 nomad carpet weaving areas (except Zemmour) include the following:

- A. Symmetrizing carpet pattern
- B. Adding central bergamot to the carpet's background
- C. Adding borders to the carpet's pattern (Ibid)

Therefore most of carpet patterns in Morocco are influenced by urban carpet of Rabat and border is an import matter in Moroccan carpet.

We will study two of the most original Moroccan carpets that remained safe from the impact of urban carpets of Rabat:

Therefore, maybe it can be said that an element was present in changes of horizon in objective and subjective perspective of people in Moroccan medinas, which existed with little difference in all of the mentioned places and it is a form called crenel that divides the secure privacy of medinas with a repetitive manner, stable rhythm and considerable length from the more vulnerable world.

Crenels also have a special place sentimentally and historically. Apparently, They have had a role that has deeply touched the minds of people in those lands with standing between invaders and them.

#### • **Defensive walls in cities (Medinas) assortment**

The process of forming the Islamic cities of Morocco was generally in this way that first Muslims would build a military fort called Kasbah and then cities and medinas would be formed around the Kasbahs for the military and civilian's resident. Medinas have defensive walls around them and crenels form the skyline of these walls as a functional and military element.

Regarding to the word "Medina" (madīna), it should be said that the plural form of this word in Quran vocabulary is "Medaen" (madā'in) and where it is used as in single form, it is referring to the city of "Yathrib". But it has also been used in general form.... When we approach classic dictionaries, we can see that the word "Medina" is in no way the equivalent for "city", but instead it refers to the "Krak des Chevaliers" (Djaït, 1993: 228). Therefore, the difference between "Qarya" and "Medina" is not in their size but in their duty and municipal engineering. Medina had defensive duties: On the contrary.

Qarya was a normal and specially non-military city, with a commercial and religious structure and aggregated population. (Ibid: 229) Medina is a fort in real sense or to be better expressed a City-Fort or a city with fortifications (Ibid: 228).

#### • **Doors and gateways**

It is at the ending of the second and to the middle of the third century that the concept of medina emerges

in Baghdad and Kufa as it specifies the center of city which has Fences, "Arbaaz" or neighborhoods and suburbs beyond the walls (Ibid: 229).

One of the most important and considerable elements in Moroccan architecture and its cities is the doors and gateways. Gateways are a part of city's defensive wall which are the junction for outer part of the city and the inner part.

As Muslims continued their conquests and advanced into the heart of Mesopotamia, they narrowed their belt of cities and built higher towers and walls. This forward move was among a move towards the past and an evident imitation from the past civilizations (Ibid: 378).

The difference in security, social positions and rights that was sequent from living inside or outside the city walls and the formalities of entering and exiting the gates, added to the importance of walls and the community's attention to the defensive walls of the city as the objective and subjective edges of the city.

#### **Crenel in pre-Islamic and post-Islamic art in Morocco**

As it was said before, Crenels were formed on top of the fortifications and towers and gradually made its way to Moroccan art as a motif and a decorative element. Crenel grew common as a pervasive and repetitive element In decorative architecture and other arts in the region. The crenel motif first entered the decorative architecture and then the knit works, city rugs and other post-Islam crafts. There was not any traces of crenel in original Moroccan patterns in tattoo and handcrafts. Diamond patterns and horizontal lines can be seen in pre-Islamic ancient and nomad knit works, including kilim and prayer rugs which are taken from people's beliefs like tattoos.

Therefore the obvious presence of crenel can be seen in decorative patterns of all kinds of arts in Islamic era. In order to find crenel patterns in the art of ancient tribes of Morocco which are called Berbers, we should study their architecture. In this subject, the





Figs .1 & 2. Use of crenel in Morocco's defensive fortifications (the origin of crenel), Photo: DaneshTaherabadi, 2016.



Figs. 3 & 4. The use of crenel in skyline of non-military buildings (mosques, schools and minarets and...), Photo: Danesh Taherabadi, 2016.

### Manifestation of walls and gates in Moroccan urban perspective

The general process of spatial perception of Medinas (old textures of Moroccan cities) is in such a way that the city's defensive wall looks very tall and impenetrably lengthy in first encountering. Regarding the role of defensive walls in Moroccan Medinas, their skyline is conducted from crenels with defensive function. Entering medinas was always accompanied with passing by thick and crenulated walls and change of vast perspectives and spaces into narrow and twisty spaces.

The perspective of Moroccan city's old texture is an impenetrable wall with crenels as skyline at the top from the outside. And one who looks at the secure and guarding wall standing between him in closed and dense texture of the city and the free world outside, sees crenels at the intersection of the infinite sky and the thick wall, which is a compound of long horizon and the thick mass of walls.

The presence of people resident outside the walls, is due to specific circumstances including time limit and they should have exited the city for the nights when the gates would close (Djaït, 1993: 378).

of the major scientific and literary centers at the time (Ibid). The military and defensive power of Morocco's cities was one of the important achievements of post-Islamic society of Morocco that provided the necessary conditions for forming and thrive of a new civilization in Morocco. Morocco's post-Islam military power has manifested and been repeated in particular frameworks of Moroccan society, in which the crenel pattern is one of them.

### Hypothesis

The existence of crenel as a repetitive element in Moroccan art, specially used in every part of historical and contemporary buildings, demonstrates its rooted place in this country's culture and society. The role of crenel after the country's empowerment and creation of its military bases, first was used in towers and fortifications and gradually perpetuated the natives art. Continuation in using crenel in other buildings of the city such as mosque and school, made it into a useful motif during time.

### The role of crenel in Morocco's defensive and military architecture

Different uses of crenel in Moroccan architecture are as follows:

- Functional use in Morocco's defensive fortifications (The origin of crenel)

Observed defensive fortifications in Morocco can be divided into 3 general categories:

- Castles or Kasbahs
- Defensive walls of the city
- Coastal walls

Crenels have been used functionally in various shapes in the aforementioned cases. Crenels are located at the wall and sky's intersection with a serrated shape that is the borderline between the sky and the building's façade which divides the background from the context. Crenels are used in 5 forms of simple, simple with sharp top, triangular, serrated and circular shapes with this function, which simple crenels with

sharp top and triangular ones are used often at the heads of entries (Figs. 1&2).

- The use of crenel skyline of (non-military buildings, mosques, schools, minarets and ...)

Crenels are also used in skyline and turning point of non-military building's architecture. Skyline is defined by the use of these crenel in buildings such as mosques, monuments and schools. The use of crenel as decoration in repetitive and minor order such as skyline and major and bigger order like the compound of heads and arcs is a considerable point. Crenels are used in heads because of their shape to be the finishing point of a vertical surface, and also seen as a two dimensional pattern in the surface (Figs. 3&4).

### The concept and method of defense in townspeople and Bedouins

Townspeople have laid relaxed, drowned in ease and luxury and gave the responsibility of defending their belongings and lives to a ruler that burdened their policy and strategy and relied on guards and military forces so that they would be unharmed. Fences go around the city and impenetrable forts that are built to stop the invaders thus one shall not scare away their game and no voice and horrendous roar will not awake them, so they threw out their weapons proudly and easily and generations after learned to do so too and in result, it is penetrated in the women's and children's behavior that the house's god should be the breadwinner in their affairs and have no trust in their own, and this behavior has gradually take much hold of them that is as their instinct and nature, But because of being far from society and alone in remote areas, not having protecting forces and fences and gates, Bedouins carried the responsibility of defending their properties and lives (Burckhardt, 2010: 41).

Titus Burckhardt recognized using battlement and gate as one of the differences of townspeople and Bedouins.

Persian translation of this paper entitled:

شناخت و تحلیل عنصر تزئینی کنگره در معماری بومی مراکش  
is also published in this issue of journal.

## Recognition and analysis of decorative element of crenels in native architecture of Morocco\*

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### Abstract

The use of the crenel element in decorative way in the post-Islam art in Morocco is so vast that it can be observed in a position similar to its operational function (placed at the top of a decorative rhythm) in all of the Moroccan decorations.

Although crenel is used in architecture of other parts of the world in operational and sometimes decorative way, but the redundancy and extensiveness of the crenel's function in the post-Islamic decoration and art shows the specific importance of its role in Morocco's art. Based on field researches and studying the post-Islamic art in Morocco, this study looks to firstly, prove that crenel is one of the most useful decorative indicators in Morocco, and secondly reach the ruling atmosphere of Morocco's post-Islam society by library and field researches in field of history and prove that the cause of Morocco's civilization thrive and its advantage on Andalusia is gaining access to the ability of self-defense and providing security for its cities. In another words, military and defense capability is one of the important and considerable achievements of Morocco's society that attracts the attention of Moroccan artists to the element of crenel and it has manifested in the function of crenel in decorations.

### Keywords

*Morocco, Decorations, Crenel, Decorative indicator, Motif.*

### Introduction

Morocco's long beaches has exposed its cities to a lot of attacks by invaders throughout the history, in a way that nations like Phoenicians, Carthaginians, Romans, Vandals, Visigoths and Byzantines of Greek overpowered Morocco until the rise of Islam (Razm Araa, 2007). Morocco's particular geographical location in the nearest adjacent point to Europe and the thrive and power of Morocco's civilization in

Islamic era which manifested in creation of cities with military foundation and structure, created a post-Islamic society which built cities with military forts called kasbah and a country which included cities with defensive structure. Relying on internal security and profiting from the new post-Islamic spirit in the society, Morocco accessed to capabilities that defeated the settled colonialists, moreover they overcame the Andalusians across the ocean and ruled there with their military power and other advantages for years and gradually made Morocco and Spain one



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