

*Review article*

THE FLORAL AND GEOMETRICAL ELEMENTS ON THE OTTOMAN  
ARCHITECTURE IN RHODES ISLAND

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**Abstract**

*The Ottomans had inherited the decorative elements preceding them, and did not contend with such extent, but had developed and created at each of the Floral, geometric and writing adornments. The key features distinguishing Ottoman architecture in Rhodes (1523-1912AD) are the ornamental richness and the attention paid to the decorative side had been increasingly growing. Through what had reached us of the Ottoman period constructions, it would be apparent to us the tendency to decoration and that such decorative material had largely varied. Such ornaments had been represented in a number of types:*

\* Floral ornaments

\* Geometrical ornaments.

**Keywords:** Ottoman architecture, Ornamental elements, Floral ornaments, Geometrical ornaments, Rhodes.

**1. Introduction**

Floral ornaments is meant by plant ornaments every ornament relies in its drawing or inscription on vegetable elements whether natural or altered from nature in an image remote from its original one [1]. Moslem artist had made of the natural vegetable elements a source for his ornamental creations. Since the Islamic art is an ornamental art, he could use such decorative elements in embellishment of establishments and manufactured goods, as it distinguished the Islamic art from other arts, so that floral and arabesque ornaments shown in Rock Dome in the 7<sup>th</sup> century and also the branches such as antimony, pine and flower vases [2]. Some researchers have

tried to bind between religion and vegetable ornaments, as the some had mentioned that the Moslem tendency to vegetable ornaments is a result of the Koranic directives urging on avoiding the imitation of all what may have spirit [3]. But the other some of critics do not agree with such view relying on the lack of a provision in the Holy Koran prohibiting or preventing that [4]. The floral ornaments have varied during the Ottoman period in respect of its shape and the style of execution. Some of these ornaments, that had had extensions and origins in the preceding Islamic eras had appeared, such as three lobed leaves, palmettos and others. Besides, floral

ornaments had appeared that may be said that the Ottoman art had specialized in, that was the floral drawings in its various shapes, that have been executed in a close to nature fashion to a great extent, and it kept in coming after the Ottoman era at the same level. Besides the appearance of altered ornaments such as Arabesque, Roomy *Hatai*, in addition to the appearance of floral ornaments influenced with the European patterns such as Baroque and Rococo [5]. These types of ornaments on the Ottoman religious architecture in Rhodes form a distinctive element in the art of Turkish

## 2. Discussion

### 2.1. *The plant ornaments near the nature*

Flowers were among the favorable subjects in Turkish art and the Turks have used it in large in the beginning of the Turkish art, as such beginning had been by the classical period in the Ottoman art about the middle of the 16<sup>th</sup> century [6], in a more

### 2.2. *Forms of the flowers*

Turkish designs at almost all periods, but especially in the Ottoman, included a great many floral forms of relatively realistic details. Ottoman architecture and its arts are particularly noted for their use of wide variety of flower representations: roses, carnations, tulips, hyacinths and many of others. The variety of decorative patterns employed by the Ottoman artists is remarkable, especially since the dominant fashion throughout the sixteenth seventeenth centuries was polychrome floral style [8]. During the reign of Suleiman the magnificent (1520-1566) all forms of Ottoman art and culture flourished. Styles and decorations on cloth, ceramics, metalwork, marble, or wood carving were strongly influenced by designs originally created for many aims. Three styles can be distinguished as particularly typical of the decorative art of this period, illustrated here mainly by examples taken from pottery and tiles; First, the re-interpretation of the traditional leaf and floral scrolls. Second, the saz style, a

ornamentation. The Ottoman floral ornaments have been used in different places of the constructions, whether that was on the facades, the entrances, praying house walls, *mihirabs*, *minbars*, ceilings and on column capitals and some spots of the fountain have been adorned with such ornaments. The technical methods used in making such ornaments have varied, among them the high and low relief used on stone, marble and wood and painting. Such method has been used in large in making mural paintings as is the case in *Rejeb Pasha* and Sultan Mustafa mosque.

natural way that could be seen in the Turkish art and art during such period, as it became easy the distinction between the flower types despite of the various methods addressing the Turkish Art [7].

composite style derived from drawings of an enchanted forest and adapted to scroll designs with additional long serrated saz leaves and fantastic flowers to produce a restless, twisting and turning effect, and third, a naturalistic style of garden flowers and trees in balanced, natural sprays each tempering the effect of the other [9]. Flowers illustrations had widely prevailed on the marble paneling during the Ottoman period, between tulips, carnation, pomegranate flowers and others. Such ornamental elements were among those elements that have largely prevailed through the Turkish art, moved to Rhodes in the Ottoman era and continued among the adornments that have lasted up to the end of the Ottoman era in Rhodes. The reason of Turks interesting in such adornments, that they have found in their lands vegetations a rich source from which they take their ornamental element [6]. That may reflect the prevailing of flower gardens everywhere around the mosques, graveyards and inside the houses [10].

### 2.2.1. Multi petal rosette

The multi petal rosette was the most important decorative element in Islamic art, it was a symbol to the mooning glory [11], it may derived from the Chinese effects on Islamic art [12]. It is one of the floral ornamental elements most used in the Turkish buildings in Rhodes. It is multi lobbed rosette, including fan rosette around a bulging out circle in the middle. As an example of such ornament the multi lobbed rosette in the marble pulpit of Sultan Mustafa mosque, pl. (1), and also found in the marble mass of the entrance of Murad Reis mosque, pl. (2) [13], it had also come in the form of a multi lobbed boss, and a wonderful model of such rosette has reached us, executed on wood interposing the bigger spiral rosette, in Suleiman mosque minbar, pl. (3). So, in all such models, the rosette had been executed in high relief in marble or wood, but it had been colored in the wooden ceiling of the marble

### 2.2.2. Carnation flower

Such flower shape helps in that it may be drawn in many ornamental ways. Turks have been familiar with growing it, so that, in the 18<sup>th</sup> century, they had reached to grow two hundred types of such flower [6], Arseven refers such flower origin either to Iran or China [6]. Most likely that the origin of such flower goes back to Iran in the Sasanian epoch, as carnation flower had been represented on a part of plaster kept in Berlin Museum [15]. It represents by the Ottoman the happiness, wisdom and knowledge [15]. The shape of this flower was differs to how it looked like in the Ottoman period, as it is distinguished with alteration, in both of stem and leaves. It has gathered with other types of flowers within vases adorning the marble sides in Sultan Mustafa mosque's fountain, pl. (8), also it used on the base of The Koran Reciter seat (*Dekket Al Moqri'a*), pl. (9). there are many marble panels had adorned with this flower separated on the Turkish çesme s, such as

minbar of Rejeb Pasha mosque, pl. (4), as it is drawn in white on a blue background within a hexagonal shape in green. It is in here different from what has been previously pursued, of engraving the ornaments desired for execution in the marble paneling itself. It has also been used in decorating Murad Reis mosque prayer niche, pl. (5), as the intertwined vegetation branches end with an eight lobbed rosette. Some scholars believe that such a style in ornamentation is of the European influences that have descended on the Islamic arts [14]. The multi lobbed rosette also used on the wooden ceil of the mosque of Mohamed Agha, pl. (6). This rosette had engraved on the stone façade of the main entrance of Sultan mosque pl. (7), it engraved on marble slab of çesme Ipodamo St., fig. (1), and on marble slab of Muzedeki in Vilargou garden, fig. (2).

the çesme of the house of Vilargout, pl. (10), the çesme of Virgin of the citadel church, the çesme of commercial bank, fig. (3), and the çesme of Simi Sq. It was normal that carnation flower should occupy a prominent space in the construction ornamentation in the Ottoman period and has taken different shapes in adorning the marble panels decorating a number of ottoman monuments in Rhodes. It had been executed in high relief, and had sometimes appeared between a varied group of close to and altered from nature flowers, despite of being a main element in the decorative formation and often comes out of a stem or merge with another type of flowers and roses. Its most important models is what we see engraved in a marble panel in Sultan Mustafa mosque's fountain among different flowers in a vase drawing. It is in here fully different from the carnation flower engraved in the panels decorating Rejeb Pasha mosque niche, pl. (11).

### 2.2.3. Tulip

It is known in French as "*Tulipe*", and in Turkish as "*Tulband*", which is taken from Persian "*Dulband*" [16]. The tulip was already known in Anatolia in the 12<sup>th</sup> century by the Seljuks who used it in ornamental decoration of art pieces. It is only in the 12<sup>th</sup> century that the tulip makes its appearance in the decorative arts of Anatolia<sup>(a)</sup> [17]. Lala flower is considered as one of the most interesting and beloved flowers by the Ottomans. They've grown it in bounty, particularly in the time of Sultan Ahmed III (1703-1730 AD.) [18]. There are various views about the Ottoman care of such flower which has been executed in varied forms [6] some of which is the close to nature, and the altered *Lala*. The origin of such flower goes back to Turkey, not to Holland, as some critics have mentioned, because this flower had entered Holland via Turkey in the 16<sup>th</sup> century, and Turks have reached in growing it to the perfection, particularly in the 17<sup>th</sup> century [6]. In the 18<sup>th</sup> century, in the time of Sultan Ahmed III (1703-1730 AD.), it had spread out more and more, and such

### 2.2.4. Arabesque or Roümi ornaments

Arabesque <sup>(c)</sup> [20-22] is a well known type of ornamentation of which the Islamic world had been singled and exclusive. It is based on the extreme alteration in the flower and leaf shapes and the interlacing between them to the extent that further it away from its natural origins to show as alternated [23, 24]. It had been developed in Iraq and Iran by means of the Seljuk, and had moved with them to Asia Minor [19]. Whereas the Ottoman Turks call such ornamental style Roümi [6], the Europeans call it Arabesque as attributed to the Arabs, i.e., the Arabic ornaments. It is considered the innovation of the Muslim artist and of the ornaments the Islamic art is singled with [25]. The reason of the Ottoman Turks calling such ornament Roümi, that such type of ornament that had been developed by Central Asia Turks, had spread out in the Islamic world and the Seljuk Turks in Iran and Anatolia have developed it, and

age had been called "*Lale Devri*" (*Lala age*)<sup>(b)</sup>. Some manuscripts have mentioned that the particular importance of the Lala flower is not due to its religious meaning beside its aesthetic shape, as its letters are the same as the letters of the Almighty name (*the name of Allah*), hence came the sacred religious character of its importance by the Turks [6], and such care and attention paid to Lala flower "*Tulip*" remained to the time that had been dominated by the Baroque and Rococo in the 18<sup>th</sup> century, when the artists desired in creation, so Lala flower had developed in accordance with the changing idea, and its shape had changed, for its lines to become in compliance with the baroque age [19]. Tulip flower had been relieved on Ottoman buildings in Rhodes. We may find it engraved in marble in relief in the fountain of Sultan Mustafa mosque where we see it included, in recurrence, in vase flowers, in between carnation flowers, the half palmett, and also engraved in relief among vase flowers decorating the mihrab of Rejeb Pasha mosque.

called it Rûmi in reference to its origin with Roümi Seljuk, that is the Roümi countries in Asia Minor, where it had reached its top of development, and the Turk used to call it in the old times Biladi Roümi [6]. It is well known that the Arabs had called the Roümi on the Byzantines, since the wars that had erupted between them around the Islamic state conquests. Thus, it would be notice that the term "Roümi" means in Arabic language Byzantine [19]. Since the Ottoman Turk are the inheritors of the Seljuk Empire, so, they have inherited the ornamental style also and have mastered its deliberation, as such ornaments composed of different vegetation elements had been executed with various geometrical shapes [6] and had overdone in complication of such ornamental forms to a great degree demonstrating their artistic quality. Through the study of the floral ornamentations existing on Ottoman

religious buildings in Rhodes which we've found them executed in different ways, as they were executed either in perforated relief engraving, which is often found above mihrabs, above entrances, pulpit and above doors, whether were wooden of marble. Turkish arabesque ornamentation had also been executed in various painting on mosque walls and in the geometrical inlays resulting of openings whether windows, doors or others were. To sum up, arabesque ornaments execution, whether in Rhodes or Turkey had not been restricted on a certain material, so, we may find it on marble, stone, ceramics and wood in painting and engraving. The arabesque ornament examples in Rhodes mosques, a plaster inlay crowning the prayer niche "mihrab" of Murad Reis mosque. Murad Reis mosque have another example of arabesque ornament, represented in the triangles surround the transition zone of the dome, pl. (12) and also included within an inlay crowning Suleyman mosque prayer niche "mihrab", pl. (13), also represented as an eternal decorative frame surround the windows. It is also found executed in engraving on Suleyman mosque entrance mass. It is worth mentioning, that such arabesque decorating the marble entrance mass brought from Prince Tzem palace, attached to it bearing the writing of the word "it is God's will", pl. (14). Such ornament founded on the top of the marble entrance of Ibrahim pasha mosque, pl. (15). There is another example of arabesque, had engraved on gravestone survived in the cemetery of Murad Reis, it belonged to someone called Abdulah pash who was dead in 1137 AH., pl. (16). It is also found

#### 2.2.5. Flowerpots

Vase ornamentation designs, with different branches and flowers popping out are among the ornamental elements popular on the Ottoman buildings. It had been executed in real life pear shape, out of which coming out different flowers and leaves. It was usually that the artist persistence on the symmetrical element in distributing

executed in engraving on the marble gate of sadrevani mosque in Sokratos street. This ornament had used to decorate the sides of the balcony and the body of the minaret of Murad Reis, the arabesque decorating the marble slab of çeşme of Virgin of the citadel, fig. (4). Regarding arabesque ornament representation on pulpits, we may find it executed in engraving on Rejeb Pasha mosque marble pulpit, pl. (17). It had also been executed, but more simply, on top of Sultan Mustafa mosque marble pulpit. Arabesque ornaments have engraved in wood on top of Suleyman Mosque wooden minber door, pl. (18) and also on top of Murad Reis mosque wooden pulpit door, pl. (19), and on the main wooden door of Sultan Mustafa mosque, pl. (20) & fig. (5). Arabesque ornaments is also found executed in painting on the walls of Rhodes mosques; most important example, the frame around the lower level windows of Suleyman mosque, Murad Reis mosque and Sultan Mustafa mosque and the frame of windows and on the bottom of central dome of Rejb pasha mosque. We may also find it occupying the dome transient areas Murad Reis mosque and Sultan Mustafa mosque, pl. (21), and sporadic areas of such two mosque ceiling. It was also executed in painting on ceramics, that had been present in Rejeb Pasha mosque, but unfortunately, there is no trace of such ceramic tiles [26] and also we may find that Arabesque ornaments have been executed in Turkish architecture in Rhodes in various types of decorative methods, whether that was engraving or perforation on wood of marble, or painting.

vegetable branches and flowers to the body sides, also the symmetry in distribution of the short branches to the sides of the middle branch in harmonious distribution<sup>(d)</sup> [27]. The ottoman buildings had represented many examples of flowers vase on various materials in the Ottoman mosques, such as the mosque of Sultan

Mustafa, on the marble fountain sides, on the main entrance (pl. 22), on the spherical triangle the dome (pl. 23), and the vase had engraved on the marble slab of the çeşme of Muzediki in the garden of Vilargout, pl. (10) & figs. (2), in addition on the çeşme of Virgin mairy of the citadel, figs. (6-10), and on the slab of the çeşme of Symi Sq., and there is another example to the flower vas engraved on the marble slab of Musalla çeşme, fig. (7), also the flower vase had engraved on gravestone survived in the cemetery of Murad Reis, it belonged to the wife of Shekeeb Pasha and dated with 18<sup>th</sup> of Safar 1312 AH [13], pl. (24), also we found this

### 2.2.6. Cypress tree

Using Cypress trees in Islamic architecture and arts started since early 18<sup>th</sup> Century AD., particularly in Turkish decorations as a direct influence of baroque art that had followed the European Renaissance age [28]. Such tree is known in Turkish as Selve, and is used to be grown up in cemeteries due to its sweet fragrant. Such tree has a special position by the Turks, because it is the symbol of eternity in their ideology for its ever green leaves over all year seasons and is

## 3. The geometrical elements

### 3.1. The geometrical motifs

Geometrical designs are basically very simple; they may be constructed with only a compass and a rule and the knowledge of certain procedures which produce triangles, squares, hexagons, stars, etc. By repeating these procedures, and through further division and the addition of straight and curved lines, almost limitless elaborate variations may be achieved [29]. Once the grid has been laid down there is scope for individual experimentation. Although these designs often appear highly complex there are no mysteries; all that is needed is a logical approach and a steady hand and nerve. The best way to understand the geometrical patterns is to draw them [30, 31]. The Turk artists have innovated various geometrical decorative shapes, through assembly of

element on a marble slab survived in the library of Hafiz Ahmed Agha, it belonged to someone called Mustafa Agha and dated in Muharam 1098 AH., pl. (25). The very important example for the flower vase engraved on the marble slabs of the niche of Rejeb pasha mosque, pl. (26) there are anther flower vases had engraved on the stones, such as the main entrance of the Sultan Mustafa mosque and the top of the main entrance of the Sulaymaneia Medrassa. The vase ornament had painted on the triangles of transition zones of the domes of Sultan Mustafa mosque and in the same location of Sultan Suleiman mosque.

an expression of renewable life [19]. There are many examples of this ornament on the Turkish monuments in Rhodes. The Cypress tree was used on marble slab of the çeşme of Ipodamo street, pl. (27) & fig. (1), and it used on the çeşme of Musalla beside the De empoase gate, pl. (28) & fig.(7), also it used on the çeşme of Simi Square and the Cypress was used on the marble slabs of the fountain of Sultan Mustafa mosque.

polygon shapes, different in form and size, intersecting or meeting with each other in repetition or interlocking. As a result of such interlacing, such decoration is called geometrical arabesque [6]. Besides, their execution of the triangle shapes that have frequently been used a base for distribution of decoration for forming harmonious sets of decorative formations and equilateral and equiangular pentagonal and hexagonal shapes, and octagonal shapes. The Turks had favored such shapes, so it has taken an important role in their execution of the star shapes, particularly the pent lateral and hex lateral stars. Such stars are used as central elements for decorative formations [32]. There are many examples explaining the execution of such geometrical decorations

on the Ottoman wooden artwork in Rhodes, those executed in decorating the wooden pulpits surviving so far in Aga mosque, Suleiman mosque, pl. (3) and Murad Reis mosque, fig. (8). Such geometrical decorations are just rhombus, squares and triangles shapes, such decorations have been executed by assembly. One of the most geometrical shapes that have survived of wooden decorations found on the Ottoman monuments in Rhodes, those the wooden poles which composed in octagonal and square shapes, decorating wooden ceilings as those found in Aga mosque, the ceiling of the wooden Dikka found in the wall facing the wall of qibla in Suleiman, Rejeb Pasha, Sultan Mustafa and Ibrahim Pasha mosques. Among the innovative geometrical elements on the marble, we find a decoration on the shape of a T letter, meeting with a converted similar. It has been executed on the door of Rejeb Pasha mosque on marble, pl. (29) fig. (9), and on the decorative tape interposing the niche of the same mosque, pls. (30, 31). There is a geometrical decorative elements used in Ottoman architecture in Rhodes, engraved in marble is the star patterns

### **3.2. Decorative elements representing insignias and symbols of Ottomans**

Through the study of the different elements inscribed on Ottoman architecture in Rhodes Island, some of such elements that were used by Ottoman as insignias

#### **3.2.1. Crescents**

Crescents are considered among the important decorative elements that have embellished the Ottoman state insignia in general. The crescent stands for the moon [33], it is one of the moon statuses in the beginning and end of the Arabic moon month. It had a religious significance by Muslims, and the Ottoman have frequently used it in their arts and on their flags [34]. The scholars have argued of two opinions about the reason of the Ottoman taking the crescent on their flags and in their arts; that they may have conveyed from the Romans, as it was prevailed in Byzantium. It was an insignia for them, and when the Ottoman conquered Constantinople 1453 AD.,

decoration, which is a unique model among the decorations of Rejeb Pasha mosque niche. The niche is also surrounded with a decorative frame engraved in the marble taking pentagonal shapes, interposed with hexagonal stars, which is the beginning of formation of a hexagonal star plate. Also the star patterns decoration had presented in a skylight in the Rejeb pasha mosque. The star patterns had presented on marble slab of çeşme of Karantina in Koundouriotou square. Stars decoration has been executed in painting particularly on the inside surface of domes, such as the dome of Rejeb Pasha, Ibrahim Pasha and the dome of Murad Reis mosque. The wooden artworks in Rhodes have been distinguished with distinctive elements in decorative artistic approaches. Such distinctive elements are developed decorations from the swastika (Hooked cross), which the Turks call Gamali Hac, and are considered one of the important elements of old Turkish decoration [6]. This element has been executed in decorating Suleiman mosque's pulpit sides, pl. (3).

and symbols of their own have been enumerated. Among such elements the following:

they've seen it pictured everywhere, so they've been highly impressed by it, and took it as insignia for them on their flags and in their arts. Second, the crescent has been known by the Ottoman since the emergence of their state as it was known in the state of the Seljuk and the Persian [35]. The crescent has become of the most important decorative elements embellishing all the insignias survived to us from the Ottoman state to its end in 29<sup>th</sup> November, 1922. In fact, the crescent has prevailed as a slogan of the Islamic religion since early time, so, we may see it crowning the minarets and domes. It is also in Rhodes that we may find the crescent crowning all the surviving

minarets in the city mosques. The crescent has also been placed on the top of all domes of the Ottoman mosques in Rhodes, but in such cases, we cannot call it a symbol, but just an ordinary decoration, that had prevailed on top of the Islamic minarets and domes since early time. But there are some models that may be said that had been place as an insignia or as a symbol, such as what is engraved in Sultan Mustafa mosque

### 3.2.2. The stars

The star in Islamic arts is a pentagram, hexagonal, octagonal or more. It is among the important decorative architecture elements that have been distinguished the Islamic art [37]. The stars have been found associated with the crescent in minaret of Sultan Mustafa Mosque and star patterns from çeşme of Muzedeki, fig. (11). Also the star pattern

### 3.2.3. The sun disk

The sun disk is considered as one of the most important astronomic shapes with which the Ottoman insignias recorded on the architecture and arts have been decorated. The sun has been drawn for its light to radiate all over the Ottoman Empire. The use of the sun as a decorative element has not been innovation of the Ottomans, but has been found much earlier, and had had sacred significances. It is apparent that the sun has met extreme interest by the Ottoman artist, as it has been found decorating the arts and architecture all the same. May be one of the most important artistic pieces ornamented with the sun disk, salver of Sultan Suleiman the Magnificent, made of fabric and decorated with the sun disk with crescent and star [19]. This element has been found on all the Ottoman state's

minaret's balcony sides and on the main entrance, as it may be seen the crescent combined with star, which is one of the Ottoman state slogans in the 18<sup>th</sup> Century [36]. The same symbol has also come in the same place of Suleiman mosque's minaret, fig. (10), the crescent as a symbol had been painted on the top of the main entrance of the mosque of Ibrahim Pasha, pl. (32)

could be seen in the Residence of the Orthodox Metropolitan, fig. (12). The Ottoman flag has in the beginning a crescent and a six pointed star, which has been used more frequently on Ottoman constructions and arts. They have placed it on the city gates and walls as symbol of protection [38]. Such star has stayed up to Sultan Selim III reign 1789-1807 [34].

insignias since Sultan Mahmoud II reign (1808-1839) up to Sultan Mohamed Waheed El Din reign (1918-1922) [34]. It symbolizes that the Ottoman state's sovereignty will reach all over the earth like sun rays. There are many examples for the sun disk had represented on the ottoman architecture in Rhodes, it executed with various methods, such as the wooden door of the women compartment of the mosque of Suleiman, pl. (33), Another sun disk had executed in the wooden ceil of the compartment of Ibrahim pasha mosque. The sun disk had also used with painting with color on the walls as the windows of Murad Reis mosque, and in the bottom domes, such as the domes of the exterior arcade of Sultan Suleiman mosque.

## 4. The Decorative Methods of Ornaments

Different decorations that have survived up till now of the Ottoman mosques in Rhodes, have been executed by various industrial and artistic methods.

### 4.1. Engraving

Muslim artist has mastered the execution of his decorations by engraving on woods, marble, stones and others

It is the same methods used in general in the Ottoman arts, the following are the most important industrial methods:

[39]. It is well known that each of such materials differ from each other in regards of execution of decorations on it

in engraving. The technique which used in engraving had been numerous, and had reached a high degree of artistic quality through the Ottoman age in Rhodes, and

#### 4.1.1. Deep relief

The decorations were executed in such method is more protruding or deeper in the ground that should be at an equal level and depth. The Ottoman have used such method in executing some documentary writings, and in decorating the panels executed by the assembly method in decorating some wooden

#### 4.1.2. High relief

The Turks call the decorative shapes executed in such method, "Oyma". Such idiom still used among the craftsmen and carpenters [3, 19]. The ground on which such decorations are executed should be level and look like it is stuck to the ground. The Ottoman had use such method in executing their decorations, and arrived by it to a great deal of artistic mastering and proficiency. Most decorations executed in such method have been of the writing elements and plant elements that the Ottoman period was distinguished with, in Rhodes and other states of the Ottoman Empire. The best examples of such method, are the writing texts on the entrance of Ibrahim Pasha mosque, pl. (32), and the entrance of Sultan Mustafa mosque, pl. (9), and also above the prayer niche of Suleiman mosque, pl. (13), in addition to

### 4.2. Cutting method

This method has been executed in making different decorations in Ottoman architecture in Rhodes, particularly in wooden, stone and marble works. For instance, such method had been used in executing acute angled stalactites. The fact is that, such decorative element is a pure Islamic element, which was used in Rhodes mosques. We may find its most important and best quality examples in stalactites in Rejeb Pasha mosque's prayer niche, pl. (34), and has also been used in Hamza Bey mosque's prayer niche. It has also been used in decorating the column capitals in Sultan Mustafa mosque, and in Rejeb Pasha mosque. The beveled method has also been used in decorating the

that is confirmed by the wooden, marble and stone works the decorative elements of which have been executed in the different engraving methods.

panels in the pulpits, such as Suleiman mosque's pulpit, pl. (3). It has also been used in executing Arabesque decorations found on the marble pulpit in Sultan Mustafa mosque, pl. (1). The Ottoman use of such method was a continuity of its use in the Umayyad, Abbasid, Fatimiad an Mamlouk era [40].

the various writings recorded on the marble and wooden pulpits, such as Suleiman mosque pulpit, which is composed of some monotheism phrases and Koran verses. There are also some vegetable decorations that have been executed in such method, overtopping the marble pulpits, such as Sultan Mustafa mosque's pulpit, and have also been executed in the geometrical decorative frames surrounding Rejeb Pasha mosque's prayer niche, and also the frame surrounding the main entrance of the same mosque. Also, it has been executed in high relief the floral decorations engraved on the fountain of Sultan Mustafa mosque, pl. (8), such as Tulip, Carnation, vases and half palmetto, all of which are in high relief on marble. We may also find it on Rejeb Pasha mosque's prayer niche.

capitals of the columns of the front portico o Sultan Suleiman mosque. On originating such decorative method, it was found that the beveled engraving is an innovation belonging to the Abbasid art style [41]. The tilted "beveled" engraving method had continued till the beginning of the Fatimiad age, into the Ayyobid and Mamlouk ages, and to the Ottoman age. For executing the various decorative shapes in engraving, whether high, low relief, simple or beveled, by engraving specialists, required decorative shapes must be executed on a model of drawing paper, that may be transferred on the material required to be decorate [6].

### **4.3. The paneling**

Assembly and dovetailing the ornaments, such decorative method is one of the artistic methods decorated with which woodworks in the Ottoman monuments. The Turks know such method and called it "Kundedari" [6], it is just geometrical panels of certain thickness, to be assembled together on the wooden surface to be decorated and dovetailed within frames confining it so forming varied geometrical polygon shapes, such method is the brain child of the Muslim carpenters, as there has never come to us any evidence on that such woodwork decoration in such way in the ages predated Islam, since the 4<sup>th</sup> Century after Hegira. Such method requires long time and extreme precision in craftsmanship as making a wooden pulpit or a door, for instance, would be composed of many assembled and dovetailed small panels. In fact, the scarcity of woods in many Islamic countries, forced the manufacturer to attempt making use of the small pieces executing it in such method. The

### **4.4. Painting with varied colors**

The colored decorations have been executed in decorating the mosque walls and roofs, and also many of the movable masterpieces in mosque, specially the wooden ones, such as pulpits, compartments, doors and others. Such method has also been executed in decorating the religious and civil construction ceilings. Among the colors used, red in its shades, blue, green yellow and white beside the gilded colors. The Ottoman artist had mastered using such method to a great deal. The fact is that such method had largely prevailed in ottoman monuments, as the internal walls to be covered with many decorations

### **4.5. Projecting bar**

It is projecting bars nailed down on the wooden surface the decorative shapes are executed in, it earns the wood covered by it toughness. This method has been executed in many wooden shapes in Rhodes, particularly ceilings, it has been executed on large scale in the ottoman

Ottoman artists have inherited the assembly and dovetailing method from the artists preceded them in such field. It is well known that the manufacturing methods are bequeathed between successive generations, one generation after another generation. The Ottoman used the assembly and dovetailing method in executing their decorations represented in polygon shapes and geometrical shapes composed of treble, quadruple, pentagon and hexagonal panels, such decorative shapes have been executed in decorating wooden pulpits, such as Suleiman mosque's pulpit, Aga mosque's pulpit and Murad Reis mosque's pulpit, and also, decorative panels have been executed in Aga mosque's minaret, and have also been used in doors, such as in Sultan Mustafa mosque's door, Rejeb Pasha mosque's door, Ibrahim Pasha mosque's door. Such decorative method has also been used in decorating windows and wall cupboards, such as those in Hamza Bey Mosque, Murad Reis Mosque and Sultan Mustafa mosque.

executed in such method. Among most popular examples: Rejeb Pasha and Sultan Mustafa Mosques, also the decorations on Aga Mosque's ceiling, and the other wooden ceiling of back compartments in mosques such as Suleyman, Sultan Mustafa, Ibrahim Pasha and Murad Reis mosques. It is noticed that decorative elements executed in such method represented in vegetables decorations, the Ottoman period have been distinguished with, and the Turkish Roumi and Arabesque, besides, the vases from which the flowers and rosettes emerge along plant branches and leaves.

period. For instance, it was not popularly used prior to the Ottoman age. The projecting bars have largely been used in decorating the wooden ceilings. Among most popular example: Aga Mosque's ceiling, whether in dividing the ceiling area into squares, or in making wooden

frames bordering the ceiling on the four sides. It has also been use in the wooden ceiling of back compartments in mosques such as Murad Reis Mosque, Suleyman Mosque, Sultan Mustafa Mosque, Ibrahim Pasha Mosque. It also be seen in ceiling decorations of the preach seat ceiling in Rejeb Pasha Mosque's pulpit, in hexagonal shape painted in various colors, pl. (4). Through presentation of the manufacturing methods used in execution of the decorations in ottoman constructions in Rhodes, upon different materials, such as woods, marble, stone and stucco, it may be obvious for us that

the Ottoman have not given little to decorating their products, as most of the decorating methods have been executed, as motioned before, in various shapes of decorations such as vegetable, geometrical and writing shapes. That may indicates, if any, at that the Ottoman artist had not deviated the authentic style he has been known within the Middle Ages, as he had reached high level of decorative mastering in his development and innovation of decorative methods he had been distinguished with. That is supported by what is surviving in Rhodes mosques in the ottoman period.

## 5. Conclusion

*To sum up, we have traced one of most pleasing and characteristic of the arts practiced on the Turkish buildings in the Island of Rhodes. The results of my study show that the ornaments had a significant impact on all of the Ottoman buildings in Rhodes and affected by all impacts which effected and influenced the Ottoman architecture and arts. We can say that there weren't any special element practiced on the Ottoman buildings in the Island. The ornamental elements on the Ottoman buildings were extended to the traditional styles of Turkey which originally depended on the Seljuk elements due to the fact that the Ottomans had inherited the Seljuk state. The Ottoman artists made significant contributions to the standardization of artistic practices and to the transmission of the artistically knowledge. Some of the Ottoman ornaments in Rhodes have a very simple design in contrast to the complex and intricate designs of the Ottoman style in Constantinople. The frequent re-employment of building materials makes it difficult to establish a chronology of the Ottoman elements if no foundation text exists, like the mosque of Hamza Bey. If the reused materials could be re-employed, the technical grounds used to determine a date become limited. Finally, I hope that future research in that direction will cast more light on the intricate questions concerning the Ottoman ornaments in the Rhodes Island.*

## Plates & Figures



Plate (1) multi lobbed rosette in the marble paneling of the entrance of Sultan Mustafa mosque.

Plate (2) multi lobbed rosette in the marble panel on the entrance of Murad Reis mosque

Plate (3) multi lobbed rosette in the wooden minbar of Sultan Suleiman mosque.

Plate (4) painted multi lobbed rosette on the wooden ceil of the minber of Rejb pasha mosque.



Plate (5) multi lobbed rosette on the prayer niche of Murad Reis mosque



Plate (6) multi lobbed rosette on the center of the wooden ceil of Mohamed Agha mosque



Plate (7) multi lobbed rosette on the stone façade of the main entrance of Sultan Mustafa mosque



Plate (8) carnation flowers engraved in marble slabs of the fountain of Sultan Mustafa mosque.



Plate (9) carnation flowers painted on the Reciter seat of Sultan Mustafa mosque

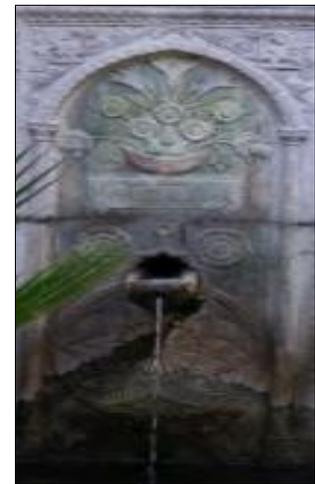


Plate (10) carnation and Lala flowers on the marble slab of the Çesme of the house of de Vilargout.



Plate (11) carnation and Lala flowers on the marble slab of the prayer niche of Rejb pasha mosque

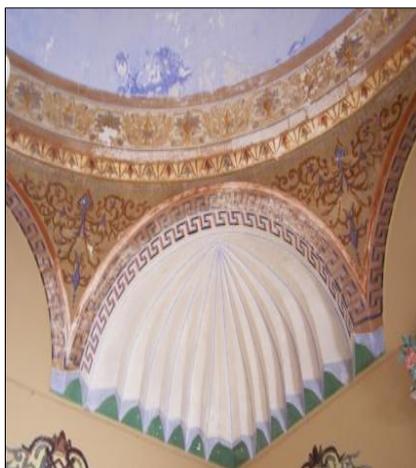


Plate (12) Arabesque ornament represented in the triangles surround the transition zone of the dome of Murad Reis mosque.



Plate (13) engraved painted Arabesque on the prayer niche of Sultan Suleiman mosque.



Plate (14) multi lobbed rosette in the marble paneling of the entrance of Sultan Mustafa mosque.



Plate (15) Arabesque engraved on the main entrance of Ibrahim pasha mosque



Plate (16) Arabesque engraved on gravestone survived in the cemetery of Murad Reis, it belonged to someone called Abdulah pash who was dead in 1137 AH.



Plate (17) Arabesque engraved on marble slab crowning the entrance of minbar of Rejb pasha mosque.



Plate (18) details; arabesque engraved on wooden slab crowning the entrance of the minbar of Sultan Suleiman mosque



Plate (19) details arabesque engraved on wooden slab crowning the entrance of the minbar of Murad Reis mosque.



Plate (20) arabesque engraved on wooden shutters of the main entrance of Sultan Mustafa mosque.



Plate (21) arabesque painted with colors on the tri-angles of transition zones of Sultan Mustafa mosque.



Plate (22) flowers vase engraved on stone, decorating the main entrance of Sultan Mustafa mosque.



Plate (23) flowers vase painted with colors decorating the transition zones of Sultan Mustafa mosque



Plate (24) flower vase engraved on gravestone survived in the cemetery of Murad Reis, it belongs to the wife of Shekeeb Pasha and dated with 18<sup>th</sup> of Safar 1312 AH.



Plate (25) flowers vase on a marble slab survived in the library of Hafiz Ahmed Agha, it belonged to someone called Mustafa Agha and dated in Muharam 1098 AH.



Plate (26) flower vase engraved on marble slabs of the prayer niche of Rejeb pasha mosque



Plate (27) The Cypress tree on marble slab of the çeşme of Ipodamo street



Plate (28) The Cypress tree on marble slab of the çeşme of Musalla beside de empoase gate.



Plate (29) geometrical decorative elements used as a frame, engraved in marble surround the niche of the mihrab of Rejeb pasha mosque.



Plate (30) geometrical decorative elements engraved in marble surround the niche of the mihrab of Rejeb pasha mosque

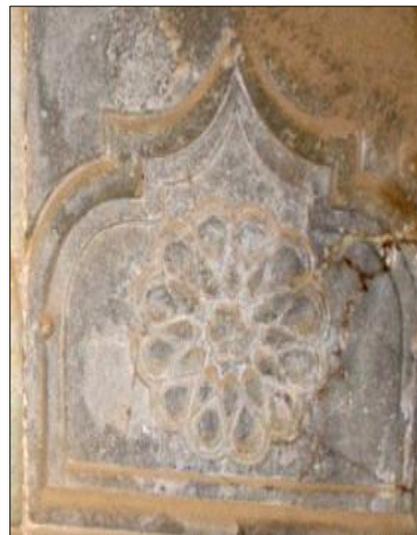


Plate (31) geometrical star patterns engraved in marble surround the niche of the mihrab of Rejeb pasha mosque



Plate (32) Crescent painted with colors on marble, represented on the top of the main entrance of Sultan Mustafa mosque.

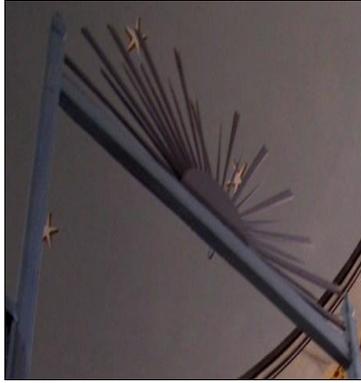


Plate (33) The sun disk in the entrance of the wooden compartment of women in the mosque of Sultan Sul-eiman.



Plate (34) the cutting stalactites in Rejeb Pasha Mosque's prayer niche.

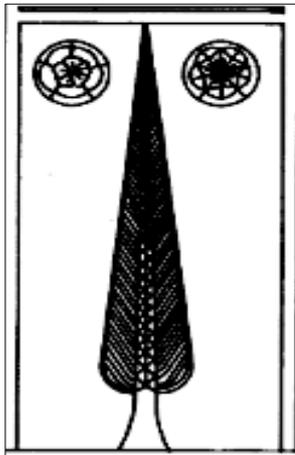


Figure (1) multi lobbed rose on the marble slab of çeşme Ipo-damo St..

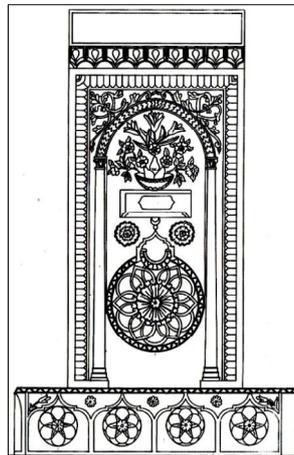


Figure (2) multi lobbed rose on the marble slab of çeşme Muzedeki in Vil-argou garden. (Archive of the office of the conservation of the medieval town)

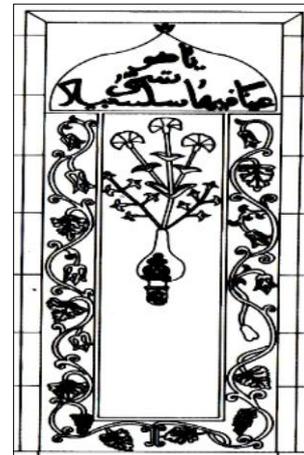


Figure (3) the carnation flower engraved on marble slab of the çeşme of commercial bank. (Ar-chive of the office of the conservation of the medieval town)

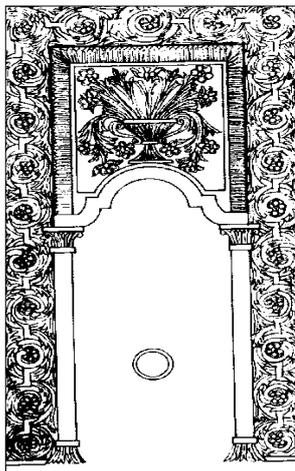


Figure (4) The arabesque decorating the marble slab of çeşme of virgin of the citadel

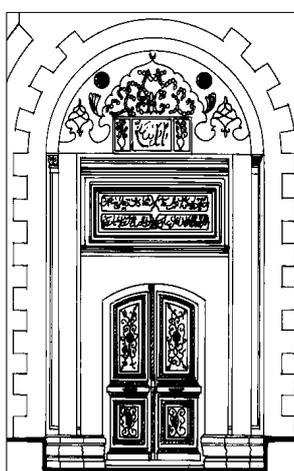


Figure (5) The arabesque of the main entrance of Sultan Mustafa mos-que

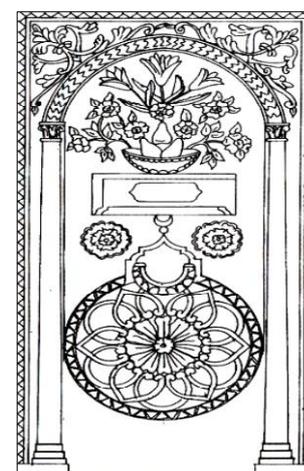


Figure (6) the flower vas on marble slab of Muze-deki çeşme in Vilargou garden

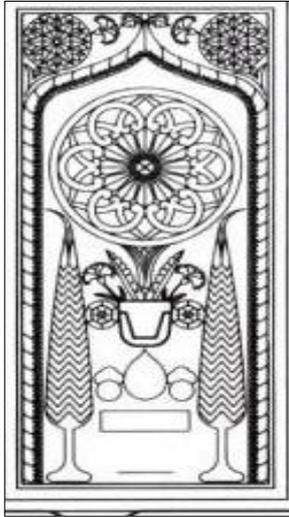


Figure (7) flower vas on the marble slab of the çeşme of Musalla beside the gate of De empoase. (Archive of the office of the conservation of the medieval town)

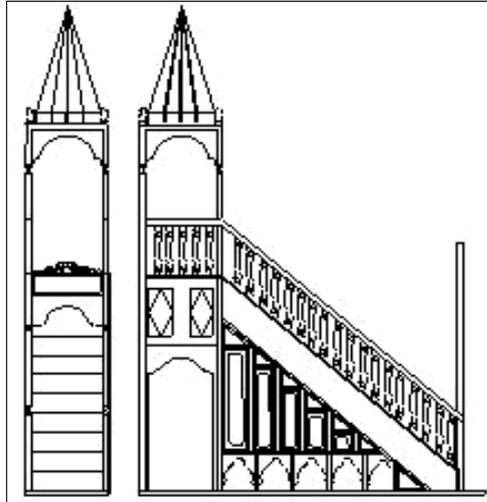


Figure (8) The geometric ornaments on the wooden minbar of Murad Reis mosque

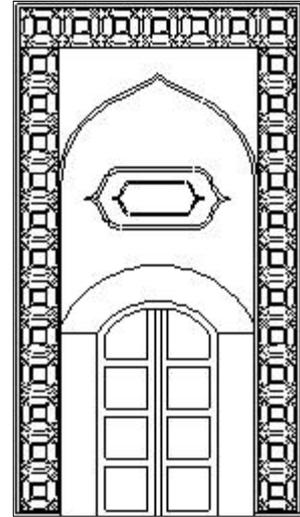


Figure (9) The geometric border surround the main entrance of Rejb pasha mosque

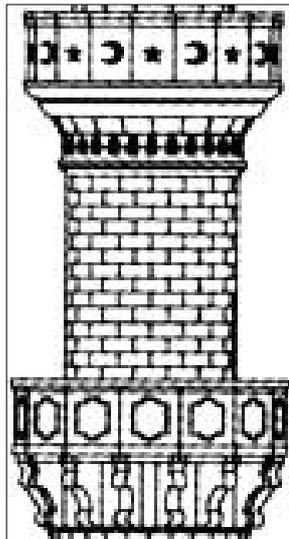


Figure (10) Crescents and stars cut on the stone sides of the balcony of Sultan Suleiman minaret.

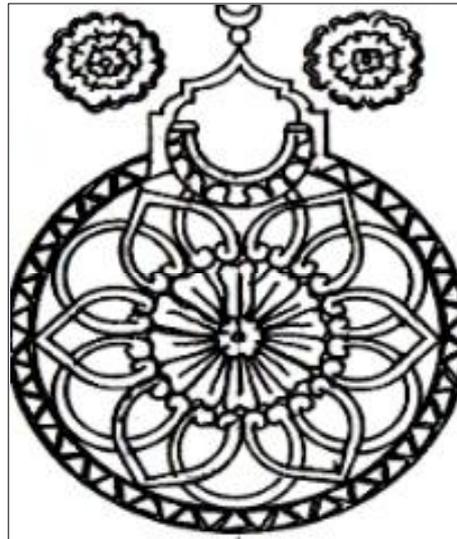


Figure (11) Details of star patterns from çeşme of Muzedeki (Archive of the office of the conservation of the medieval town)

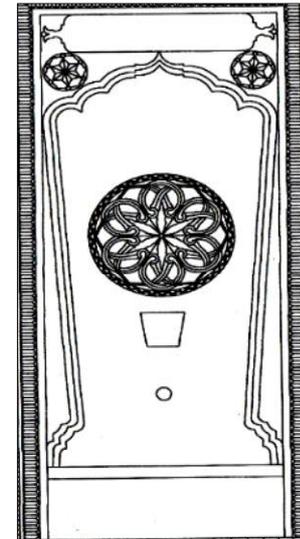


Figure (12) star patterns on the marble slab of the çeşme of Residence of the Orthodox Metropolitan (Archive of the office of the conservation of the medieval town)

## Endnotes

(a) The first mentioned in literature by the 13<sup>th</sup> century Turkish mystic Mevlana Celaleddin-i Rumi, who frequently uses the image of the tulip, as for example in the line, "Tulip soul always speaks of the tulip garden". The fact that this flower does not appear on the coins or art of the Roman and

Byzantine periods shows that it was unknown to them

(b) Beginning with this period, the upper class and the elites in the Ottoman Empire started to use the open and public areas frequently. The traditional, introverted manner of the society began to change. Fountains and

waterside residences such as Aynalıkavak Kasrı became popular. A water canal (other name is Cetvel-i Sim), a picnic area (Kağıthane) were established as recreational area. Although the tulip age ended with the Patrona Halil uprising, it became a model for attitudes of westernization. During the years 1720-1890, Ottoman architecture deviated from the principals of classical times. With Ahmed III's death, Mahmud I took the throne (1730-1754). It was during this period that Baroque-style mosques were starting to be constructed.

- (c) The arabesque is a form of artistic decoration consisting of "surface decorations based on rhythmic linear patterns of scrolling and interlacing foliage, tendrils" or plain lines, often combined with other elements. Within the very wide range of Eurasian decorative art that includes motifs matching this basic definition the term "arabesque" is used consistently as a technical term by art historians to describe only elements of the decoration found in two phases: Islamic art from about the 9<sup>th</sup> century onwards, and European decorative art

from the Renaissance onwards. Arabesques are a fundamental element of Islamic art but they develop what was already a long tradition by the coming of Islam. The past and current usage of the term in respect of European art can only be described as confused and inconsistent. Some western arabesques derive from Islamic art, but others are closely based on Ancient Roman decorations. In the West they are essentially found in the decorative arts, but because of the generally non-figurative nature of Islamic art arabesque decoration is there often a very prominent element in the most significant works, and plays a large part in the decoration of architecture.

- (d) The origin of using vases as an ornamental element has been known in Hellenistic arts and had then transferred to different arts. Using such element had prevailed on many applied masterpieces in Islamic art, executed in different materials. Vase shapes have also been used on masterpieces backdated to early Islamic age, including some wooden boards in Al-Aqsa Mosque, backdated to 780AD

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