

## THE PORTRAITS OF TWO OTTOMAN SULTANS PRESERVED AT THE PALACE OF PRINCE MOHAMED ALI MUSEUM, EGYPT

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### Abstract

The present study analyzes and publishes a portrait of an Ottoman Sultan in the museum's register, entitled "the portrait of Sultan Muhammad al-Fatih". It is preserved in the Store of Islamic Department, Prince Mohamed Ali Museum, Cairo under number (3) and register no. (516). It was drawn on paperboard with watercolors. It is in good condition, and it measures 52 × 46 cm. It is published and studied for the first time with its distinctive artistic formation. The problem is that the portrait does not include any dates. Accordingly, the study adopts the comparative analytical approach of the technical composition and design method. The elements of the colors used were identified and thus the date of this portrait could be traced back to the 13<sup>th</sup> AH. / 19<sup>th</sup> A.D. century, to the art center in Egypt.

**Keywords:** Sultan Muhammad al-Fatih, Murad IV, Portrait, SEM-EDS, Paper, Painting, Ottoman decoration.

### 1. Introduction

Othman Sultans and other rulers of the Islamic world were fond of the art of portrait and brought foreign artists to carry out this artistic task [1]. They did so because of their love and encouragement of art, as well as their keenness to leave their descendants with some memories through such portraits<sup>(a)</sup> [2]. However, most of these portraits were not allowed to be seen but by the close ones, especially in the 19-20<sup>th</sup> century where the fascination in the West increased dramatically in portraits. They were often placed on walls. They were rarely presented but not sold [3]. The portrait of the study is an extension of that art in the 12<sup>th</sup> AH/ 18<sup>th</sup> A.D. painted by Constantine. The problematic, social, and artistic levels of the artist of the 13<sup>th</sup> AH/19<sup>th</sup> A.D. repre-

nted in many modern artistic trends dominated by the expressive character in a new framework combining the originality of realism with the modern expressive trends of its systems, foundations, and philosophy. Thus, this portrait was different from the form of the Sultan and the content of the existing writing. The artist tried to achieve his identity through the portrait to satisfy his intellectual and artistic desire. The aesthetic of the concept of the integration system in combining the form of the Sultan and the ground painted in a vertical and horizontal style, which had the greatest impact on the rigor of the shape and the power of expression [4]. The paper material, the way the artist handled it to form the artwork in accordance with the design and knowledge of the materials and the color elements used for its scie-

ntific documentation and history in a precise manner were revealed. This article discusses the study of a portrait of an Ottoman sultan through an introduction and three topics and a conclusion. The first part is a description in the register of Prince Mohamed Ali Museum. It is a commentary on the description, attributes the portrait to Sultan Muhammad al-Fatih, and translates the written text below the portrait. The second one is the experimental

## 2. The Case Study

The case study is a portrait of Sultan Muhammad al-Fatih<sup>(b)</sup> preserved at the store of Prince Mohamed Ali Palace Museum, Cairo. It was documented from the text at the bottom although many researchers adopted the museum documentation without reviewing the real features of the Sultan. The present investigation has a greater significance because it highlights many items of the portrait's codicology<sup>(c)</sup> to help date it back, including the type of paper, colors, decoration method, and font styles [5]. The pigments palette used in the portrait of Sultan Murad IV<sup>(d)</sup> deco-

### 2.1. Documentation of the portrait (description in the register)

It is a portrait in water colors for Sultan Muhammad al-Fatih in frame and glass (58×46cm), fig. (1-a,b,c). It contains Sultan Muhammad al-Fatih was painted holding his sword beside a glass window over-looking a natural scene. Some weapons, cushions, and a curtain are around. They are encircled in an oval frame of three ribbons. The internal ribbon is decorated with a gilded interlinked chain. In the middle, there is a broad ribbon with the black color intervening interchangeable gilded decorative units. It is also linked with a pink ribbon with colorful drawings and flowers. The external ribbon contains geometric decorations like gilded *mafruk*. Inside each unit, there is a small red rhombus. Above the frame, there is a circle enclosing the star and crescent, the emblem of the Ottoman Empire, with two crossed swords. Furthermore, the frame is surrounded by

study, samples, methodology and preparation layers. The third part is a discussion of the style of the portrait and a comparative study of the portraits of two Ottoman sultans in the Museum with other portraits of Ottoman sultans preserved in international museums. It is dating of the artistic position of the portrait. Finally, the conclusion covers the recommendations. The study also includes an appendix of the plates and a list of references.

ration was defined using the Scanning Electron Microscopy with Energy Dispersive Spectroscopy (SEM-EDS) that was utilized to detect such items and allowed us to study the paintings in more detail. Consequently, the researcher could appropriately document the portrait based on an analytical method, comparative study, and examining the design items along with identifying similarities and differences. This is a starting point for further studies on the art of portrait in the Ottoman school of painting.

two branches in the form of a spikelet. In the outer part of the corners, there are four similar decorative units resembling those of the middle ribbon, which is followed by three other ribbons representing the shape. While the first square is a gilded chain, the second and the external comprise triangles, and every triangle encloses a duplicate decorative unit of arabesque. The lower part of the portrait contains a natural scene of Istanbul, Bosphorus, a boat, and a table with books, copies of the Holy Qur'an, and keys. In the bottom, there is Turkish writing. Additionally, the portrait has a wooden frame on a dark apricot ground highlighted with two black lines with drawings of duplicate red and green flowers. They are linked with a branch holding leaves and yellow flowers. The portrait is in good condition with traces of restoration.

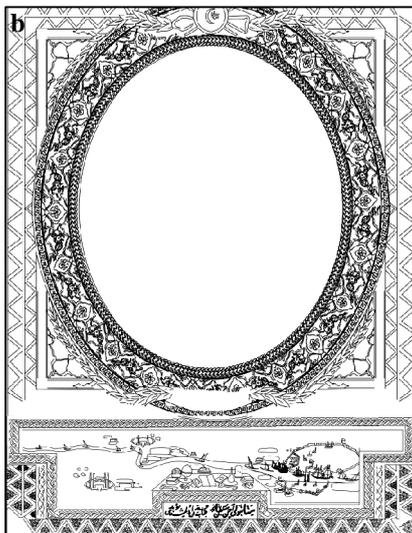
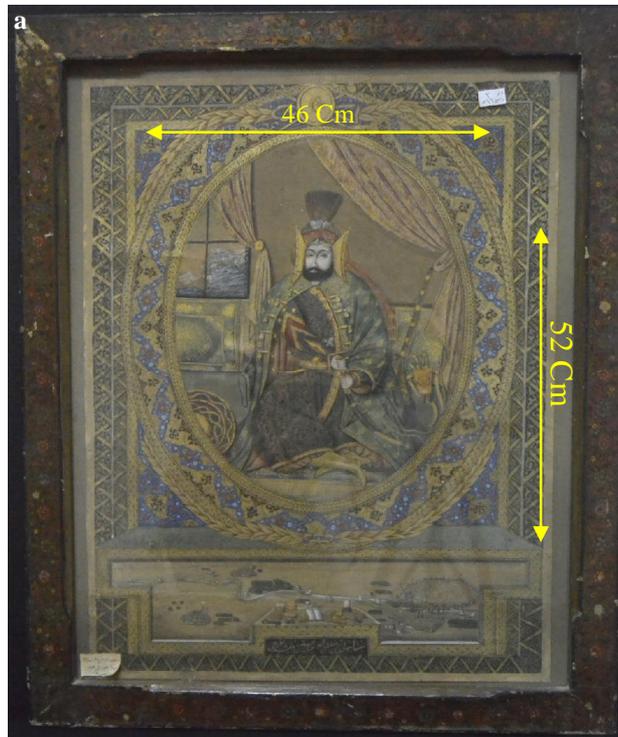


Figure (1) Shows **a.** portrait of Sultan Murad IV, Prince Mohamed Ali Palace Museum, Cairo **b.** drawing of the portrait of Sultan Murad IV, Prince Mohamed Ali Palace Museum, Cairo, **c.** Sultan Murad IV

## 2.2. Commentary

The description attributes the portrait to Sultan Muhammad al-Fatih based on the written text without reviewing his characteristics in the albums or the depictions of manuscripts or documents. The documented data do not include some important features, especially in terms of exact measurements, raw materials, or colors. Rather, they were only reported to be of watercolors and gilded. No chemical or physical examination was conducted nor did scientific proof existed. Furthermore,

the museum's register, correspondences, and scientific studies do not include something relevant or even something on the portrait's origin or circumstances illustrating its admission to the museum. If so, linking the inputs of accurate documentation and the museum's register help define the name of the Sultan. In fact, it is ignored by the information and documentation of the museum's register in terms of notice, analysis, and interpretation.

### 2.3. The relationship of the portrait to the title and attribution to Sultan Muhammad al-Fatih

A golden-colored phrase in Turkish was inserted on a black ground in a horizontal rectangle as an illustration along with an independent unit to merge the text with the portrait. It says:

ستانبولی آجن سلطان محمد جناب حقڈن اولمشدی مؤید.

That translated: Sultan Muhammad, the conquer of Istanbul who was endorsed by the true blessed and exalted be He<sup>(e)</sup>.

This statement proves that the portrait is attributed to Sultan Muhammad al-Fatih with his full grandeur and dignity. However, the frequent examination shows that the same portrait was found in album no. 170

"Arab-Turkish history" at the Egyptian National Library and Archives, fig. (2-a)

This album contains the depictions of Ottoman Sultans from Sultan Osman Khan to Sultan Mahmoud Khan dating back to the 11<sup>th</sup> H/17<sup>th</sup> G. century. The list contains a portrait of Sultan Murad IV<sup>(f)</sup>, fig. (2-b) that highly resembles the portrait under study in terms of the facial features, body-building, posture, fez with the long

red feather, color of clothing, shoes, shape and movement of the hands, dagger, sword, and gun. However, they differ in the decoration of caftan, the golden colored fez, and the background [6]. The aforementioned shape and look of Sultan Murad IV coincide with another portrait, fig. (2-c) at the album of Ottoman Sultans [7]. They agree in terms of the artistic formation and general design, drawing the Sultan inside an oval shape and adding a wide ribbon in the bottom, surrounding the shape with two spike lets forming a decorative unit at the top, facial features, body-building, clothing, and fez. They differ in the color and decoration of clothes and shape in the horizontal rectangle in the bottom and in the background. To conclude, the portrait understudy is attributed to Sultan Murad IV although the name of Sultan Muhammad al-Fatih is inserted.



Figure (2) Shows **a**, the name of the sultan, **b**, Sultan Murad IV, the Egyptian National Library and archives, **c**, Sultan Murad IV, album of D. Oglu,

### 3. Experimental Study

Some samples were collected from different parts of the portrait and, they were chosen for the aim of identifying the pigments and technique. These samples were investigated and analyzed by

scanning electron microscopy unite attached to energy dispersive spectroscopy (SEM/ EDS) for defining their surfaces morphology and their chemical components<sup>(g)</sup> [8].

## 4. Results

### 4.1. Morphological Features by SEM

The surface morphology of the portrait under study investigated by SEM, fig. (3) revealed that it is an original work created by imitating the portrait. This is reported by the steps and tools used. First, the painter prepared the ground to inscribe the design in lithography or a copper plate using special heavy colors. The artworks were duplicated on certain paperboards that should be strong, porous,

and soft. Then, it was polished. Thus, only a small portion of the paper was left around the portrait to maintain its validity and easiness of installation. After that, the artist selected the design to be submitted to the divider to unpack the places to allow color penetration using a sharp tool. Later, the manufacturer received the work and used a coarse brush to force colors into the open positions.

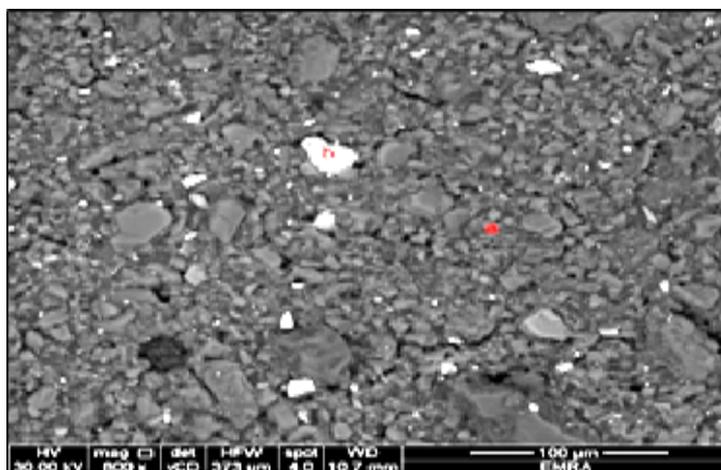


Figure (3) Shows SEM micrograph of the external surface of the paint layer

### 4.2. Chemical analytical results by EDS

The analysis of the plaster layers showed two layers by EDS analyses referred to the internal layer prepared from a mixture of gypsum ( $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$ ) and very fine grains of silica (Si). Gypsum was the main compound of the plasters used as filler in the pores of the paper to make it more smoothable and to paint portraits easily. The external layer was prepared from the Barium sulfate ( $\text{BaSO}_4$ ) to make the surface smoothing, fig. (4-a,b) [9]. Moreover, EDS analysis of different colors showed the light brown pigment appeared as the background of the decorative elements in the portrait. It is mainly composed of goethite ( $\text{FeO OH}$ ), traces of silica and

clay. It took the form of limonite [ $\text{FeO (OH).H}_2\text{O}$ ] mixed with calcite, quartz, and clay. Thus, it is more brownish. Also, it proved that black pigment used in the ribbons of the frames consists of carbon (C) that took the form of soot in the clothes of the Sultan. Yellowish green appeared because of the silicates of iron, aluminum, potassium, and magnesium. Furthermore, blue pigment was used for the decoration of the frames because the painter used natural ultramarine that consists of silicon, sulfur, aluminum, and calcium [10]. Finally, EDS analysis identified iron which referred to red ochre used for the red pigment consisting of

the pure form of hematite ( $\text{Fe}_2\text{O}_3$ ) with other traces of silica ( $\text{SiO}_2$ ) and aluminum oxide ( $\text{Al}_2\text{O}_3$ ), so as not to be affected by light or alkaline. Instead, it is melted in hot concentrated acids and high tem-

peratures, where the light color becomes darker. Additionally, the examination showed a large amount of barium sulfate ( $\text{BaSO}_4$ ) to coat the surface and make it smoother and shinier.

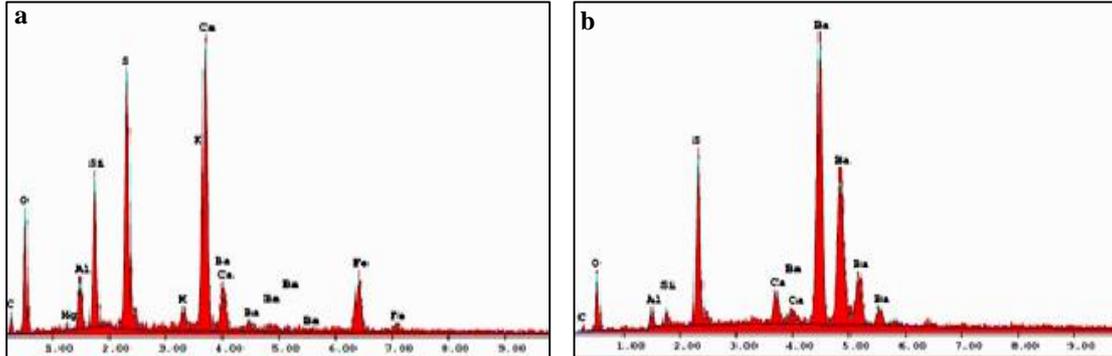


Figure (4- a, b) Shows EDS analysis charts obtained on the same surface investigated by SEM.

## 5. Discussion

### 5.1. Style of the portrait

The portrait appeared in a distinctive art form. The vertical and horizontal lines intersected, resulting in colorful triangles that formed a set of pyramids "i.e. composite pyramid composition", fig. (5) [11]. This shape symbolizes firmness, rigidity, durability, stability, and communication between the sky and earth. The artist wanted to highlight these concepts

in the personality of the Sultan in a way that indicates grandeur and majesty [12]. In other words, the portrait of the Sultan was portrayed in an oval shape, indicating absolute eternity, sovereignty, and centrality. This portrait has stability, aesthetic artistic perception, and attracting attention [13].

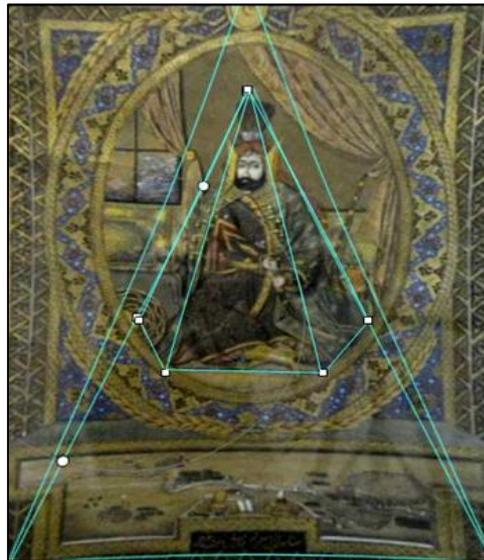


Figure (5) Shows details of lines composite pyramid composition

Despite the link of lines to make the pyramid and circular compositions, there was a discrepancy between the shape and the ground, resulting from the interaction and link among the lines

and color shades. When the Sultan was portrayed in the middle, the work shall be completed by creating a background in the form of a horizontal rectangle with many decorations. In addition, the

shapes of the Sultan and the ground were given value and attracted attention based on the geometric shape where the Sultan in an oval and the ground is a horizontal rectangle. This could achieve unity, harmony, and attention in the portrait. It also has a communicative value in integrating the acquired knowledge. The difference between the shape and the ground was necessary to achieve and highlight the artistic creation aesthetically. Furthermore, the artist utilized colors that cohere with the meanings. First, the artist applied the brown to the ground to suggest warmth and beauty. Then, he applied the golden to the frames of the portrait and part of the Sultan's clothing to bestow grandeur and majesty. The green in the caftan symbolized life, nobility, and eternity. Moreover, it created cohesion and balance. The blue was applied to the oval frame to attract attention to the shape and to bestow stability and calmness, while the red was utilized a little bit in the fez to indicate the sultan's leading personality as it shows energy and will power [14]. The portrait understudy was similar, in terms of artistic composition and design, to the portraits of the album that was created from the reign of Selim III (1204-1222 A.H./1789-1807 A.D.) to the reign of Mahmud II (1223-1225 A.H./1808-1839 A.D.). A copy of this album entitled "A Portrait Album of the Ottoman Sultans" was printed in London in 1815 [15]. A painter called Constantin introduced this distinctive style and descr-

### **5.2. Historiography and artistic position of the portrait**

Although the portrait is not dated, the investigation results analysis of pigments and layers of material used by the artist using SEM-EDX [18] reflect the great progress and culture of the painter in the field of the materials industry. For example, ultramarine (lazord) was used. It was taken from lapis lazuli by delicate grinding, washing, and smoothing. This method was only introduced in the early 19<sup>th</sup> century. In addition, there was a large amount of barium sulfate, fig. (4) that was only known as a coloring material in the

19<sup>th</sup> century [10]. He taught them how painters could use it to achieve distinctiveness and creativity. Furthermore, he reported that the tools used for this style do not require a certain skill, but they require coordination in paintings and colorful images to get a satisfactory result. He sent a letter dated 15/12/1727 to a dignitary explaining this "paper" art that is practiced as a hobby by women and men, especially the aristocrats and notabilities. Despite its easy decoration, it is costly. As a result, portraits and paintings are expensive. Furthermore, few traders sell or have such portraits. Specialists used to produce paperwork as they maintain various designs. Additionally, a furniture maker could assign his designer or painter to prepare them only or assigns him to prepare, create, or implement them in the light of his ideas in a studio. In fact, more money could be saved by largely imitating a certain design because most expenditures were allocated for preparing the artwork and portraits [16]. Some catalogs also comprised many ancient portraits of Sultans, and they were valid for printing. Because of the large demand for paintings, some publications were specially adapted for this purpose. They covered topics of different size and painting that catered to different tastes and needs. It is known that Giovanni Antonio Remondini (1643-1711 A.D) and his successors created catalogs for paintings of the scraps of paper that could be used in this process [17].

19<sup>th</sup> century [10]. The portrait understudy was similar, in terms of artistic composition and design, to the portraits of the album that was created from the reign of Selim III (1204-1222 A.H./1789-1807 A.D.) to the reign of Mahmud II (1223-1225 A.H./1808-1839 A.D.). A copy of this album entitled "A Portrait Album of the Ottoman Sultans" was printed in London in 1815. The portrait was painted in Egypt by an Egyptian painter as he was interested in painting the portrait in terms of the artistic and technical styles

and not the text. According to Hauser [19], it was familiar to assign the painter to frequently duplicate the artwork and to ask for the same royal portraits of Sultans and Princes. Because originality wasn't appreciated in Egypt, the painter was interested only in performance and discipline. Hence, the portraits were typical. Furthermore, Hauser made a comparison between the bibliography of kings on the templates that glorify them using eloquent expressions and the stereotype of their facial features and characteristics based on model grandeur standards. Such standards were imposed by holy traditions that denied depicting them in reality, but as they should be seen by others. Finally, the author addresses the museum

sector of the Egyptian Ministry of Antiquities by re-documenting the Islamic manuscripts written and codified in the register of Prince Mohammed Palace Museum and the formation of a scientific committee specialized in the field of manuscripts. The author encourages researchers of the art of Islamic painting to investigate the manuscripts from the historical, artistic and aesthetic aspects, and linking them and combining them with the conduct of rigorous chemical tests and analysis if possible to examine the component of the surface of the paper and its stratification and knowledge of the colored materials and racial composition until achieving the accuracy of history and the industrial style and country of manufacture.

## 6. Conclusions

*The present study investigated a new portrait published for the first time. Consequently, it is an addition to the archaeological and artistic studies, in general, and Islamic painting, in particular. It illustrated the relationship between the writing and portrait, highlighting that the artist was not restricted. Rather, he enjoyed a great deal of freedom that helped him revive the old tradition in terms of committing to the artistic composition and design. Furthermore, the portrait understudy showed that the Egyptian artist adopted foreign styles to the culture and modern techniques of visual art. The study also indicated a sample of less than one mg of the ground was taken and examined by SEM-EDX. The investigation of the pigments and layers lead to the identification of the light brown composed of Goethite and traces of silica and clay, carbon (black), hematite (red), ochre (yellow), and natural ultramarine (yellowish green). The analysis of the plaster layers showed that two layers, the internal layer mix from gypsum with very fine grains of silica, and the external layer were from the Barium sulfate ( $BaSO_4$ ) to make the surface more smoothing. In addition, the results of the present study showed that the portrait understudy is an original work created by imitating the portrait. This is reported by the steps and tools used. First, the painter prepared the ground to inscribe the design in lithography or a copper plate using special heavy colors. The artworks were duplicated on certain paperboards that should be strong, porous, and soft. Then, it was polished. Thus, only a small portion of the paper was left around the portrait to maintain its validity and easiness of installation. Then, the artist selected the design to be submitted to the divider to unpack the places and allow color penetration using a sharp tool. Later, the manufacturer received the work and used a coarse brush to force colors into the open positions.*

## 7. Endnotes

- (a) Attention to the art of Ottoman portrait has been paid since the 9<sup>th</sup> Hijri/15<sup>th</sup> AD century. The materials carried out varied, including metal, paper, and plaster. The methods used to implement them varied, as well.
- (b) Al-Fatih's (1432-1482) real name is Muhammad bin Murad, better known as Sultan Muhammad II, or Sultan Muhammad al-Fatih, referring to his

success as the "pioneer or conqueror of Constantinople. He was born on March 29, 1432CE in Adriana polis (Turkish border-Bulgaria). He was the fourth son of Sultan Murad II and had himself two sons, Huma and Hatun. The title of al-Fatih (Conqueror) was given to him for his success in liberating Constantinople. He was an authoritative Sultan of Uthmaniyyah

as an administrator, military chief. He was proficient in history, geography, astronomy, poetry, and languages. He mastered seven languages; Turkish, Arabic, Latin, Greek, Serbian, Hebrew, and Persian. He was trained on a simple life and was educated with religious knowledge and war science. He officially ascended the throne at the age of 19 on 18<sup>th</sup> February 1451 AD after the death of Sultan Murad II (8<sup>th</sup> February 1451 AD at age 47). He died on May 3, 1481 AD at the age of 49 (poisoned by one of his personal doctors, Maesto Jakopa (or Yakop Pasya). His body was interred in Stambul, the old town south of Tanjung Emas, near the historical panorama of 70 Ottoman ships from the top of the hill to the Constantinople City.

- (c) Codicology (from Latin codex, genitive codicis, "notebook, book"; and Greek -λογία, -logia) is the study of codices or manuscript books written on parchment (or paper) as physical objects. It is often referred to as 'the archaeology of the book', concerning itself with the materials (parchment, sometimes referred to as membrane or vellum, paper, pigments, inks and so on), and techniques used to make books, including their binding.

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- (d) Murad IV of Turkey (1612-1640) was both strong-willed and physically strong. He was born on July 27, 1612. He was 5 years old, when his father, Sultan Ahmed I (1590-1617), died. Six years later, he ascended the throne after the second dethronement of his insane uncle Mustafa I (1591-1639). Over the next years, his mother, Sultana Kösem, ruled with ability from the harem, but much power was also held by the civil aristocracy and the military who were mainly interested in their own advancement. Murad was an uncultivated, strong-willed, dark-eyed giant and immensely cruel. Boastful of his muscular strength, he excelled in wrestling and javelin throwing.
- (e) The text is read and translated by the author. It is published for the first time.
- (f) Each page of the album contains a portrait of an Ottoman Sultan, while the other (yellowish) page contains his name, title, number in the list, birt-hdate, crowning, death, and age. Each portrait is separated from the others.
- (g) Examination was conducted at the National Research Center, Dokki, Cairo.

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