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### Early Egyptian bone and ivory inlaid woodwork, 700-1200 A.D.

Balsam Abdul-Rahman Saleh

*The American University in Cairo AUC*, [balsam@aucegypt.edu](mailto:balsam@aucegypt.edu)

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EARLY EGYPTIAN  
BONE & IVORY  
INLAID WOODWORK  
700 • 1200 A.D.

BALSAM ABDUL  
RAHMAN SALEH

2001



THE AMERICAN UNIVERSITY IN CAIRO  
SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

**EARLY EGYPTIAN BONE AND IVORY INLAID  
WOODWORK  
700-1200 A.D.**

A THESIS SUBMITTED TO  
THE DEPARTMENT OF ARABIC STUDIES  
IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE  
DEGREE OF MASTERS OF ARTS

BY

**BALSAM ABDUL-RAHMAN SALEH**

Feb/2001

2001/10  
C.2

THE AMERICAN UNIVERSITY IN CAIRO  
EARLY EGYPTIAN BONE AND IVORY INLAID WOODWORK  
700 - 1200 A.D.

A THESIS SUBMITTED BY  
BALSAM ABDUL-RAHMAN SALEH  
TO THE DEPARTMENT OF ARABIC STUDIES  
DECEMBER 2000

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR  
THE DEGREE OF MASTER OF ARTS

HAS BEEN APPROVED BY

DR. GEORGE SCANLON  
Thesis Committee Chair/Adviser  
Department of Arabic Studies, A.U.C.

DR. BERNARD O'KANE  
Thesis Committee Reader/Examiner  
Department of Arabic Studies, A.U.C.

DR. CHAHINDA KARIM  
Thesis Committee Reader/Examiner  
Department of Arabic Studies, A.U.C.

Department Chair

21/12/2000  
Date

Dean

Date

23/1/01

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relatives, and my great friends.

Thank you all

Balsam

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# CHAPTER ONE

## AN INTRODUCTION TO IVORY AND BONE WOOD INLAY

### I. The Materials, Trades, and Techniques

Ivory was used for artistic purposes in Egypt as early as the Old Kingdom. It has always been a precious material because of its recognized qualities such as fine grain, cool and pleasant surface, and a suggestion of the soft color and texture of human flesh which makes it very suitable for the carving of figures. Ivory is technically known as dentine, the teeth of elephants and other animals. It is a very durable material that does not damage or deteriorate easily. It does not burn and the material itself is very little affected by immersion in water. In appearance, ivory is so similar to bone that it is hard for an inexperienced eye to differentiate them. The color of freshly cut ivory is creamy white and it displays a variety of grain patterns depending on the animal type from which it derives.<sup>1</sup> It is also considered a comparatively easy material to handle; when the work is fresh and immersed in water for a certain period of time, it becomes soft enough to enable bending or carving with a knife.<sup>2</sup> Because of its closely compacted grain, ivory can be sawn into quite thin plates that are suitable for fastening onto other materials or for

<sup>1</sup> McFarland, R., "Ivory," in *The Dictionary of Art* 15, ed. Jane Turner (New York and London, 1996) 794.

<sup>2</sup> For a detailed reference of the ivory working techniques and the working of the material see: Martiny, A., *Bone, Antler, Horn and Ivory: the Technology of Natural Materials Since the Bronze Period* (New Jersey, 1982) 33-72.



# CHAPTER ONE

## AN INTRODUCTION TO IVORY AND BONE WOOD INLAY

### 1. The Materials, Trades, and Techniques

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<sup>1</sup> McParland, E., "Ivory," in *The Dictionary of Art* 16, ed. Jane Turner (New York and London, 1996) 796.

<sup>2</sup> For a detailed reference of the ivory working techniques and the rendering of the material see MacGregor, A., *Bone Antler Ivory and Horn: the Technology of Skeletal Materials Since the Roman Period* (New Jersey, 1985) 55-72.

inlaying. However, both the size and the shape of the tusk limit the use of it to either small objects or to sheets for elements of large-scale decoration.<sup>3</sup>

The main sources of ivory are elephant and walrus tusks, and hippopotamus teeth. Ivory derived from elephants has a characteristic pattern of thin curving lines that intersect at regular intervals and arch outwards from the center. Furthermore, because elephant tusk grows in thin layers in a cone shape, when it becomes very old it tends to disintegrate in conic sections. This creates an important surface feature which enables experts to identify elephant ivory from other types. Hippopotamus ivory does not have the crossing line pattern that is found in elephant ivory. Also, unlike elephant ivory's rounded and tapering ends, its end is sharply beveled, and when old splits longitudinally, coming apart in chunks or blocks.<sup>4</sup>

The third type is walrus tusk, which is much larger than that of the hippopotamus. When walrus tusk is freshly taken, it has a thin white outer layer that gradually turns yellow with time. This outer layer is rather plain and does not have the thin intersecting lines found in elephant's ivory. The core of the walrus tusk has another darker dentine substance that fills in the original pulp cavity. When a section is taken from the tusk we find that, against the light, the core is translucent contrasting with the opaque outer layer.<sup>5</sup> Nevertheless, functionally the tusk of the African elephant is regarded as the best because of its size, averaging about 2 meters in length

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<sup>3</sup> Pinder-Wilson, R. "Ivory," in *The Arts of Islam: Hayward Gallery Exhibition* (London, 1976), 147.

<sup>4</sup> Cammann, S. V. R., "Ivory and Bone Carving: Material and Techniques in *Encyclopedia of World Art* 8: 758.

<sup>5</sup> Ibid.



and weighing about 23 kg. Thus it is far bigger than all the other types of tusks even those of Indian elephants.<sup>6</sup>

Most of the surviving Islamic ivories are of elephant tusk. Hippopotamus ivory was also used but not as frequently or as often as that of the elephant.<sup>7</sup> We know that Muslims acquired ivory carving techniques from Byzantium long before the fall of Constantinople to the Ottomans. Constantinople was the center of the ivory trade especially during the 5<sup>th</sup> and 6<sup>th</sup> centuries.<sup>8</sup> Nevertheless, it is a well-known fact that Alexandria was the nexus of the ivory trade, since it was the main access point to the Mediterranean for the trade of African ivory and that coming from India via the Red Sea. Whether Alexandria itself was a center for ivory and bone carving has yet to be proven.<sup>9</sup>

Sources do not tell us much about the Egyptian ivory trade between the 6<sup>th</sup> and 10<sup>th</sup> centuries, but we know for example that trade in general with Central and West Africa, both are two major ivory production centers, flourished during the 8<sup>th</sup> and 9<sup>th</sup>

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<sup>6</sup> McParland, E., "Ivory," in *The Dictionary of Art*, 16: 796.

<sup>7</sup> In Ereshefsky's study we find a small cosmetic dish from the Fustat finds which has been identified as of hippopotamus ivory. Ereshefsky, M., *Bone and Ivory Carving in Early Islamic Egypt* MA. thesis, American U. in Cairo, 1980), 12. Also see Scanlon, G. T., "Fustat Expedition: Preliminary Report 1968, Part 1," in *Journal of the American Research Center in Egypt* XI(1974) 83, pl. 30

<sup>8</sup> Kollwitz, J., "Alexandrinische Elfenbeine," *Christentum am Nil* (Recklinghausen, 1964), 209.

<sup>9</sup> Since we are not discussing carved ivory we will not go into detail about this argument. However, for the study of carved bone and ivory see *ibid.* and Ereshefsky, *Bone and Ivory Carving*, 15-20. Also see Marangou, L., *Bone Carvings from Egypt* (Germany, 1976) who is positive that Alexandria had workshops for the production of bone objects, but she maintains that this does not necessarily make Alexandria the sole center of bone carving in Egypt. She points to the status of Alexandria as representative of Hellenistic and Greco-Roman art and the rest of Egypt as representative of Coptic art. Cutler also mentions that bone and ivory wasters have been found in Alexandria.

Cutler, A., *Late Antique and Byzantine Ivory Carving* (Aldershot ; Brookfield USA : Ashgate, c1998) I/5.

centuries.<sup>10</sup> However, it is assumed that during that period, trade also continued with all the usual sources such as with Sudan via the Nile, East Africa through Ethiopia, and Ceylon and India via the Red Sea.<sup>11</sup> Nevertheless, it is arguable whether India exported any of its ivory to the Near East or to Europe because its production barely secured its own needs. That makes East Africa, the origin of the best tusks, the primary ivory production area during the Middle Ages and the main source for ivory in the Islamic period.<sup>12</sup> During the Fatimid period, Cairo was the center of the major movements of the East-West world trade. The Mediterranean trade extended through Cairo to India and the Far East as well as to the East African coast.<sup>13</sup> Due to this domination of trade routes, Egypt was considered the nexus of the ivory trade during that period.<sup>14</sup>

The extensive use of ivory, especially in Fatimid Egypt and in Andalusia, can be explained as the result of the availability of the material, and can also be viewed as part of the general attitude of that period when expensive and lavish objects were the sign of the wealth and power of the court. The fact that a material was expensive was a great point in its favor. In the Muslim art aesthetic, the beauty of a person or of a building is always associated with luxurious and wealthy objects.<sup>15</sup> This also explains the domination of the carving technique in the ivory production of the period in

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<sup>10</sup> Anon., *Hudud al-'Alam*, trans. V. Minorsky in E. J. W. Gibb Memorial Series, New Series XI (London, 1937), 165.

<sup>11</sup> Ereshefsky, *Bone and Ivory Carving*, 21.

<sup>12</sup> Pinder-Wilson, R., "Adj," in *The Encyclopaedia of Islam*, 2<sup>nd</sup> ed.1: 200.

<sup>13</sup> Udovitch, A. L., "Fatimid Cairo: Crossroads of World Trade- From Spain to India," in *L'Egypte Fatimide: son art et son histoire* (Paris, 1999) 682-3

<sup>14</sup> Ereshefsky, *Bone and Ivory Carving*, 17.

<sup>15</sup> Mayer, L. A., *Islamic Woodcarvers and Their Work* (Geneva, 1958) 15.



comparison to other ivory working techniques such as painting, inlaying, and incrusting. Carved ivory was the distinct mark of courtly objects, all the great carved ivory pyxes from Andalus testify to this fact.<sup>16</sup>

The use of bone was quite common, for carved objects as for small inlays or incrustated pieces. The bones of large animals were widely used as a good and cheap substitute for ivory. Marangou in her book *Bone Carvings from Egypt* informs us that bone carving was found in the Ptolemaic court, side by side with the more fashionable and costly ivory. According to her, the central market for ivory trade changed from Alexandria, the market for African ivory, to Persia the market for Indian ivory, which made ivory a rare and most luxurious material and resulted in the use of bone to produce the same art objects.<sup>17</sup> Since it is relatively hard to distinguish between ivory and bone, and the working techniques applied to ivory are the same as the ones applied to bone, it is not unusual or surprising that we encounter numerous articles made of bone. Excavations in Alexandria and Rome, have shown that ivory and bone were worked at the same time because of wasters of both materials found in a location that must have been a workshop.<sup>18</sup>

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<sup>16</sup> The Kutubiyya minbar, which was ordered by the court in Cordoba, has always been misleadingly thought to be inlaid with ivory; however, recent analysis during its last restoration showed that it was inlaid with bone. Bloom does not believe that the use of bone in such a remarkable minbar was merely for economic reasons. Nevertheless, the fact that ivory was very costly and that tiny pieces of bone, like the ones used in the inlaying of the minbar, are indistinguishable from ivory, caused bone to be used instead and then imagined by people as ivory. For a full discussion of the Kutubiyya minbar see Chapter III, pg. 76-78

Bloom, J. Toufiq, A., et. al., *The Minbar from the Kutubiyya Mosque* (Rabat, c. 1998), 21, 73.

<sup>17</sup> Marangou, *Bone Carvings from Egypt*, 22

<sup>18</sup> Cutler, A., *Late Ivory Carving*, 1/5.

Wood, on the other hand, due to climatic reasons is fairly scarce in the major parts of the Muslim world. This fact helped it achieve an importance and significance that it did not receive in other societies where wood was more plentiful. However, the dry climate that prevented such regions from growing trees helped very much in preserving finished articles of wood.<sup>19</sup> The extrinsic value of wood in the regions that lacked it was transformed mainly through artistic expression; even when wood was used architecturally it was used for decorated coffered ceilings, doors, arches, mashrabiyyas, etc. Thus it was with Egypt, where wood was not available and valuable, yet at the same time in very high demand, both artistically and architecturally.

In Egypt, wood was originally plentiful and varied. Used too rapidly a wood shortage existed from the fourth to the seventh century, presumably because of the general impoverishment experienced under the Byzantine control of Egypt.<sup>20</sup> The afforestation that was carried forward by the Ptolemaic rulers declined gradually, especially along the coast, which resulted in the growth of imported timber to keep up with the demand for wood. Naturally, Alexandria became the center for the trade of all precious and luxurious imported woods. The Fatimids carried out an active afforestation policy in Egypt, but still local production was not enough and thus was rarely used for decoration.<sup>21</sup> Egypt imported teak and ebony from Sudan and India;

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<sup>19</sup> Folsach, K. v., *Islamic Art: The David Collection* (Copenhagen, 1978), 158.

<sup>20</sup> Rutschowascaya, M., "Woodwork, Coptic," in *The Coptic Encyclopaedia* 7: 2326.

<sup>21</sup> Cahen, C., "Khashab," in *The Encyclopaedia of Islam* 2<sup>nd</sup> ed. 4:1085.

pine and cedar from Turkey and Syria; while oak, walnut, plane, and beech were from Europe.<sup>22</sup>

What is said about the importance of ivory because of its rarity and cost is equally applicable to wood. Since it was an expensive import and a luxury material, we find that it was consequently ornamented with lavish care, especially during the early Islamic period. Wood, just like ivory, is a practical material that can be used in every way and does not allow for a lot of waste. Another similarity between ivory and wood is that in some of its properties ivory is comparable to hard wood: it is quit dense, it polishes beautifully, and it can be worked with woodworking tools. However, unlike wood, ivory can be carved in any direction without regard to its grain which makes it easier and more possible to achieve a freer and more naturalistic treatment of form.<sup>23</sup>

Wood inlay is a technique that dates back to ancient Egypt. Inlaid coffers from the first dynasty decorated with geometric motifs were found in the royal necropolises at Abydos and Saqqara, in addition to many furniture articles from later dynasties.<sup>24</sup> The term inlay itself is a general name used for ornamental or figural work that is produced by setting together upon a flat surface variously shaped pieces of different materials. Those materials could be marble, stone, ivory, or wood. Inlay refers particularly to the embellishment of furnishings or architecture and that makes it

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<sup>22</sup> Scarce, J., "Wood," in *The Arts of Islam: Hayward Gallery Exhibition* (London, 1976), 273-274.

<sup>23</sup> Barnett, R. D., "Fine Ivory Work," in *A History of Technology I*, ed. Charles Signer, et. al. (Oxford, 1954), 667.

<sup>24</sup> De Azevedo, M. C., "Inlay: Antiquity," in *Encyclopedia of World Art* 8: 126-129.



fall into the wider category of composite decoration with techniques like joining, inset, and damascening. More exactly, it is a term that describes the technique of using a set of pattern pieces inlaid into a solid ground.<sup>25</sup>

Inlay can be achieved by hollowing out the surface in order to receive the pieces of different material or color creating the desired design. In this type of inlay process, the ground and the inlaid material can be combined to create the design in such a way that the value of both materials is evident. Or the inlaid material can be used as the sole decoration of the piece and the ground works as a host or a frame to the inlaid material that could be carved, incrustated, or assembled in the mosaic technique. This inlay process is used when the artist wishes to "exhilarate" the design or the precious material used for inlay.

There is an enormous confusion between the different terms for the inlaying technique. The three most agreed upon are intarsia inlay, incrusting inlay, and mosaic inlay. Intarsia, also known as *tarsia* and *intarsiatura*, is an Italian word derived from the Arabic *tars`i*. It is commonly used in Europe to describe both inlay and marquetry techniques.<sup>26</sup> However, the true intarsia is achieved when pieces of ivory or bone are inserted into carved grooves on the wood surface. The inserted pieces have to be of the exact size of the grooves.<sup>27</sup>

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<sup>25</sup> Ibid.

<sup>26</sup> Ibid.

<sup>27</sup> Monneret de Villard, U., *Monumenti dell'arte musulmana in Italia: I. - La cassetta incrostata della Cappella Palatina di Palermo* (Rome, 1938), 7.

The incrusting technique, from the Latin *crusta*, is attained by emptying the space to be decorated on the wooden surface and then inserting the cutout decorative pieces of ivory or any desired material. The spaces left between the applied material and the wood surface are filled with paste.<sup>28</sup> The difference between intarsia and incrusting is that in the first one the ivory shapes are countersunk, while in the second the shapes are fixed to the surface.

The third technique is mosaic inlay technique and sometimes called mosaic marquetry. In this technique the entire wooden surface is covered with closely set small pieces of different colored materials (tesserae) like wood and ivory, and of equal thickness, all cut into cubes or any other desired regular shape and fitted together in a mortar. Mosaic differs in the size of its components. Its pieces are "anonymous fractions" of the design and rarely have the dimensions of pieces for intarsia or incrusting work.<sup>29</sup>

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<sup>28</sup>Karnouk, G. S., "Form and Ornament of the Cairene Bahri Minbar," *Annales Islamologiques* 17 (1981), 135.

<sup>29</sup>Harding, C., "Mosaic," in *The Dictionary of Art* 22, ed. Jane Turner (New York and London, 1996), 154.

## 2. History of Inlaying Technique

The most ancient inlaid objects come from Egypt, providing a continuous tradition. The most ancient examples are from the pre-dynastic period when intarsia was used with colored stones cut out in decorative forms and inserted into cavities on the wooden surface as seen in the grave of Hemeka, minister of King Den from the first dynasty. Starting with the 5<sup>th</sup> dynasty, we find the use of incrustation parallel to intarsia inlay. These inlaying techniques continued their development until the 18<sup>th</sup> dynasty when they reached their zenith.<sup>30</sup> We have some outstanding examples from the tomb of Tutankamen. Among these examples is an inlaid casket executed in the marquetry mosaic technique (fig. 1). Mosaic pieces are cut in small, thin slips of ebony and ivory arranged together vertically and horizontally and bordered with ivory strips.<sup>31</sup>

Towards the beginning of the Christian era, a simplification starts to occur: inlay is limited to ivory or bone and a few colored woods. This development is evident in two caskets discovered during the excavations of Karanog (Nubia) and considered to be of the 3<sup>rd</sup> or 4<sup>th</sup> century A.D., now in the University Museum, Philadelphia (figs. 2-3). Another example is a lectern preserved in the British Museum representing two figures of standing women under an architectural composition constituted by two columns holding up a triangular lintel. The style of the

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<sup>30</sup> Monneret de Villard, *Monumenti dell'arte musulmana*, 7-8.

<sup>31</sup> Alder, C., "Fine Wood-Work," in *A History of Technology I*, ed. Charles Signer, et. al. (Oxford, 1954), 693.



architecture dates the piece to the 4<sup>th</sup> century A.D.<sup>32</sup> The finest piece of the period is from the necropolis of Ballana (Nubia), where we find a game table inlaid with thin decorative intarsia and a large rectangular wooden chest standing on four legs that is dated to the late 4<sup>th</sup> and early 5<sup>th</sup> century A.D. (figs. 4-6). The side and back of the chest have plain panels, but the front is elaborately decorated inlaid with ivory intarsia in addition to plaques of carved and painted ivory.<sup>33</sup> Another example is two uprights from a wooden chest inlaid with ivory found during the excavations of the Monastery of St. Jermias at Saqqara, dating from the 5<sup>th</sup> century A. D. (fig. 7).<sup>34</sup>

From the Byzantine period to the Islamic conquest of Egypt we have neither objects nor documents, but we know that during the first half the of the 8<sup>th</sup> century and under the caliphate of Hisham and the governorship of al-Qasim, there existed in the famous convent Dayr al-Abiad a chest of *sasam* or *sag* wood in which the registers and the documents of the monastery were kept. According to the sources, the chest was incrustated with ivory and carried the image of a saint.<sup>35</sup> The inlaying technique never died out in Egypt. Even though it may not have been fully practiced in certain early periods; we shall witness the full revival of this ancient technique during the ensuing Islamic periods.

Although ivory carving is a well-celebrated Byzantine art, we do not find any significant example of ivory inlay art. It is clear that the main concentration was on

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<sup>32</sup> Monneret de Villard, *Monumenti dell'arte musulmana*, 8.

<sup>33</sup> Emery, W. B., *The Royal Tombs of Ballana and Qustul* (Cairo, 1938) 383-4.

<sup>34</sup> Quibell, J. E., *Excavations at Saqqara: 1907-1908* (Cairo, 1909) 109, pl. XLI.

<sup>35</sup> Monneret de Villard, *Monumenti dell'arte musulmana*, 8.

ivory figural carvings. We have examples of ceremonial chairs decorated with incrustated carved ivory panels. The first one is the Archbishop's chair of Maximian in Ravenna dated c. 547 A.D. (fig. 8). It is inlaid with rectangular carved ivory panels and ornamented with scrolls filled with birds and animals.<sup>36</sup> The second one is a later example from the Cathedra of St. Peter in the Vatican, dated 870-875 A.D. (fig. 9). It is the work of the court school of Charles the Bald at Metz and decorated with rows of flat ivory plaques carved with figures. Narrow bands carved with vine scrolls are inlaid on the upright supports of the chair and frame the gable of the chair's high back.<sup>37</sup>

The main influence on later Islamic wood inlay comes from Egypt, which, as we saw, retained the technique through the ages. Nevertheless, as we noticed, the examples from Egypt are all done in either intarsia or incrusting. The mosaic technique is seen only in the casket from the Tutankamen treasures (see fig. 1). We do not have any substantial influence from Byzantine art on the inlay techniques. These latter therefore seem to have been carried into the Islamic period through Coptic art.<sup>38</sup>

Also we have few carved ivory objects from the early Islamic period in the eastern Islamic world. It seems that during the early Umayyad and Abbasid periods there was no ivory tradition, possibly because of the lack of ivory working tradition in Sassanian art.<sup>39</sup> Contrast this to the strong art of ivory carving well established in both

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<sup>36</sup> Dalton, O. M., *Byzantine Art and Archeology* (Oxford, 1911) 203-205.

<sup>37</sup> Ereshefsky, *Bone and Ivory Carving*, 35-36.

<sup>38</sup> For a further discussion of this last part see Chap. III, pg. 68-69

<sup>39</sup> Pinder-Wilson, "Adj," 200.

Syria and Egypt. Small carved pieces were found in Fustat,<sup>40</sup> in addition to two small pyxes and a panel all attributed to the 7<sup>th</sup>- 8<sup>th</sup> centuries. Furthermore, a chess set of the same period decorated with an inset design of dots and circles filled with brown pigment is attributed to Syria or Egypt.<sup>41</sup>

## Chapter II

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<sup>40</sup>The most important is a cosmetics dish in the shape of a bird with worm in its beak.

Ereshefsky, *Bone and Ivory Carving*, pl. 23.

Scanlon, G. T., "Fustat Expedition: Preliminary Report 1965, Part I," *Journal of the American Research Center in Egypt*, 5(1966) 104.

<sup>41</sup>Pinder-Wilson, "Islamic Arts: Ivory," 523.

## CHAPTER TWO

### THE CATALOGUE

#### Analysis Criteria:

- Present location
- Inventory number
- Dimensions
- Provenance
- Description of the circulation of the piece
- Basic analysis of the decorative elements
- Usage (if different)

## Chapter II

## CHAPTER TWO

# THE CATALOGUE

### Analysis Criteria:

- Present location
- Inventory number
- Dimensions
- Provenance
- Description of the condition of the piece
- Basic analysis of the decorative elements
- Usage (if different)

The design of most of the group objects is composed of a central square compartment flanked on both sides by a series of five arches. We have only two complete pieces with this design (Catalogue nos. 1, 2). The rest of the objects either contain part of this design (Catalogue nos. 3, 4, 5), or they have a different layout but with the same design elements still uniting them to the rest of the group (Catalogue nos. 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100).

<sup>42</sup> The pieces are scattered among many museums. The Islamic Museum in Cairo holds most of the group objects, but only two are on exhibition (Catalogue nos. 1 and 2). The Metropolitan holds the most complete and well-preserved one, while there is just in the Louvre and another two fragments of one panel in the Ethnographisches Museum, in Berlin. *Renouard de Villard* states that there is one object that belongs to the group in the French Museum in Athens, but in the Catalogue of the Musée du Louvre, they are not even cited the presence of the panel in Athens.

*Musée du Louvre, Catalogue des bronzes de la section Égypte* (Paris 1989) 34.  
<sup>43</sup> For more details about the inlay technique check Chap. 1, pp. 10-11.



## I. Pre-Tulunid Period "Ain al-Sira Group"

This name is given to certain pieces that share the same characteristic features and which come mostly from the cemetery of 'Ain al-Sira in Cairo.<sup>42</sup> All the pieces from this group are decorated with minute pieces of ivory and different colored wood in the mosaic inlay technique over a sycamore wooden base.<sup>43</sup> We here have to appreciate the technique of cutting such pieces of ivory or bone in tiny squares or lozenges and assembling them with even tinier pieces of wood. Wood as a material is softer than either ivory or bone, allowing the craftsmen to produce pieces smaller than, the originally very small, bone pieces and achieving different colors by using different species of wood. Larger carved circular and triangular ivory (bone?) plaques are incrustated within the mosaic decoration.

The design of most of the group objects is composed of a central square compartment flanked on both sides by a series of five arches. We have only two complete pieces with this design (Catalogue nos. 1, 2). The rest of the objects either contain part of this design (Catalogue nos. 3, 4, 5), or they have a different layout but with the same design elements still uniting them to the rest of the group (Catalogue

<sup>42</sup> The pieces are scattered among many museums. The Islamic Museum in Cairo holds most of the group objects, but only two are on exhibition (Catalogue nos. 1 and 7). The Metropolitan holds the most complete and well preserved one, while there is one in the Louvre and another two fragments of one panel in the Islamisches Museum, in Berlin. Monneret de Villard states that there is one object that belongs to the group in the Benaki Museum in Athens, but in the Catalogue of the Musée du Louvre, they are not sure about the presence of the piece in Athens.

Monneret de Villard, *Monumenti dell'arte musulmana*, 10.

Musée du Louvre, *Catalogue des boiseries de la section Islamique* (Paris, 1988) 34.

<sup>43</sup> For more details about the inlay techniques check Chap. I, pp. 10-11.

nos. 6-9). Not all of the pieces are from 'Ain al-Sira, but since most of the group's pieces are, they are grouped under the same rubric.

The sizes of the pieces vary, but the two complete ones, Catalogue nos. 1 and 2 have the same size, and what remains of the other pieces with the same design shows that they too would have been of the same dimensions. The exact use of such highly decorated panels is still not known. It has been suggested that the pieces served as Qur'an covers, cenotaphs, or boxes. The suggestion of boxes is the most appropriate in terms of size and decoration, particularly if we take into consideration that inlaid boxes were an important part of a bride's luggage.<sup>44</sup> However, based on the decoration of the objects, we can suggest that they were the lids of boxes especially made for mosques or religious places. The objects are attributed by art historians to different periods, with no specific determination of a certain period.<sup>45</sup> Chapter III includes a discussion of the dating of the group.

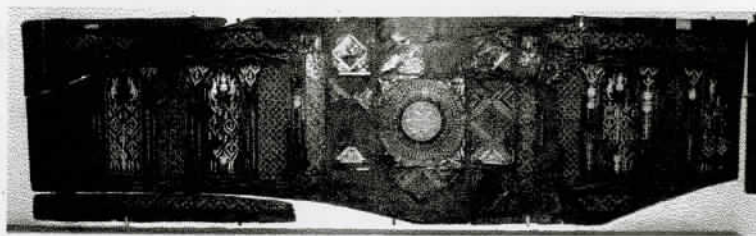
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<sup>44</sup> Goitein, S. D., *A Mediterranean Society: The Jewish Communities of the Arab World As Portrayed in the Documents of the Cairo Geniza IV* (London, 1983) 105.

<sup>45</sup> Abdel-Wahab and Shafi'i each date one of the objects to the 8<sup>th</sup> century A. D., while Dimand dates the same object of Abdel-Wahab to the 8<sup>th</sup>-9<sup>th</sup> century (Umayyad and early Abbasid period). Monneret de Villard for example finds the attribution of the pieces to the Tulunid period beyond any doubt. Of the same opinion are Pinder-Wilson, and the Catalogue of the Musée du Louvre. Abdel-Wahab, M. A., *Terminological Decorative Analysis and Artistic Styles of Islamic Art: A Study Based on the Woodwork Collection of the Metropolitan Museum of Art, New York* (D. Phil. thesis, U. of Michigan, 1970) 17. Dimand, M. S., "An Egypto-Arabic Panel With Mosaic Decoration," *BMAA* 33 (1938), 79. Ibid., *A Handbook of Muhammadan Art* (New York, 1958) 124. Monneret de Villard, *Monumenti dell'arte musulmana*, 10-11. Musée du Louvre, *Catalogue des boiseries*, 34. Pinder-Wilson, "Adj," 200. Shafi'i, F., "al-Akhshab al-muzakhrafa fi'l-tiraz al-umawwi," *BFA* 2/14 (1952), 107-8.

1.

## Inlaid wood panel:



- Cairo Islamic Museum
- Inv. 9518.
- H.: 51 cm.; W.: 180 cm.; D.: 2.5 cm
- From the cemetery of 'Ain al-Sira.
- The panel is broken into four pieces and part of the lower left side is missing.

It is covered with a mosaic of bone and various colors of wood. Part of the design is incrustated and part is inlaid with pieces of carved bone. The very delicate pieces that compose the incrustated design are probably made of bone, however, the large circle in the middle could be made of ivory. Some of the mosaic decoration and the carved pieces are missing; nevertheless, the general design of the pieces is ascertainable.

- The main design is divided into three sections. The middle section is occupied by a large square with a central carved "ivory" medallion and a border composed of lozenges, rectangles, squares, and triangles all filled with geometric patterns except for the central medallion that has a typical classical design of vine scrolls carved in low relief.<sup>46</sup> This middle section is flanked by two series of niches that were originally identical, but though the panel is partially incomplete on its right

<sup>46</sup> See Chap. III, pp. 65-67.



side, it is flanked from the left side by five arches and four only on the right side. The niches and all the intervening spaces are filled with minute tesserae arranged in different elaborate geometrical designs. The spaces between the niches depict columns with capitals that constructed from relatively larger pieces of ivory and reminiscent of the winged candelabra motif found in the mosaic decoration that fills the triangular spaces between the arches of the Dome of the Rock (fig. 25).<sup>47</sup>

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<sup>47</sup> The discussion concerning decorative influences and their significance is in part one of Chap. III.

## Inlaid wood panel

• Metropolitan Museum of Art

• Inv. 37.100

• H.: 51 cm.; W.: 17 cm.

• From the Fayyum

• This piece is the best

preserved at the top. The

with curved pieces inlaid

decoration is good, but

• This is the second of

two series of arches. The

difference is that the w

four corners of the panel



<sup>48</sup> In Tarnaud's article, devoted to six pieces similar to the one here, however, he did not mention the only exception to the general rule: this piece, as the Musée de Louvre.

<sup>49</sup> Tarnaud, "An Egyptian-Style," *Musée de Louvre, Catalogue*.

<sup>50</sup> For a description of the

pieces and slight

inlay technique

some of the

clearly visible.

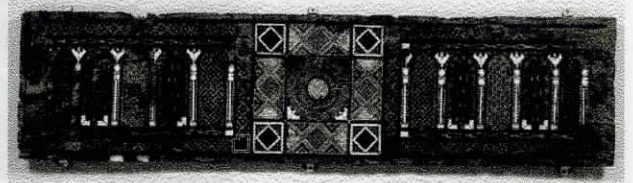
square flanked by

no. 1, the only

same motif is at the

## 2.

### Inlaid wood panel:



- Metropolitan Museum of Art
- Inv. 37.103
- H.: 51 cm.; W.: 180 cm.; D.: 2.5 cm
- From the Fayyoun provenance (middle Egypt).<sup>48</sup>
- This piece is the best preserved one. It has some small cracks and slight damage at the top. The decoration of the piece is in the mosaic inlay technique with carved pieces incrustated within the mosaic decoration. Some of the decoration is gone, but the final general design of the piece is clearly visible.
- This is the second complete piece with a design of a middle square flanked by two series of arches. The design is the same as of Catalogue no. 1, the only difference is that the wing motif fills up the spandrel and the same motif is at the four corners of the middle square.<sup>49</sup>

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<sup>48</sup> In Dimand's article dedicated to this piece, he mentioned that the Islamic Museum in Cairo possesses six pieces similar to the Metropolitan one and they all come from the cemetery of 'Ain al-Sira. However, he did not mention the provenance of the piece. The Louver catalogue mentions this piece as the only exception to the group that comes from Fayyoun instead of 'Ain al-Sira. Monneret de Villard refers to this piece as the Mallon piece because at that time it was among the collection of Mrs Paul Mallon in Paris.

Dimand, "An Egypto-Arabic Panel," 34.

Monneret de Villard, *Monumenti dell'arte musulmana*, 10.

Musée du Louvre, *Catalogue des boiseries*, 35.

<sup>49</sup> For a description of the medallion, see Chap III, pp. 65-67.



3.

# Inlaid wood panel

• Ishchenko Museum

• Inv. 250, 251

• H. 49 cm, W. 66.3

• From the cemetery of

• Two rectangular panels

parts with two holes in

decorated in the middle

two deep holes. It also

design.

• If we compare these

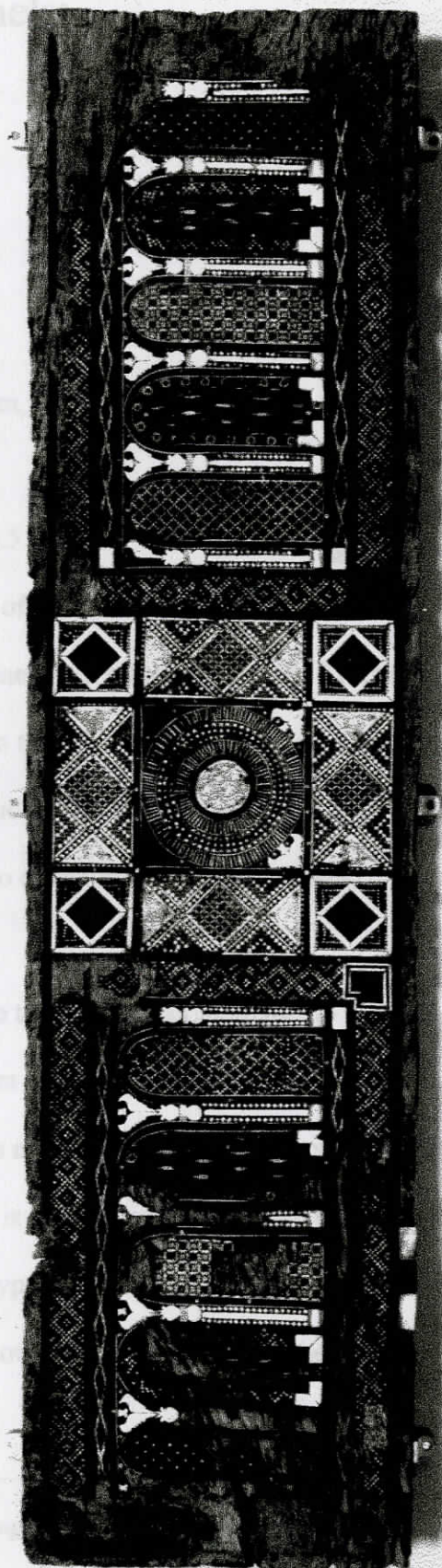
of them originally form

they are Qir'en covers

panel. Naturally, this is

Moreover, since his type

complete panel may be



is broken into three

right side. It is

panel that contains

with different

ve reason that the two

have themselves that

the two sides of one

at panels and not one.

ent, the size of a

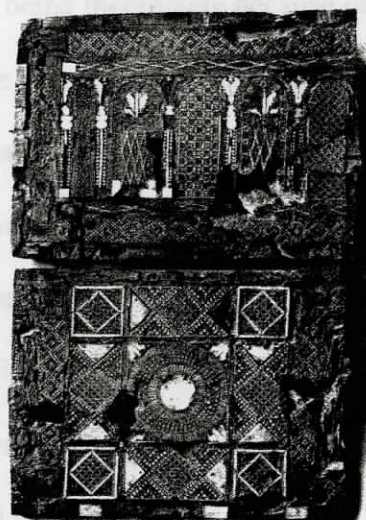
use that he refers to.

Catalogue no. 2  
Metropolitan Museum of Arts



3.

## Inlaid wood panels:



- Islamisches Museum, Berlin
- Inv. 350, 351.
- H.: 49 cm; W.: 66.5 cm.
- From the cemetery of 'Ain al-Sira.
- Two rectangular panels in a rather poor state. The first one is broken into three parts with two holes in the middle and incomplete from its right side. It is decorated in the mosaic and incrusting technique. The other panel also contains two deep holes. It also displays the same decoration type but with different design.
- If we compare these two panels to Catalogue no. 1 or 2, we realize that the two of them originally form the two thirds of a complete panel. Sarre theorizes that they are Qur'an covers assuming that these two panels are the two sides of one panel. Naturally, this is wrong because they are two different panels and not one. Moreover, since his hypothesis is based on the size of one piece, the size of a complete panel may not agree with the size of the early Qur'ans that he refers to.<sup>50</sup>

<sup>50</sup> Sarre, F., *Islamic Bookbindings* (Berlin, 1923) 9, 11: fig. 1; plate I.

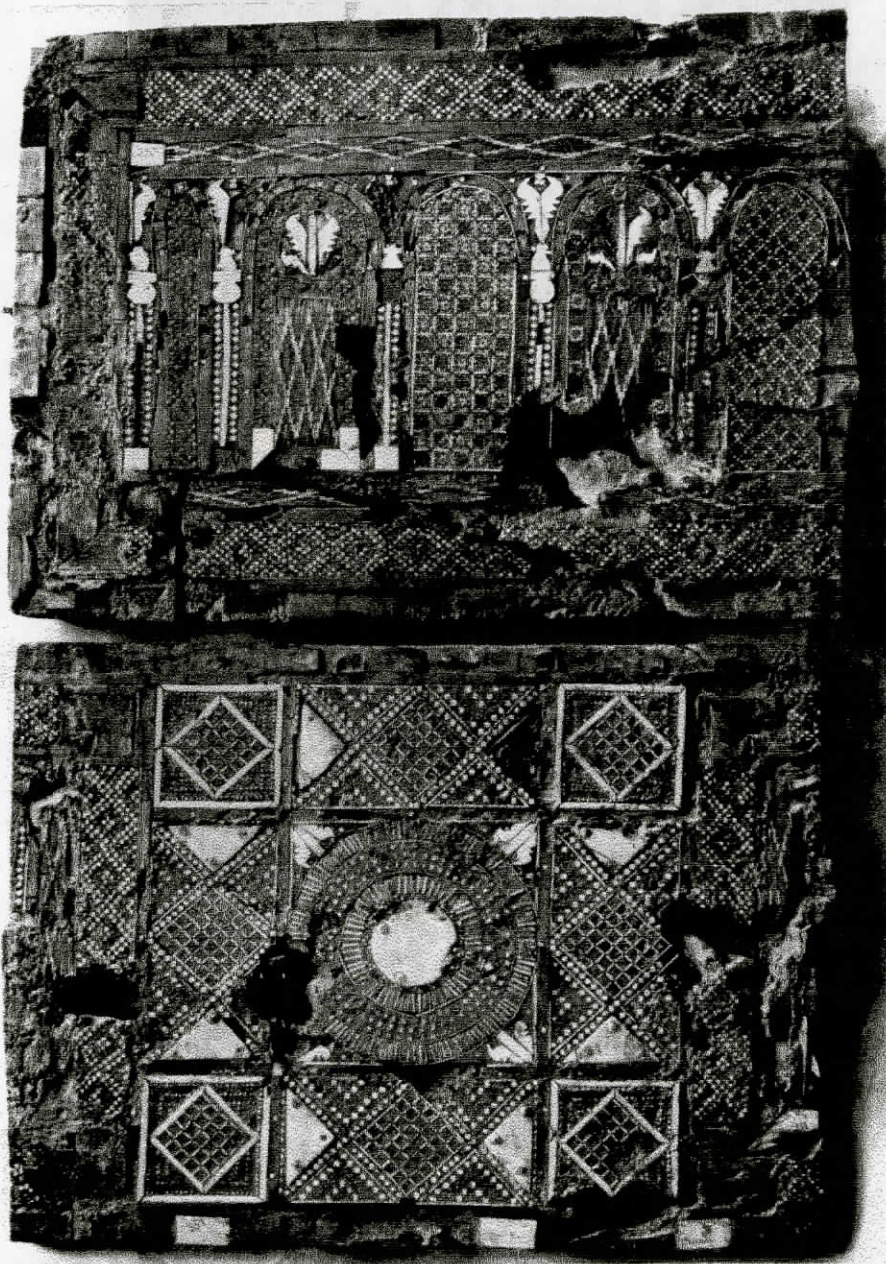
The possibility that the two panels come from the same object is well founded, particularly when analyzing the designs of the panels and comparing them to the other complete ones. The first panel has the five arches found in all pieces with the column at the end of the fifth arch to the far right being incomplete because of the breakage occurring in the piece. At the same time the design of the left side on the second panel, if compared with Catalogue nos. 2 and 3, starts with a border design which separates the middle rectangular design from the side arcade design. We can even see the traces of small lozenges that form the sides of the columns. Furthermore, the design of this panel is rather typical of the middle division of the other completed pieces. A photograph in Hillenbrand's book *Islamic Art and Architecture* shows the two pieces transposed and forming the two thirds of a complete panel.<sup>51</sup> The only difference between this panel and the other group is in the plain ivory triangles, which in other pieces are carved with a floral design. Interestingly, in this piece the central medallion is left uncarved. The arcade design of the first panel is also in the same tradition as the others with an alternating design filling the arches.

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Hillenbrand agrees with this assumption and describes this piece as "Wooden cover inlaid in ivory for oblong Qur'an." *Islamic Art and Architecture* (London, 1999), 57.

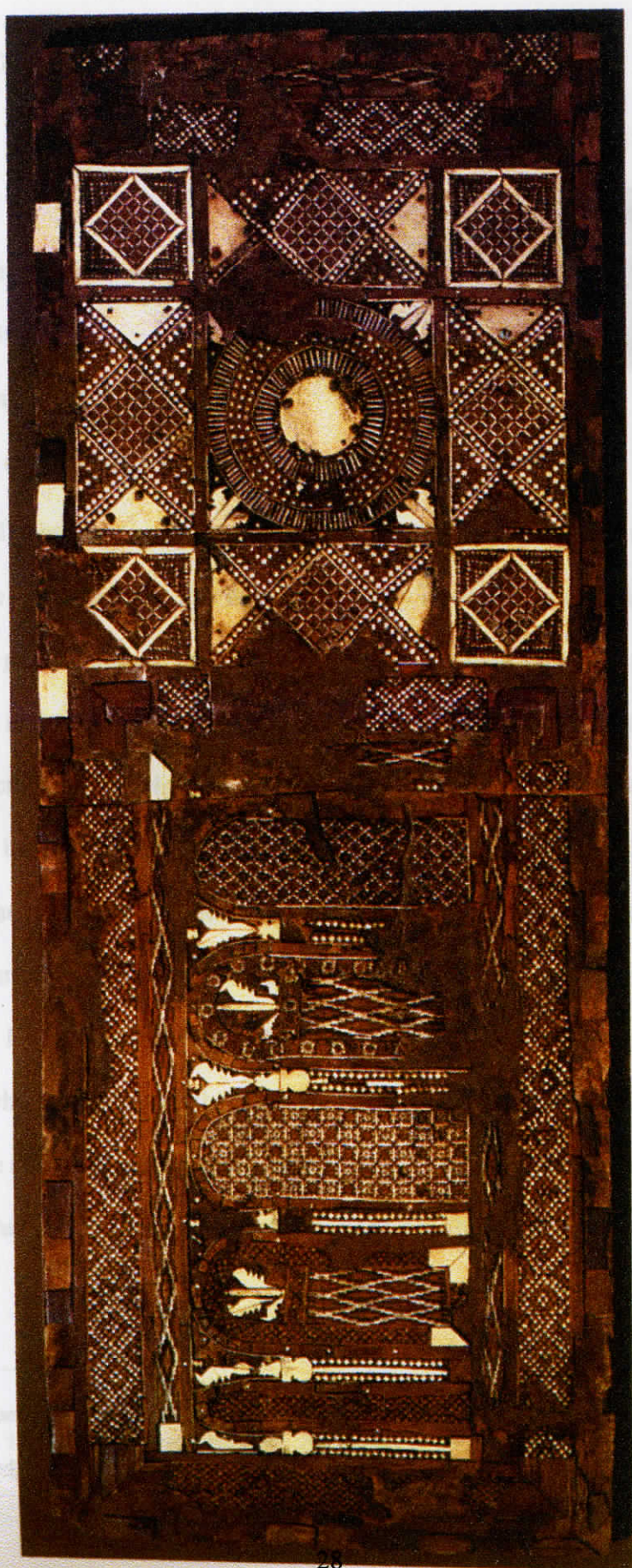
<sup>51</sup> Ibid. fig. 41.





Catalogue no. 3  
Islamisches Museum, Berlin





Catalogue no. 3  
(pieces transposed) as published by Hillenbrand



4.

## Inlaid wood panel:

- Cairo Islamic Museum
  - Inv. 11636
  - H.: 38 cm.; W.: 125 cm.; D.: 2 cm
  - From the cemetery of 'Ain al-Sira.<sup>52</sup>
  - The panel is in poor condition with a portion of its lower left side missing and a hole in the top right side. It is also decoratively incomplete on its right side.
- Most of the panel's inlay is missing, however, the importance of this piece lies in the fact that it shows how the original wood base looked. The first peculiarity is in the three rectangular panels (one complete and two narrow sections) carved into the wooden base and especially in the middle larger one. The first assumption might be that it is a later addition or a restoration, but looking more carefully, we become aware of the fact that the patch still contains part of the original mosaic decoration. Furthermore, the carved pieces are of the same wood type as that of the panel, which could prove that the wood panel originally contained these pieces. One reason for this might be that this part of the wood contained some defect or other and the craftsman had to replace it without having to waste the



<sup>52</sup> This was not mentioned in the museum records; however, Monneret de Villard associated this piece with Catalogue no. 1 and said that both were from 'Ain al-Sira. Monneret de Villard, *Monumenti dell'arte musulmana*, 10.

"valuable" wooden panel.<sup>53</sup> Also, this panel allows us to observe the grooved areas in which the carved (or plain like in Catalogue nos. 3, 8) ivory plaques were originally inlaid.

- From what remains we can make out the traces of two arches on the right side and another two on the left. Also part of the design that separates the left arcade from the middle section is still visible. In the photograph of Monneret de Villard's catalogue of the year 1938, the panel was in better shape with more mosaic decoration (fig. 10).<sup>54</sup> From the same photograph, we recognize a new feature in the second arch to the right: a shell-shaped carved ivory piece fills the lunette of the arch (fig. 11).<sup>55</sup>

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<sup>53</sup> See Chap. I, pp. 8-9, for the discussion of the considerable value of wood.

<sup>54</sup> *Ibid.*, plate XVI.

<sup>55</sup> See Chap. III, pp. 65-67.

## Inlaid wood panel:

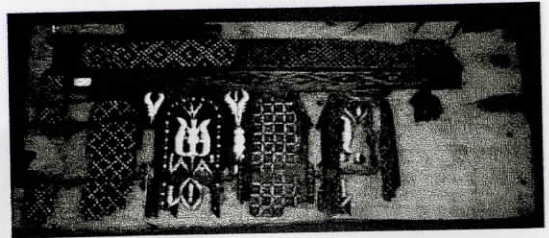


Catalogue no. 4  
Cairo Islamic Museum



5.

### Inlaid wood panel:



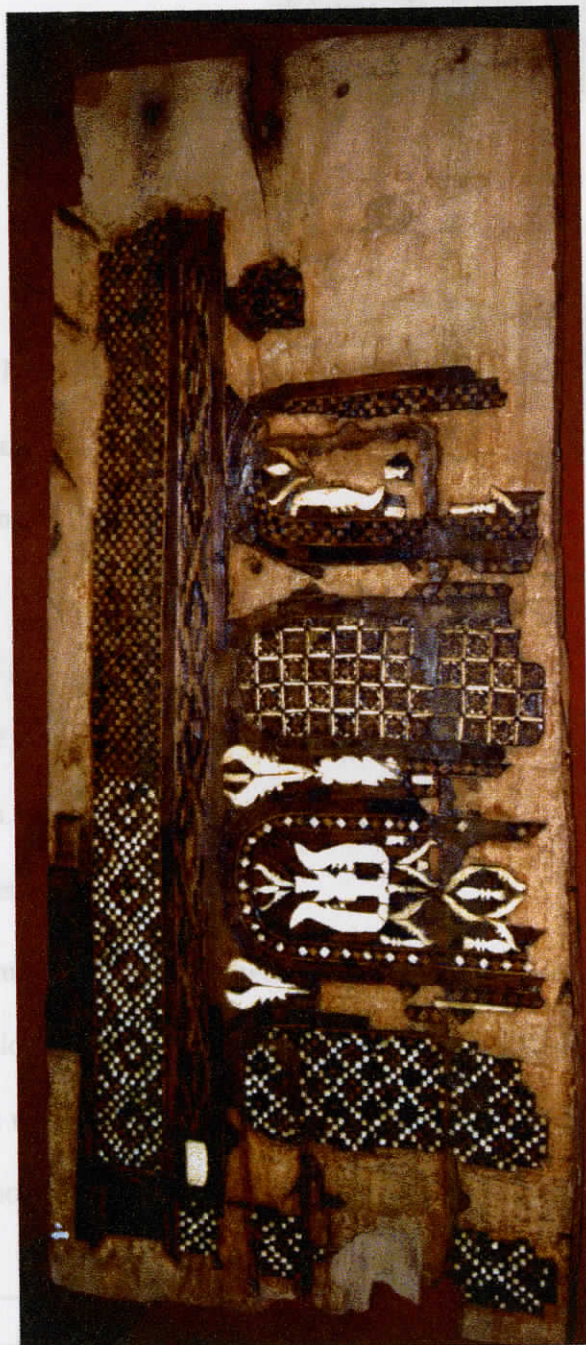
- Cairo University Museum<sup>56</sup>
- Inv. 10
- H.: 35 cm.; W.: 80 cm.; D.: 2 cm
- The original location is not mentioned in the Museum records.
- Rectangular panel incomplete from its left side with lower part missing: Like all the others, the panel is covered with a mosaic of bone and different colored wood. A great amount of the mosaic decoration is gone leaving the wood base visible. The still observable decoration consists of four arches and the traces of the inside decoration of a fifth arch, in addition to parts of the borders. What remains from the decoration of this piece would make the right side of a complete piece. Compared to the other group, there is nothing new or distinctive about this piece. It contains the same decoration and the same designs of the rest of the group, especially Catalogue nos. 1 and 3, which share with this piece the same arch design. This panel could either be the right side of a complete piece with the typical five arches on each corner and the square middle design, or connected with Catalogue nos. 1 or 3 and with them would make the side and the front or the cover of a box.

<sup>56</sup> This piece is published only in Hasan, Z. M, *Moslem Art in the Fouad I University Museum* (Cairo, 1950).



6.

# Inlaid wood panels:

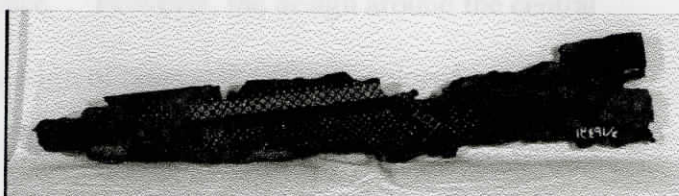
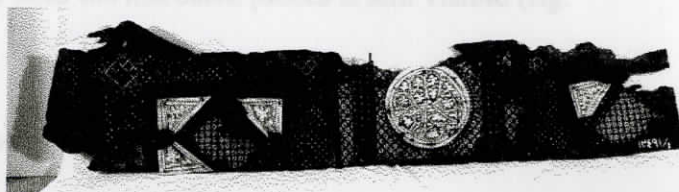


Catalogue no. 5  
Cairo University Museum

<sup>37</sup> According to the inventory of the Cairo University Museum, the original provenance is not mentioned in the records. The piece was never published before, but in the *Catalogue des antiquités de la section Égyptienne* they mention the piece's inventory number and associated it with their example (Catalogue no. 8) and with Catalogue nos. 1, 4, and 7 from Cairo Islamic Museum, all as pieces from "Ancient Egypt (old Cairo) provenance".

6.

## Inlaid wood panels:



- Cairo Islamic Museum
- Inv. 13491/1 and 13491/2
- Sycamore, bone, different colored wood.

- Panel 13491/1 :

H.: 79 cm.; W.: 180 cm.; D.: 1 cm

Panel 13491/2:

H.: 69 cm.; W.: 100 cm.; D.: 1 cm

- From the cemetery of 'Ain al-Sira.<sup>57</sup>
- Two wooden mosaic inlaid fragments. Whether both come from the same panel or not would require scientific analysis. However, close study of the pieces showed the same wood type, color (which is a good indication that they might be one panel), deterioration, and typical inlay decoration. Through comparison with

<sup>57</sup> According to the museum records, it was originally bought. The original provenance is not mentioned in the records. The piece was never published before, but in the *Catalogue des boiseries de la section Islamique* they mention the piece's inventory number and associated it with their example (Catalogue no. 8) and with Catalogue nos. 1, 4, and 7 from Cairo Islamic Museum, all as pieces from 'Ain al-Sira (old Cairo) provenance.

other pieces, #13491/1 could be the middle section of the panel, and #13491/2 from the top section. As many of the piece's inlays are missing, I was able to observe how delicate and accurate the inlaid mosaics are since the adhesive substance or the paste that is used to hold the incrustated pieces is still visible (fig. 12 a & b).

- From what remains we can observe that the decorative elements are still the same, but the arrangement of the decoration is different. The central carved medallion is the main focus of the piece.<sup>58</sup> However, the design around the central medallion is not the usual radiating design of bone and different colored wood. Instead, it sits in the middle of what must have been a square division filled with the typical eight-petaled floral design (fig. 12a). The sides of the middle square have a design different from the usual five arches. The right side consists of three (originally four) carved bone triangles touching from the angles and forming a rectangle. The space formed from the touching triangles is filled with the eight-petaled mosaic design. The other side would have had the same design, but only one of the carved triangles and some of the middle design is still there. The second piece consists mainly of two rows of mosaic decoration without any carved pieces (fig. 12b).
- The variation in the design does not necessarily require a different function. On the contrary, this piece could be part of a smaller box that did not include the side arches in its original design.

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<sup>58</sup> See Chap. III, pp. 65-67.





Catalogue no. 6/1  
Cairo Islamic Museum



## Inlaid wood panel

• Cairo Islamic Museum

• Inv. 13913

• H: 62 cm; W: 110 cm; 17

• Found in the cemetery of 'Abd al-

• Incomplete rectangular panel

wide band of mosaic tiles, decorated

perated flowers arranged with

A long narrow strip of mosaic

with the joint in the lower part

back which is decorated with

with a very thin sinuous line

some of the bigger stones is

arrowhead. Above the arrowhead

wood (figs 13 a)



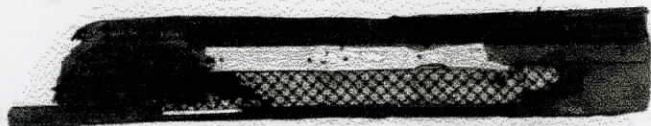
Catalogue no. 6/2  
Cairo Islamic Museum

<sup>10</sup> The museum does not mention the exact location of the find. This piece was excavated in the

7.

## Inlaid wood panel:

A drawing of the bone inlay on the back of Catalogue no. 7



- Cairo Islamic Museum



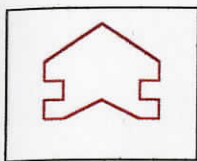
- Inv. 13918

- H.: 62 cm.; W.: 110 cm.; D.: 2 cm

- Found in the cemetery of 'Ain al-Sira.<sup>59</sup>

- Incomplete rectangular panel broken on its left side. It is composed of one wide band of mosaic inlay, decorated with minute bone lozenges forming eight-petaled flowers assembled with even smaller rectangles of different colored wood. A long narrow strip of carved bone is positioned above the mosaic decoration, with the joint in the bone strip visible. A very important feature of this piece is its back which is decorated with a chain of circles alternating in size and outlined with a very thin sinuous inlaid rod of colored wood (figs. 13 a & b). The center of some of the bigger circles is inlaid with an unusual bone design in the form of an arrowhead. Above the circles, there is another band of small inlaid triangles of wood (figs. 13 a).

<sup>59</sup> The museum does not mention its original source. It says only that it is from the stores of the Arabic Antiquities Museum. This piece was not published before. See footnote 57 for more details.



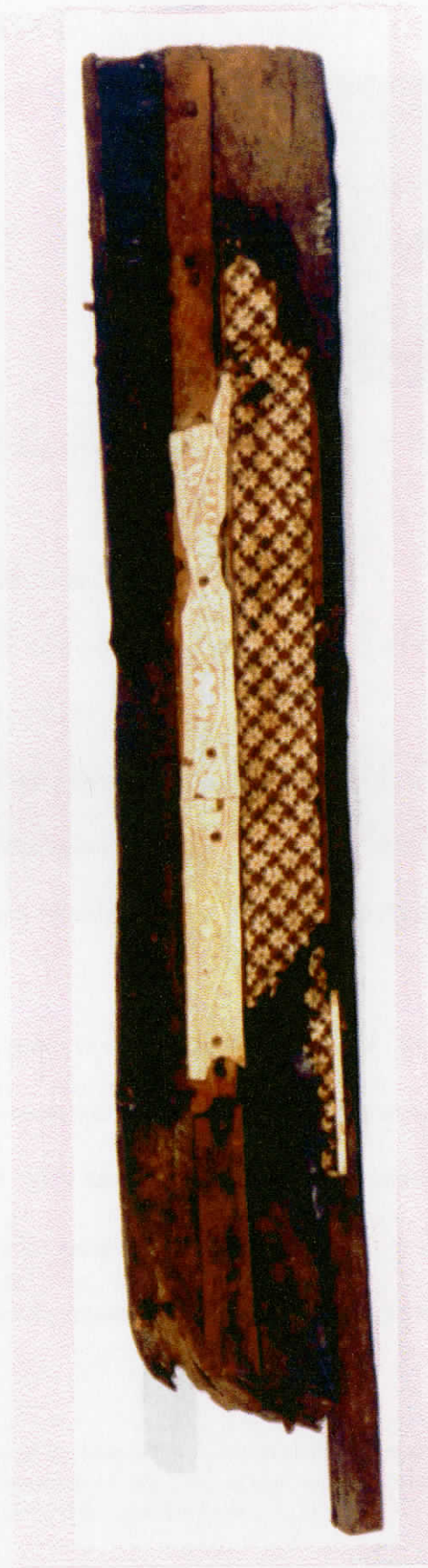
A drawing of the bone inlay on the back of Catalogue no. 7.

- This piece is unlike the other pieces in terms of size and layout of design. The first thing we notice about the size is that the panel is much narrower than the rest pieces of the group. In terms of layout, the narrow band of carved bone, and the mosaic line of decoration below it, are new compared to the other group. However, the scroll carving of the bone band is like the carvings of the bone medallions that occupy the central squares of other pieces.<sup>60</sup> Also, the mosaic inlay is decorated with the familiar eight-petaled flower. Like Catalogue no. 6, this piece cannot be separated from the rest of the group, it could belong with the other pieces but was used differently, particularly as it is decorated on both sides.

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<sup>60</sup> See Chap. III, pp. 65-67





Catalogue no. 7  
Cairo Islamic Museum



8.

## Inlaid wood panel:

- Musée du Louvre

- Inv. AA 20

- Symmetric for the back wood

and ivory.<sup>61</sup>

- H.: 42.5 cm; W.: 68.5 cm;

- Found in the house of a craftsman

by Jean David-Weill in 1933.

- Rectangular panel incomplete

The inside is inlaid with relative

very delicate ivory and wood pieces

missing.

- The design of this piece is different

technique and in the same spirit.

rectangular pieces of ivory and wood

strictly geometrical with rectangular

divided into several compartments

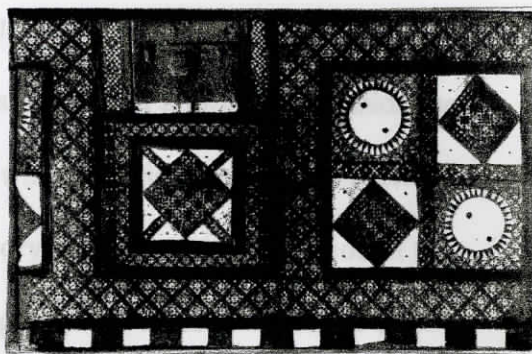


Back of Catalogue no. 7

<sup>61</sup> According to the catalogue of the Musée du Louvre, this piece is inlaid with ivory. However, there is no mention of a scientific analysis of all the material used to determine without doubt whether it is ivory or bone. Musée du Louvre, *Catalogue des Objets*, 34.

8.

## Inlaid wood panel:



- Musée du Louvre
- Inv. AA 20
- Sycamore for the back wooden panel, the inlay is of different colored woods and ivory.<sup>61</sup>
- H.: 42.5 cm; W.: 68.5 cm.; D.: 2 cm.
- Found in the *hawsh* of a cemetery in 'Ain al-Sira and donated to the museum by Jean David-Weill in 1933.
- Rectangular panel incomplete on its left side with part of the border still extant. The inside is inlaid with relatively large, incrustated ivory plaques surrounded with very delicate ivory and wood pieces in the mosaic technique. Some of the inlay is missing.
- The design of this piece is different from the other pieces but still in the same technique and in the same spirit. The border design consists simply of alternating rectangular pieces of ivory and wood. The main decorative theme of this piece is strictly geometrical with rectangles forming the main design, each one of which is divided into several compartments. The most complete rectangle is the one to the

<sup>61</sup> According to the catalogue of the Musée du Louvre this piece is inlaid with ivory. However, there is no mention of a scientific analysis of all the material used to determine without doubt whether it is ivory or bone. Musée du Louvre, *Catalogue des boiseries*, 34.

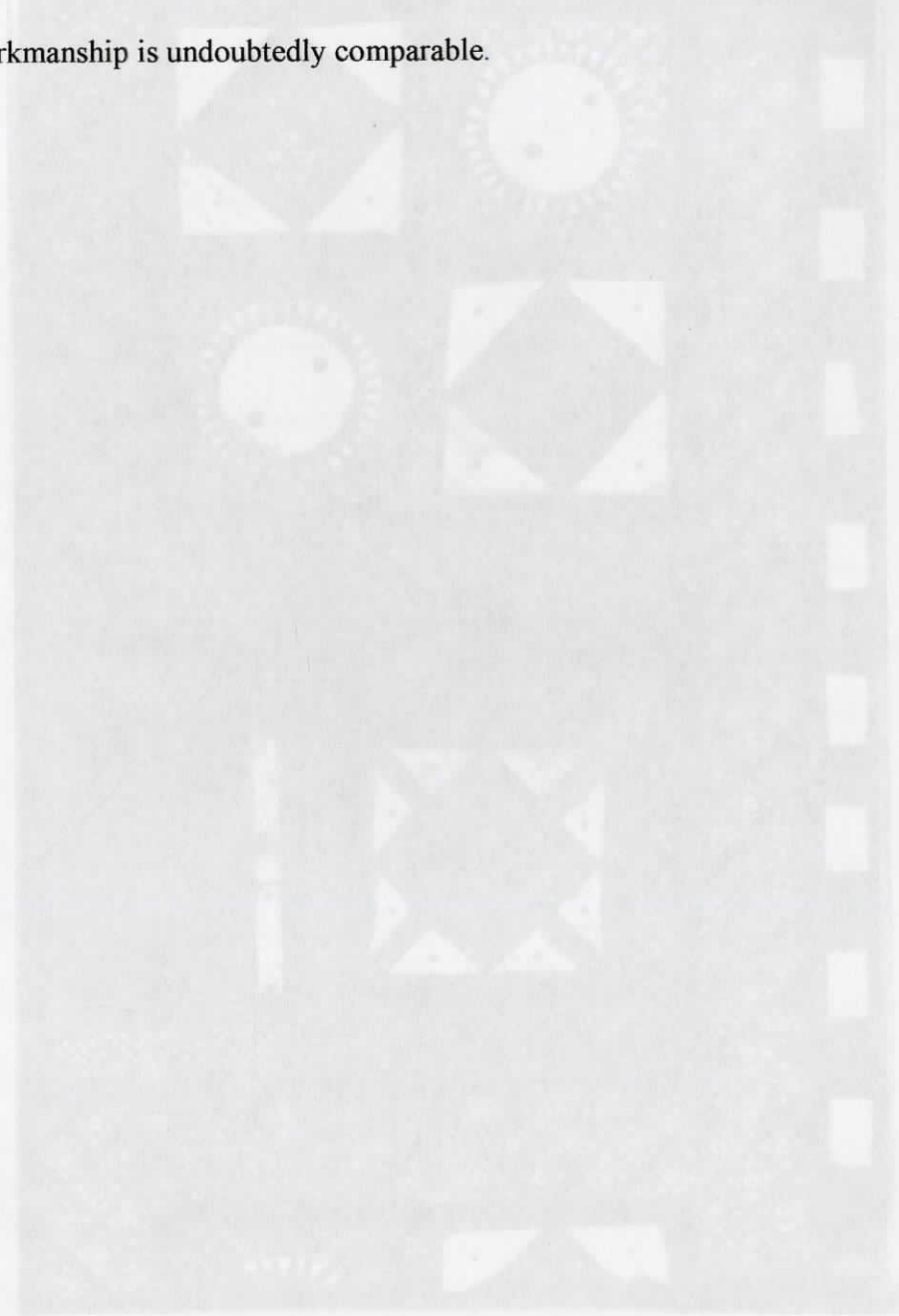
far right; it is divided into four alternating square sections which contain the incrustated ivory plaques. The design of two of these sections contains a circle surrounded by an array of small ivory and wood triangles resembling the rays of the sun, with the space around it filled with the eight-petaled flower mosaic design. The design of the other two sections consists of a lozenge set inside the square section and filled with mosaic inlay, while the triangular spaces between the square and the lozenge are inlaid with ivory plaques. On the left side of the panel, we find the remains of another rectangle. From these remains, we can determine that it was the same as the right side rectangle.

Between these two rectangles is another larger rectangle that is divided horizontally into two sections. Most of the design of the upper section is missing; what remains is a checkerboard mosaic design and a rectangular ivory piece at the base. The lower section is complete but it is evident that its design is different from the upper one. It consists of an inside square filled with a design very similar to one of the right side rectangles of a lozenge inside a square. The only difference between them is that the ivory triangles that fill the space between the lozenge and the square are divided by a band of ivory and wood mosaic inlay into two smaller triangles. The eight-petaled floral mosaic design fills the space between the inside square and the outer one and, with slight variation, fills all the space remaining between the rectangles. This very diminutive and delicate floral design, in contrast to the white and simple large ivory plaques balances the design scheme of the panel and breaks the rigidity of the geometrical lines.

- This piece poses a problem when compared to the rest of the group. Even though it is of the same essence as the rest of the group, it is different in many



aspects. We do not see the usual arches, and the large ivory plaques used in the form of circles and triangles are flat and not carved as in all the other pieces.<sup>62</sup> The design elements of the square compartments are the same as the design of the middle squares in the rest of the group; nevertheless, the treatment of these elements here is different. But the high quality of the technique and refinement of workmanship is undoubtedly comparable.

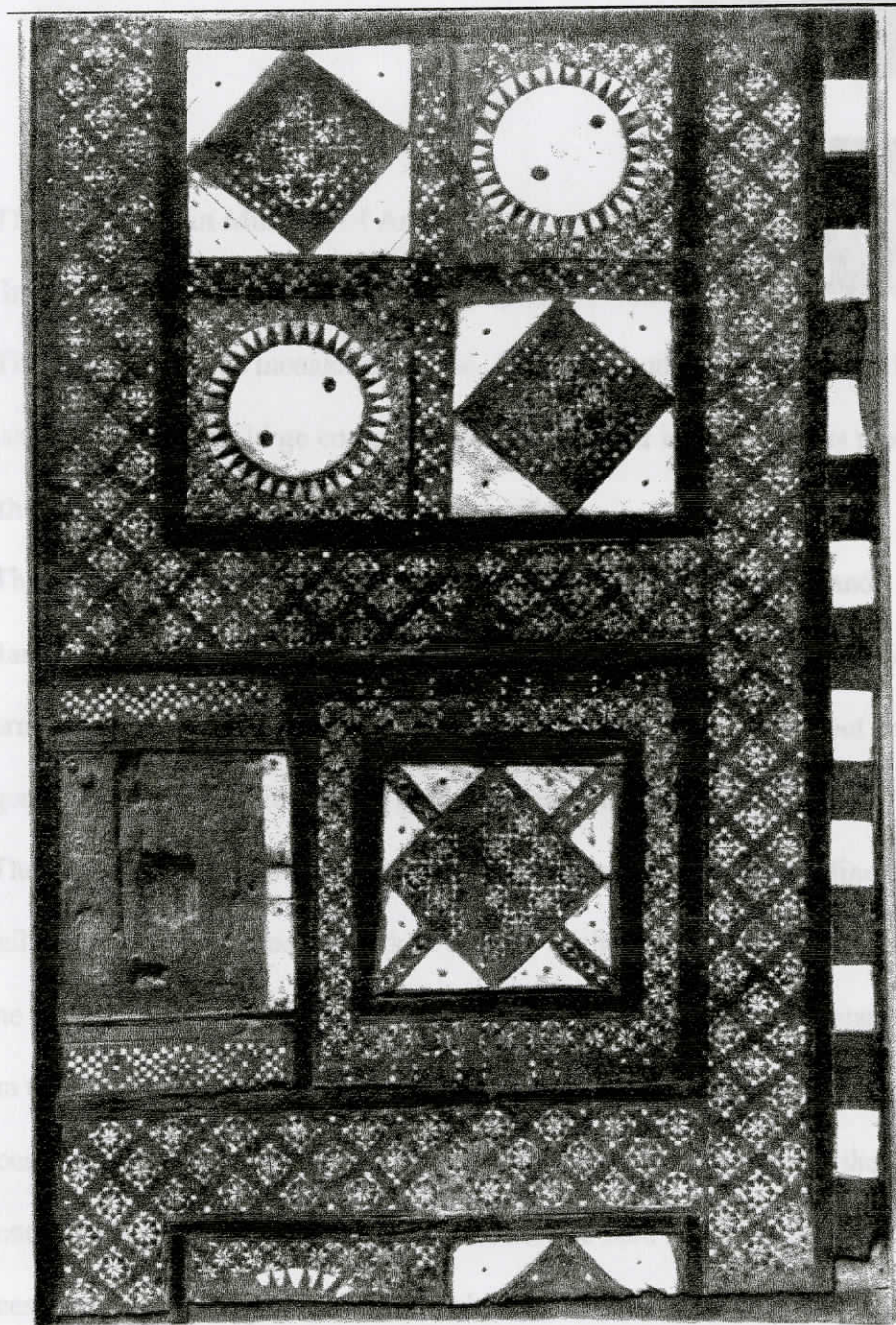


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<sup>62</sup> The single exception is the roundel in Catalogue no. 3.

9.

Inlaid wood panels:

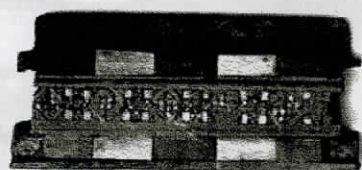
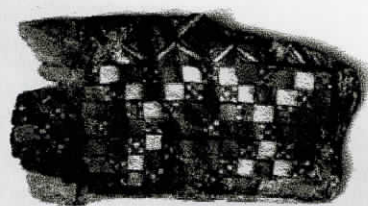


Catalogue no. 8  
Musée du Louvre



9.

## Inlaid wood panels:



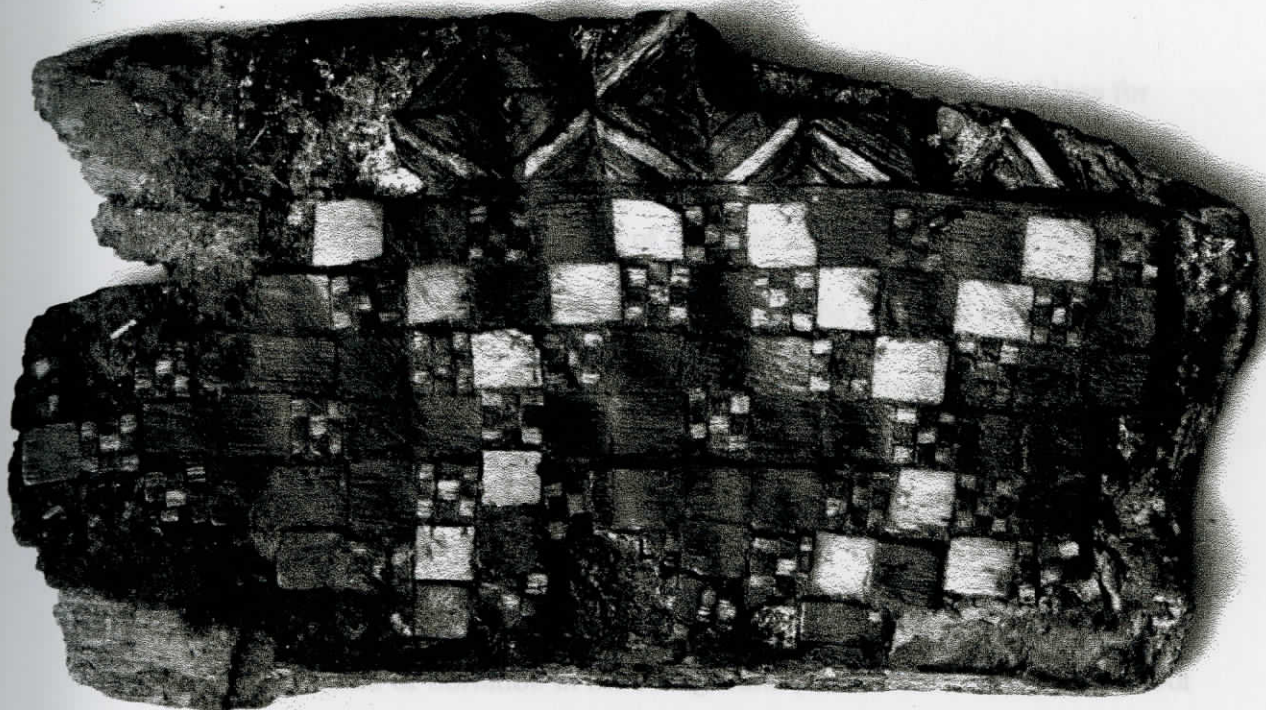
- The Metropolitan Museum of Arts.
- Inv. 21. 114. 13 and 21. 114. 14.
- They are both in the mosaic technique. The bone and wood pieces used for the mosaic decoration are large compared to the ones used in the pervious pieces.

Both panels are incomplete from their two sides.

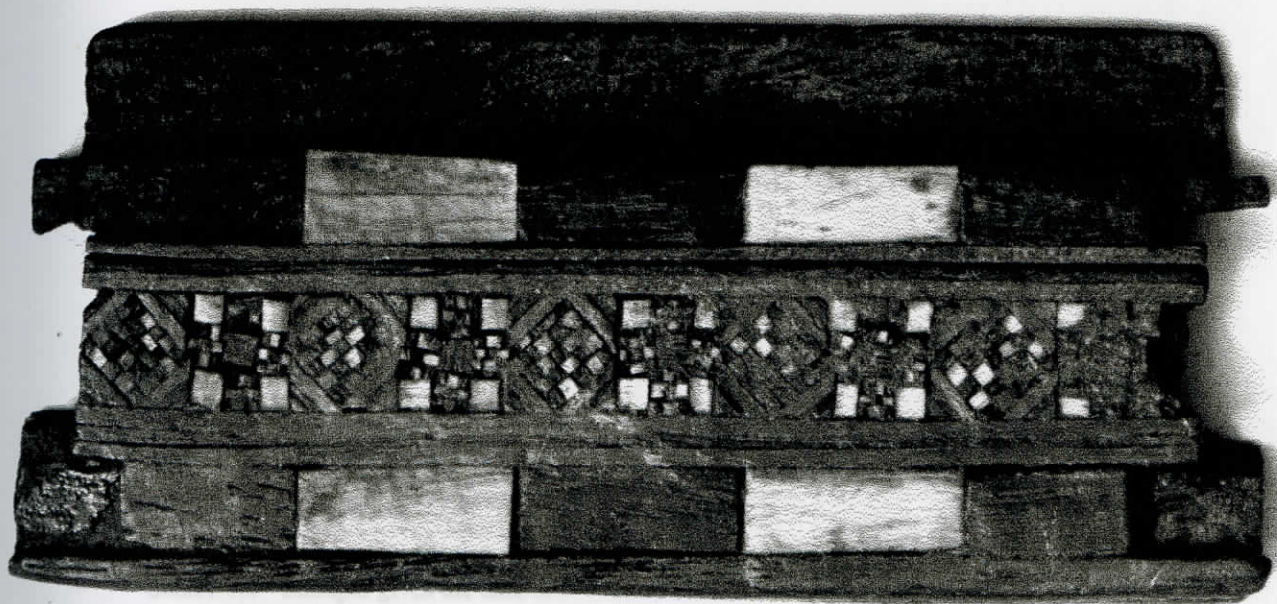
- The inlay design here is quite simple. It consists of small squares and rectangles of bone and various woods set together to form a very simple design of alternating squares, reassembling the border design of earlier pieces but with larger mosaic pieces which would indeed result in lesser detailing.
- These two small wood fragments (although coarser and not of the fine and detailed quality of the mosaic work of the rest of the group) could still be of the same period or earlier. The design of alternating ivory and wood rectangles to form the borders of the second one is similar to the borders of many of the other pieces, such as Catalogue nos. 1, 2, 8. The design of the mosaic is of the same essence as the rest of the group. However, the use here of bigger bone and wood pieces does not necessarily mean finer objects; on the contrary, in this case it is an indication of lower quality and workmanship.



## II. Tuluaid Period "Incrusting Technique Group"



generally they look the same and could come from the same period. Most authorities date the two pieces relative to their decorative elements to the Tuluaid period.<sup>18</sup>



and relates them to the decoration of the Tuluaid. More recent de Villard on the other hand, thinks it hard to date the two pieces, but he relates them to other wood puzzles discovered in the monastery of St. Catherine in Sinai and suggests that both are of Coptic work of the sixth century. Chapter III contains a detailed discussion on the dating of the two pieces.

de Villard, *Recherches de l'art copte*, 11.

Shelf, "al-Akhawat al-musakhkha," 100.

## II. Tulunid Period " Incrusting Technique Group"

This group consists of two complete wood panels with two small legs for support. Both of them are of the same size and done with the same incrusting inlay technique in which the design is cut out of the bone or the ivory plaques and inserted in its prepared space with a special paste used to hold the incrustated pieces in the spaces allotted them. The general layout of the two objects is almost typical, but some of the decorative elements are different; one is more complicated in its design than the other. For example, the Kufic inscription border which surrounds the panels on three sides, in Catalogue no. 10 is inlaid directly on wood; while in Catalogue no. 11 it is incrustated with a kind of floriation in the background [to fill the wooden space]. But generally they look the same and could come from the same period. Most authorities date the two pieces relative to their decorative elements to the Tulunid period.<sup>63</sup>

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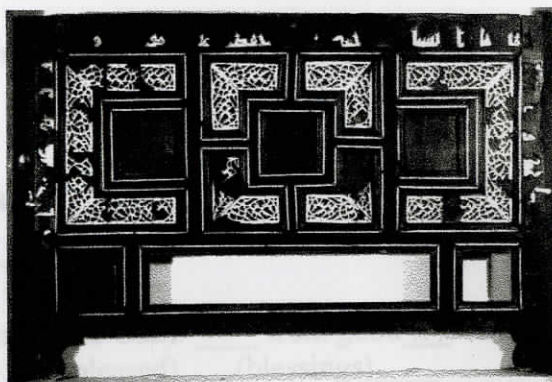
<sup>63</sup> Shafi'i for example gives the date of 9<sup>th</sup> - 10<sup>th</sup> centuries. He compares the designs of the bone inlay and relates them to the decoration of Ibn Tulun. Monnerett de Villard on the other hand, finds it hard to date the two pieces, but he relates them to some wood panels discovered in the monastery of St. Jeremias in Saqarra and suggests that both are of Coptic work of the ninth century. Chapter III contains a detailed discussion on the dating of the two panels.

Monneret de Villard, *Monumenti dell'arte musulmana*, 11.

Shafi'i, "al-Akhshab al-muzakhrafa," 108.



## Inlaid wood panel:



- Cairo Islamic Museum
- Inv. 13117.
- H.: 97.5 cm.; W.: 71 cm.
- The provenance is not known.<sup>64</sup>
- Rectangular panel, the surface is divided into a geometrical pattern that is filled with ivory (or bone) inlays.<sup>65</sup> The piece is in a very good condition, most of its original inlaid design is preserved with only some of the open scrollwork and part of the inscription band missing. The void rectangular panel at the lower part of the piece may have had an inlaid design as in Catalogue no. 11, in which the lower elongated middle panel contained inlay while the other adjoining square did not. The technique used in this piece is the incrusting technique, in which the pre-cut ivory plaques decorated with openwork carving are laid in prepared cavities.

Wooden dowels fix the pieces in addition to paste that fills the space between the wood and the pierced ivory motif. The border inscription is done in the intarsia technique: it is first carved in ivory then countersunk in the wood surface in a

<sup>64</sup> The museum record says that it was bought from Kamil Abd al-Rahim without any reference to where it originally came from.

<sup>65</sup> The museum record and Monneret de Villard mention that the panel is inlaid with ivory. However, Shafi'i and Abu Khalaf say that it is inlaid with bone. Abu Khalaf, M. F., *The Early Islamic Woodwork in Egypt and the Fertile Crescent* (D. Phil. thesis, U. of Oxford, 1985) 270-271. Monneret de Villard, *Monumenti dell'arte musulmana*, 9. Shafi'i, "al-Akhshab al-muzakhrafa," 107-9.



cavity exactly the same shape and size of the ivory. The parts where the ivory pieces fell off reveals the carved space that held the ivory letters.

- The design of the pierced bone plaques is composed of spiky scrolls that end with half palmettes. The inscription band is in Kufic with the letters also ending with half palmettes.<sup>66</sup> What is left from the inscription reads:

"(بسم الله الرحمن الرحيم) من خير \_\_\_\_\_ و(في) حفظ على(يه) مؤ(يد) و(سرور) \_\_\_\_\_  
(بر)كه \_\_\_\_\_ (من الله لصاحبه)"<sup>67</sup>

"(In the name of the Merciful and Compassionate God): \_\_\_\_\_ from good \_\_\_\_\_  
and (in) preserve, (upon) which (agreed) and (pleased) \_\_\_\_\_ (blessings) \_\_\_\_\_  
(from God upon the owner)"

The inscription is of the usual praise format found in most household items bearing inscriptions.<sup>68</sup>

- Most of the sources describe this object as part of a cenotaph; however, a cenotaph usually contains Qur'anic or prayer inscriptions. Here the normal praise of the owner inscription-formula does not coincide with cenotaphs. Besides, the small legs and the size of the panel suggest that it is part of seating furniture or part of a large box rather than part of a cenotaph.

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<sup>66</sup> See Chap. III, pg. 70.

<sup>67</sup> Part of this inscription I obtained from the museum records and then compared it to the piece to see what still remains of the original inscription band. The parts between brackets are the ones that do not exist anymore.

<sup>68</sup> This inscription formula is found in many examples of pottery, metalwork, and carved ivory objects.

11.

Inlaid wood panel



Catalogue no. 10  
Cairo Islamic Museum

<sup>10</sup> The inscription reveals that it is from the Arabic Rihla Museum where it was found in its original context.

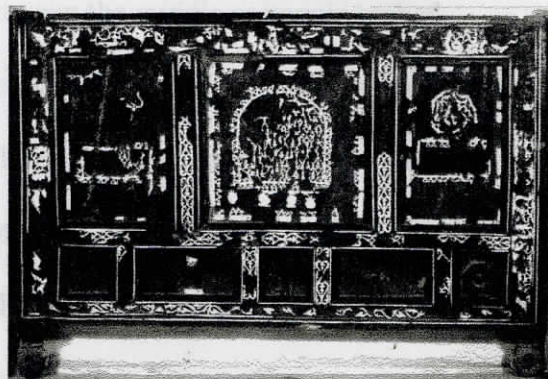
Like in Catalogue no. 11 some sources mention it as wood and others as bone. See footnote 83.

<sup>11</sup> The inscription is illegible, its style is discussed in Chap. III, pp. 70-71.



11.

## Inlaid wood panel:



- Cairo Islamic Museum
- Inv. 9750.
- H.: 1.05 cm.; W.: 63 cm.
- The provenance is not known.<sup>69</sup>
- Rectangular panel, the surface is divided into a geometrical pattern that is filled with pierced ivory (or bone) inlays.<sup>70</sup> Unlike the previous one, most of the inlay of this panel is missing because the inlay of this piece is more delicate and detailed than the other piece. The technique used here is the incrusting technique, the same as the previous one; however, in this example (because the border inscription is set within a foliated design) it had to be carved first in ivory then the whole foliated band was incrusting on the prepared wooden surface using wooden dowels to fix the pieces, and paste to hold and fill all the remaining space between the wood and the pierced ivory motifs.<sup>71</sup>

<sup>69</sup> The museum record says that it is from the Arabic Antiquity Museum stores without any reference to where it originally comes from.

<sup>70</sup> Like in Catalogue no. 10 some sources mention it as ivory and others as bone. See footnote 65.

<sup>71</sup> The inscription is illegible, its style is discussed in Chap. III, pp. 70-71.

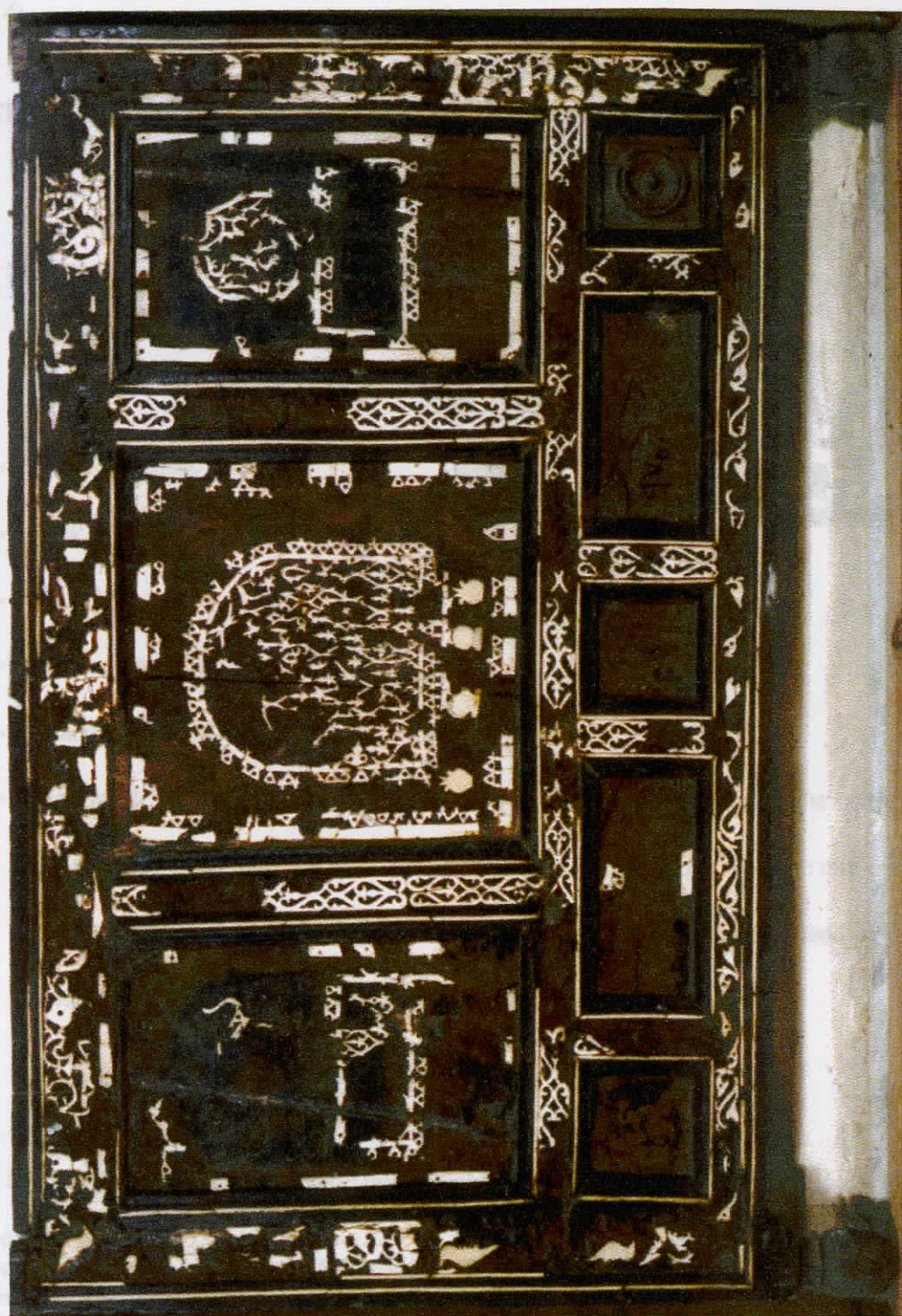


• The design of this panel matches with the previous one (Catalogue no. 10) in the general layout, the incrusting technique, and the design that fills the space between the rectangles. However, the design that fills the rectangular divisions of this piece relates in many ways to the design elements found in the 'Ain al-Sira group. We can recognize some similarity between the middle rectangle arched design with its delicate scrolls and the arches of the 'Ain al-Sira panels such as those in Catalogue no. 1. Also the four small pieces at the base of the middle arched design are very much like the columns and vases design in the 'Ain al-Sira group. Therefore, I believe that they might have been taken from a piece of the 'Ain al-Sira group and later added to this piece.



Catalogue no. 11  
Cairo Islamic Museum

### III. Fatimid Period "Larger Inlay Technique"



Catalogue no. 11  
Cairo Islamic Museum



### III. Fatimid Period "Larger Inlay Technique"

12.

Inlaid wood panel:



- Cairo Islamic Museum
- Inv. 3180
- H.: 22 cm.; W.: 41 cm.
- Found in Edfu.
- Fatimid period, 11<sup>th</sup> century.
- Incomplete rectangular panel with large horizontal split through the center.

This piece is decorated in the intarsia and mosaic techniques, and we can clearly notice that the ivory and wood pieces used are larger than the ones used in the previous 'Ain al-Sira group'.<sup>72</sup>

<sup>72</sup> In *Tresors Fatimides* it is mentioned that it is inlaid with ivory, while in the *Islamic Art in Egypt* and the museum records say that the inlay is bone. Monneret de Villard, on the other hand, says that it is made of bone and ivory.

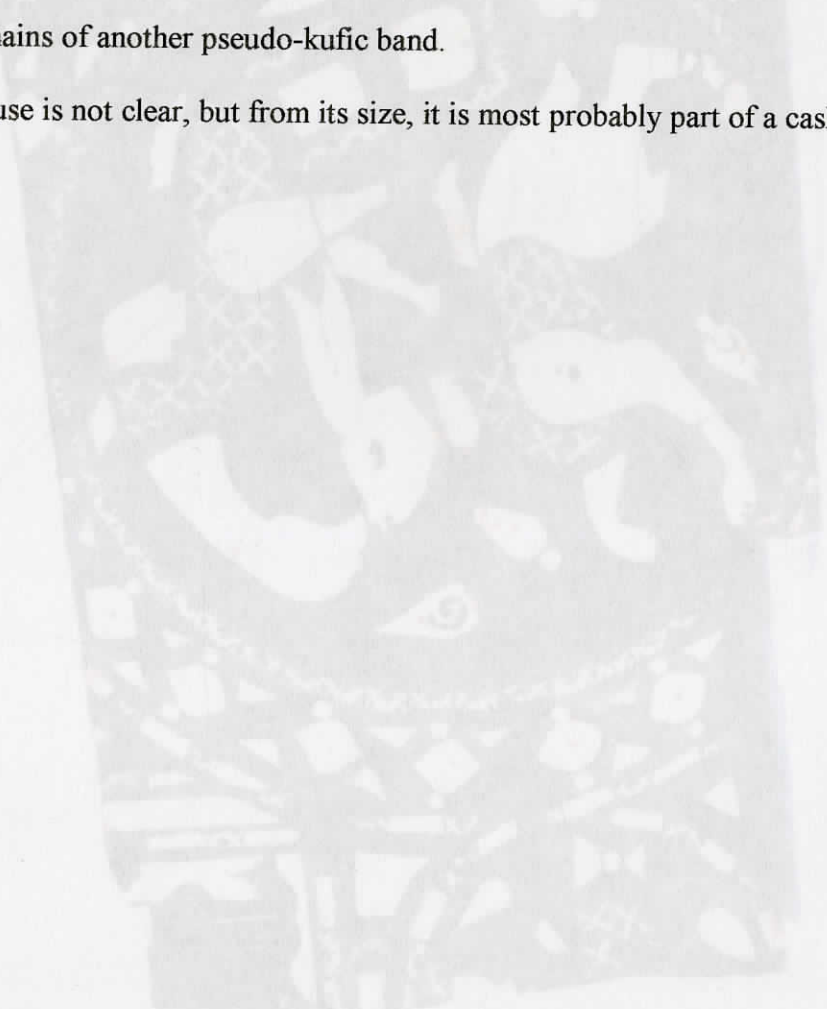
Monneret de Villard, *Monumenti dell'arte musulmana*, 13.

*Tresors Fatimides du Caire: exposition présentée à l'Institut du Monde Arabe du 28 avril au 30 aout 1998* (Paris, 1998) 92.

United Arab Republic Ministry of Culture, *Islamic Art in Egypt 969-1517* (Cairo, 1969) 249.



- The decorative elements of this piece are not related to any of the other pieces in any way, on the other hand, it is a typical representation of the subject matter of the Fatimid period. The main design is a circular medallion bordered with a band of oval ivory pieces shaped as an eye and small triangles, all set within a fine thin scroll. The medallion is filled with two animals, a running hare attacked by a falcon in a natural setting. The bodies of the two animals are decorated with serrated crosses, the rest of the space left on the medallion is filled with sparse buds on slender stems as in the circular surround. The right side of the panel carries a pseudo-kufic inscription. On the left side, a smaller circle contains a design in the shape of a chalice (?) and stylized leaves. Above the circle we can see remains of another pseudo-kufic band.
- The use is not clear, but from its size, it is most probably part of a casket.



Cambridge no. 12  
Cairo Islamic Museum



Catalogue no. 12  
Cairo Islamic Museum

# CHAPTER THREE

## A STUDY OF THE ISLAMIC INLAY TECHNIQUE BASED ON THE CATALOGUE PIECES

### Chapter III

The pieces of the Catalogue present a problem in the sequence of inlay art of the Islamic period in terms of stylistic influences, use, and dating. This chapter contains a study of the development of the early inlay technique in Egypt, as our model study and as the basis for the study of early inlaid objects in the Islamic world, based on its uninterrupted history of production of this type of art. The study will depend on our Catalogue pieces. At the same time, we will try to see the effect of Egyptian ivory inlay on contemporary and later arts of other Islamic regions. Before starting our discussion of the development of the inlay technique in the early phase of Islamic history in Egypt, I will try first to propose dates and sequences for the pieces in the Catalogue.

#### 1. Analysis and Attributions of the Catalogue pieces

The first group that raises the question of dating is the group I called 'Am al-Sira. The problem, as presented in chapter II, which this group demonstrates is in the similarities of shape, layout, decorative elements, and inlay techniques which makes



### CHAPTER THREE

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### 1. Analysis and Attributions of the Catalogue pieces

The first group that raises the question of dating is the group I called 'Ain al-Sira. The problem, as presented in chapter II, which this group demonstrates is in the similarities of shape, layout, decorative elements, and inlay techniques which makes

us certain that they all come from the same period; if not done by the same person or atelier. The questions which remains are how did the distinctive characteristics of this group start at that certain time and why did they stop for a long period before recommencing with differing aspects? To attempt to answer such questions we will try to date the group according to the designs and the decorative elements of the pieces.

The first thing that comes to our attention when studying the decoration of the pieces is the general layout of a middle square compartment sectioned into smaller parts and flanked by two series of arches with columns, capitals, and spandrel designs seeming to echo an elevated mosque with a middle courtyard and riwaqs. Architectural features, especially arches, are not new in Islamic art, we have examples as early as the Umayyad period and in many different métiers, such as the *repoussé* bronze panels of the Dome of the Rock in Jerusalem, 691 A.D. (fig. 14), another in the mosaics of the Great Mosque of Damascus, 705 A.D. (fig. 15), and a third example is found among the paintings of Qusayr 'Amra in the Jordanian desert dated after 711 A.D. (fig. 16).<sup>73</sup> The three-dimensional arch could also be found in examples such as the monumental gateway of Qasr al-Hayr al-Gharbi (fig. 17), and in the façade of Khirbat al-Mafjar (fig. 18).

The arch as a mean of decoration was also used in other media in the early Islamic period such as on the famous "Marwan II" ewer, dated from the late 7<sup>th</sup> to mid

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<sup>73</sup> Creswell, K. A. C., *Early Muslim Architecture* (Oxford, 1969) part 1, plate 4a, 27b, fig 26, 189-190

8<sup>th</sup> century A.D. (fig. 19).<sup>74</sup> It also appears in a frontispiece of a Qur'an from Syria dated around 710-715 A.D. (fig. 20).<sup>75</sup> Also on three carved wooden panels from Fustat and 'Ain al-Sira and dated to the Umayyad and early Abbasid period in Egypt (late 8<sup>th</sup> and early 9<sup>th</sup> century A.D.) (figs. 21, 22, 23).<sup>76</sup> The arch can be seen again on a lead glazed war fragment from Fustat dated to the 8<sup>th</sup> – early 9<sup>th</sup> centuries A.D. (fig. 24).<sup>77</sup>

The use of arches in decorating objects, according to King, is the direct influence of both Hellenistic Mediterranean and Sassanian art. Yet, while in Hellenistic art there was a great concern for the accuracy and realism of the architectural motifs when trying to adapt them to decoration, in Sassanian art this concern played a much lesser role.<sup>78</sup> The Marwan II ewer belongs to the Sassanian concept where we find "an increasing interest in the decorative use of the architectural motif, at the expense of structural plausibility."<sup>79</sup>

The three Islamic Museum wooden panels (figs. 21-23), demonstrate a development in the use of architectural motif as the primary decorative theme, but with no relation to any real or actual building. It is obvious that the arcade columns

<sup>74</sup> Cairo Islamic Museum, inv. 9281.

<sup>75</sup> The Qur'an fragment was found in San'aa. The codex was written in San'aa but the Qur'an itself was executed in Syria.

Piotrovsky, M., *Earthly Art, Heavenly Beauty: the Art of Islam* (Amsterdam; Nieuwekerk: 1999) 132.

<sup>76</sup> Cairo Islamic Museum, invs. 6854, 8945, 6853.

<sup>77</sup> Scanlon G. T., "Moulded Early Lead Glazed Wares from Fustat: Imported or Indigenous?," in *In Quest of an Islamic Humanism*, ed. A. H. Green (Cairo, 1984) 68, fig. 16.

<sup>78</sup> King, G. R. D., "The Architectural Motif as Ornament in Islamic Art, The "Marwan II" Ewer and Three Wooden Panels in the Museum of Islamic Art in Cairo," *Islamic Archeological Studies* (1980) 2, 28.

<sup>79</sup> Ibid.



lack a separate identity from the arches they support; furthermore, the intersecting arcade has little applicability to the world of real architecture.<sup>80</sup> It is used because its decorative and rhythmic effect unifies a surface and is unconnected to any specific building.<sup>81</sup> The layout of the 'Ain al-Sira group corresponds in many ways with the layout of two of the Islamic Museum carved wooden panels (figs. 22, 23). The design of the panels of both groups consists mainly of two sets of arches flanking a middle rectangular compartment adorning a carved medallion in the middle.

In contrast to the two carved wooden panels, the arches in the 'Ain al-Sira group are executed with an attentive sense of realism. There, the columns are detailed to such a degree that we can identify its components starting from the capitals down to the base, and to the vase and candelabra or winged motif that decorates the spandrel of the arches. This is one of the features that could connect the 'Ain al-Sira group with the Classical Hellenistic tradition. But is the decoration of these objects a description of an existing monument? To answer such a question the different motifs forming the panel's design must be studied.

The most characteristic decorative theme found in the 'Ain al-Sira group is the winged motif springing out from a vase and filling the spandrels of the arches. The similarity between it and the mosaic decoration of the Dome of the Rock in Jerusalem is unmistakable (fig. 25). In the Dome of the Rock the winged motif springs out from vases just like in our inlaid mosaic panels. In addition, the shape of the vase and

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<sup>80</sup> An exception would be the development of intersecting arches in the "real architecture" of al-Andalus, as in the Great mosque of Cordova.

<sup>81</sup> Ibid. 30.

wings in the decoration of our panels are similar in spirit to the ones on the drum of the Dome of the Rock. The vase motif is of an obviously classical origin, while in contrast to what is usually accepted, the use of the winged motif does not necessarily imply direct Sasanian influence. According to Creswell, "the winged motif is too common in all artistic developments, from the remote antiquity, for us to be able to fix the place of its origin, and it does not seem that Sasanian art had made frequent use of it as an ornamental motif."<sup>82</sup> Creswell gives examples of a Roman winged motif (fig. 26), and another Byzantine mosaic example of the early 12<sup>th</sup> century (fig. 27) that are very much like the Dome of the Rock wing examples. The Byzantine example relates in many ways to our inlaid wooden panels in that it has two arches and set between them are three ascending winged motifs springing from a vase. However, while in the church example they are set one above the other, in some of our Catalogue examples they are arranged in a triangular candelabra form to fill the spandrel of the arch (fig. 28).

In the Islamic Museum in Cairo there is a carved wooden panel dated to the 9<sup>th</sup> century A. D. which carries two winged motif with a cusped arch in between. Curiously enough the panel is also from 'Ain al-Sira (fig. 29). It seems that the setting of the winged motif within two arches was popular during a certain period. It does not necessarily directly signify the Dome of the Rock, but it could have influenced such use of the form of the motif. Also, we have to consider that its use in many cases is still associated with Persian influence; however, with the 'Ain al-Sira group I personally do not think that the wings represent a direct Persian influence. It could be

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<sup>82</sup> Creswell, *Early Muslim Architecture*, I, 278.



suggested that the use of the motif is a reflection of the architecture or of the decoration of a certain monument.

In the same sequence, the signification of five arches flanking each side of the middle square is not clear. The two complete pieces, upon which we can build the decoration of the series, have five arches on each side. Even where there was not enough space, the arches were squeezed together to accommodate the fifth arch, as in Catalogue nos. 2 and 4. As we mentioned before, it looks like an extended plan of a mosque or a building with a courtyard or middle design with arcades. The number of five or ten arches and the middle square does not derive from the Dome of the Rock in any way; and I could not confirm whether it relates to or mirrors any other monument.

The minute mosaic decoration that fills the surface of all the panels of the 'Ain al-Sira group is much more in the Classical style, which is natural because the mosaic technique in general is originally a Greek and Roman art. Since the wall and floor stone mosaic decoration and that of ivory (or bone) and wood mosaic are technically the same, it is normal that the designs would be of the same concept and spirit. The only difference perhaps is in the limited choice of colors and the minute size used for the ivory and wood decoration, which consequently would limit the amount of detailing. We can find many of the designs of the 'Ain al-Sira group in the mosaics of the Umayyad period. A first example is the popular trellis-work of the eight-petaled flower used to fill the space in all the panels. This we can find in the Great Mosque of Damascus forming a border band surrounding the Barada River or paradise scene (fig. 30). The same design is also found in some of the roundels on the façade of Mshatta (fig. 31). Other designs that dominate the surface of the inlaid panels of 'Ain



al-Sira can be found in the various floor mosaics designs of the bath hall in the palace of Khirbat al-Mafjar (figs. 32) and we can see the same echo in the floor mosaics of Qasr al-Minya (fig. 33).

The architectural setting in the Syrian Qur'an frontispiece fragment found in San'aa is said to represent the architectural decoration of the al-Walid I period, especially the Mosque at al-Madina and the Great Mosque of Damascus (fig. 20). Like the case with our group, the author of the exhibition catalogue is not sure if the drawing refers to an existing monument.<sup>83</sup> The fragment has many elements that can be found in our Catalogue pieces, but are not employed in the same manner as ours. We can see a vase below the arches, and a shell design above the left door. The side scrolls are also in the same spirit as the carved bone plaque of Catalogue no. 7 (fig. 37). Moreover, the soffits of the arches are decorated with two leaves in the spirit of our vase-and-wing motif.

A further important feature that relates the 'Ain al-Sira group to classical art is the relatively large circular and triangular carved ivory (or bone?) pieces incrustated within the mosaic decoration and used mainly at the middle square divisions. In one of the cases (Catalogue no. 4), a semicircular plaque was used under one of the arches and cut out coarsely in a shell or conch form (fig. 11). It obviously derives from the same type of scalloped shells cut out from ivory or bone and attributed to the Alexandria school of Graeco-Roman carving. The design of the 'Ain al-Sira plaques are composed mainly of different modifications of the vine scroll. The vine ornament

<sup>83</sup> Piotrovsky, *Earthly Art, Heavenly Beauty*, 132.

in general was very popular in Hellenistic and early Christian art, as well as Coptic art. This popularity continued through the Islamic period but with some stylistic changes. The naturalistic vine scroll of the Hellenistic prototype has been transformed into a more abstract ornament, becoming purely decorative and unnaturalistic.<sup>84</sup> In two carved medallions from Catalogue nos. 1 and 2 of the 'Ain al-Sira group, the cinquefoils leaves are enclosed in a spiral (figs. 34, 35). In another medallion from Catalogue no. 6, the vines fill the disk with uneven loops sprouting cinquefoils that take a conical form to adjust to the space between the vine loops (fig. 36). The triangles of the same panel each have conical cinquefoils identical to the one of the medallion but sprouting from a straight vine and branching with another small trefoil (fig. 36). These are unlike the triangles of Catalogue nos. 1 and 2, which are carved with small cinquefoil leafs enclosed within spirals (figs. 34, 35). A third different example is from Catalogue no. 7. It is an elongated carved strip with the vine forming a wave enclosing a very abstract and coarse cinquefoil between each rise and fall (fig. 37).

Comparing the bone carvings of 'Ain al-Sira with bone carved examples of the Coptic period containing the same type of scrolls, we immediately recognize the difference (fig. 38). Many scholars believe that the carved plaques in the 'Ain al-Sira pieces were done by Coptic craftsmen.<sup>85</sup> But unlike the Coptic examples, the carvings of 'Ain al-Sira are poorly executed with the less of detail. The leaves enclosed by the

<sup>84</sup> Dimand, M. S., "Studies in Islamic Ornament," *Ars Islamica* 4 (1937), 294.

<sup>85</sup> Among them is Dimand who refers only to the ivory carved plaques as of "Copto-Arabic" work, while Pinder-Wilson believes that the whole panel is done by Coptic craftsmen. Dimand, *A handbook*, 124. And Pinder-Wilson, "Adj," 200.



vines are flat and schematic, much lower than the workmanship of the mosaic decoration of the panels. But we have to bear in mind that the one who did the carving does not have to be the one who did the mosaics. In the Islamic Museum in Cairo two wooden panels, one from Fustat dated to the 8<sup>th</sup> century A.D. (fig. 39), and another from the cemetery of 'Ain al-Sira (fig. 40), bear carving similar to the carving of our bone plaques. Both have the same vine scrolls and they are executed in the same coarse and schematic fashion. Moreover, another interesting carved wood example that was also found in 'Ain al-Sira and dated to the 8<sup>th</sup> century A. D. bears a carving very similar to the elongated carved strip of Catalogue piece no. 7 (fig. 41).

Earlier research pointed to a relation between the designs of Umayyad wall and floor mosaics and the ivory and wood mosaic decorations of the 'Ain al-Sira group. The Umayyad style in the former influenced greatly the design of the inlaid 'Ain al-Sira group. Another important feature is the resemblance between the layout of the two carved wooden panels decorated with intersected arches flanking a middle rectangular space and a carved medallion that were also found in 'Ain al-Sira and Fustat (figs. 22, 23), and the layout of our inlaid group. This resemblance suggests a contemporary date.

Another important factor that cannot be ignored is the resemblance in design and execution between the carved ivory (bone?) plaques from the 'Ain al-Sira group and the Islamic Museum's carved wooden panels (without inlay) that are also from 'Ain al-Sira (fig. 39, 40). One should stress too the pure Classical Hellenistic style of the general decorative elements of the mosaic panels, influenced by Coptic art and very popular during the Umayyad period. All these suggestions when assembled



together enable us to date the whole group to the late Umayyad period (the second half of the 8<sup>th</sup> century A.D.) before the advent of the Abbasids and the slow domination of the eastern Persian taste upon the different arts of Egypt and the Muslim world in general.

Two other pieces that sit in a group by themselves are Catalogue nos. 10 and 11. The technique used in both of them, as we discussed in chapter II, is the incrusting technique. In this technique the wooden under surface is apparent and forms a major part of the design, unlike the mosaic technique where the wooden under panel was not visible. Valuable kinds of woods had to be used, like our pieces which I believe from their very dark color, are made of ebony. This type of inlay is not new to Egypt as we find it in many Coptic objects, such as the two uprights from a wooden chest from the monastery of St. Jermias at Saqqara dating from the 5<sup>th</sup> century A. D. (fig. 7).<sup>86</sup> We have Coptic incrustated inlay examples from the Islamic period, that is pieces from the 8<sup>th</sup> and 9<sup>th</sup> centuries A.D. (figs. 42).

The most important examples, however, and the masterpieces of Coptic wood incrustation, are the doors at Dayr al-Suriani in Wadi al-Natrun. One of the doors is between the sanctuary and the choir, and the other between the choir and the aisle (figs. 43, 44). The importance of these two doors inheres in the technique as well as the fact that they are dated. A carved inscription above the sanctuary doors gives a date between 913 and 914 A.D. Another inscription above the other door dates it to 926-927 A.D. Both doors are of similar structure: they are divided into many

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<sup>86</sup> Quibell, *Excavations at Saqqara*, pl. XLI.

rectangular fields of which the first line consists of saints with inscriptions bearing their names, while all the other lines are purely decorative with geometrical patterns and openwork carvings. Intarsia as well as incrustation was employed.

Monneret de Villard suggests that the use of Coptic forms of names would mean that the work was that of Christian Egyptian artists, who preserved the ancient Egyptian intarsia technique.<sup>87</sup> However, during my visit to the Dayr, the monk said that the doors were by Syrian artists during their stay at the monastery. Butler mentions that the monastery seems to take its name from a colony of Syrian hermits, who, according to him, either founded it or occupied it very early, but he does not say anything about who executed the wooden doors.<sup>88</sup>

The incrusting inlay decoration of the third and fifth rows is of a great importance to us as they are similar to our two Catalogue pieces in terms of design and technique (figs. 45, 46). Here the decoration is made of delicate ivory plaques each decorated with openwork carving or piercing towards a lacework effect and incrustated into the rectangular divisions. The scrolling decoration of the al-Suriani doors is so much like the decoration on Catalogue nos. 10 and 11 that it enables us to suggest a date for them near to that of the doors. It is of particular significance in that we have not seen this technique in Islamic objects before, therefore the Coptic objects are our only means of dating. It can also be that the two Catalogue pieces were probably executed by Coptic (Syrian?) craftsmen.

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<sup>87</sup> Monneret de Villard, *Monumenti dell'arte musulmana*, 12.

<sup>88</sup> Butler, A. J., *Ancient Coptic Churches of Egypt* I, 317.

An important feature of the two catalogue pieces which presents a point needing further study concerns the inlaid inscription bands bordering the objects on the three sides. It is interesting to note that in no. 10 the inscription band is inlaid directly into the wooden surface, while in no. 11 it is done with incrustation. However, the important feature that the two pieces present is in the treatment of the inscription. First in no. 10, we can see clearly the beginnings of foliated Kufic, though still crude, in an attempt to end the letters with half palmettes (figs. 47). We know that it is by the year 820 A.D. that the use of the three-lobed palmette was extended to different letters, but prior to that it had been restricted to *alif* and *lam*.<sup>89</sup> The treatment of the *qaf* or *fa'* in the inscription of the piece is also very interesting: a trefoil leaf grows from the curve of the letter. In the Museum of Islamic Art in Cairo there is an epitaph dated 848 A.D. which is one of the first objects that has an inscription treated in the same manner as in our ivory inlaid band (fig. 48).<sup>90</sup> Another inscription in the enclosure wall of the Haram at Jerusalem dated to the reign of al-Muqtadir billah, between 913 A.D. and 929 A.D., has a *mim* executed like the *fa'* (*qaf*?) in the inlaid wooden panel of catalogue no. 10 (fig. 49).

In the remains of the inscription band of catalogue no. 11, we witness a further development (figs. 50-51). First of all, the inscription is achieved with the incrusting technique. Secondly, we recognize scrolls growing out from the letters. And finally, there is something akin to later naskhi (fig. 50). If we consider this as an early

<sup>89</sup> Grohmann, A., "The Origin and Early Development of Floriated Kufic," *BIE* 37 (1954-5) 286.

<sup>90</sup> Cairo Islamic Museum, inv. no. 3904.



attempt at floriated Kufic, it could mean that the date of the piece would have to be around 1003 A.D., the date when we begin to see floriated Kufic in the al-Hakim mosque, where tendrils grow out of the letters and form the ideal filling of the space behind (fig. 52).<sup>91</sup> Our inscription band has this same drive to fill the space behind the inscription band; however, we might also consider it as an attempt to mirror the design of the rest of the object rather than a true floriated Kufic. Most particularly, the inscription is incrusting into the paste and would certainly need to fill the space left so as to reduce the amount of visible paste.

Dating these two pieces represents a bit of a problem. First of all, we can not separate the two pieces and treat them as two different objects from two different phases because of the reasons stated above. Secondly, the decoration of the two objects does not fit with the decorative expressions of the Fatimid period, it is rather earlier. I am in favor of dating the two pieces, based on comparisons to the inlays of Dayr al-Suriani and to the foliated inscription of no. 10, to the Tulunid period (late 9<sup>th</sup> - early 10<sup>th</sup> century A. D.). In this case, the inscription on piece no. 11 might be considered an experiment in decorating the space behind the inscription and not a real and deliberate attempt to produce floriated Kufic.

The third group from the catalogue consists of only one piece, Catalogue no. 12. It is the only Fatimid inlaid object we have considered because it was done with both the intarsia and the incrusting techniques. The piece is attributed to the Fatimid period by most authorities because of the circular setting of two animals

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<sup>91</sup> Ibid. 299.

within scrolls. The theme of a running hare being attacked by a falcon is a very popular one in Fatimid art. It is seen in wood and ivory carvings of the same period (figs. 53-54). If we compare this piece to the luster decoration of the same period, we find that it is done in the reserve style, in which the background is dark, while the design is white. However, the theme of an animal attacking another is found on only one pottery jar in the Islamic Museum in Cairo, where we see a wild animal also attacking a hare (fig. 55).<sup>92</sup>

Although the Fatimid period saw most forms of decorative arts reaching their zenith, inlaid woodwork was not among those arts. Carved ivory and wood are among the most important and celebrated arts of the period, but never with inlay. We have many examples of carved ivories inserted in wooden pieces that serve as a frame, but not of the type in which ivory pieces were cut to form a design and incorporated with the wood. One reason could be that both materials are precious and a way to emphasize the preciousness of this material is to carve it so as to show the mastery of the artisan. Also, we have to bear in mind that most of the inlays we have are made of bone and not ivory, and we know it is difficult to distinguish them. The Fatimid as a period of grandeur and wealthy expressions in all forms did not tolerate using (or the suspicion of using) bone in the superior production of the age.

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<sup>92</sup> Grabar, O., "Imperial and Urban Art in Islam: The Subject Matter of Fatimid Art," *Colloque international sur L'histoire du Caire* (1969) 178.

## 2. Influences

The objects of the Catalogue are the only pieces that we have from the early Islamic period in Egypt which might be considered evidence for the unpopularity of the technique during the early periods of Islam. However, as we mentioned in chapter I, it is not just inlay that was not popular; it seems that ivory in general was not amongst the existing arts of the early Islamic period. Yet, at the same time carved (not inlaid) ivory was a keynote in Byzantine art. We have to wait until the Fatimid period to see an attentive revival of artful working with ivory.

Concerning the history of inlay technique in particular, we can say that, based on the pieces of the Catalogue, the pieces form groups done in a certain period and most properly by a special order or for a particular reason. What I mean to say is that we cannot claim that we had an inlaying tradition and that that tradition stopped in the early Islamic period, *except for these pieces*. It is more accurate to say there were attempts during the very early Islamic period to revive an old technique; but the attempts did not continue, either because they did not accord with the taste of the people (because they were more used to either carved ivory or carved wood and inlay was not the kind of art they appreciated), or because the mosaic technique simply died out.

Even before the Islamic period, we cannot say that the inlay technique was popular. The incrustated articles we have from the Coptic period are too few to consider the inlay technique of that period as forming an art tradition. Undoubtedly it was known in the earlier periods (cf. chapter I), but it can never be compared to ivory



or bone carving, or to wall murals, or to textiles, or to any other well known form of art from the pre-Islamic period. It is clear that carving was the celebrated expression of meaningful art for ivory in both the Coptic and the Byzantine aesthetic.

A question remains concerning the mosaic inlay technique: how did it come to Egypt? We saw it in the casket from the Tutankamen treasures (fig. 1), which means that it was not a new art to Egypt. However, we do not see it in later Pharaonic or Coptic art and it is not present in Byzantine art. I believe that Syria is the most suitable place to find the origin of such a technique. Most examples of *tesserae* floor coverings of the first Byzantine period are found in Greater Syria.<sup>93</sup> This area was also well known for the art of covering walls with different colored marbles. A sixth century wall revetment inlaid with different colored stones from the church of St. Vitale in Ravenna in Italy is said to be influenced from the East (more particularly Jerusalem).<sup>94</sup> The design of its mosaic pattern can be related to the middle divisions on our Catalogue ivory and wood mosaic panels (fig. 56).

Stone mosaics influenced the subject matter of Byzantine ivory carvings;<sup>95</sup> equally, couldn't the mosaics of the Dome of the Rock; the great mosque of Damascus, the Aqsa mosque and the mosaics of the Syrian desert palaces have influenced the wooden inlaid panels both in technique and subject matter? It is as if

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<sup>93</sup> Dalton, O. M., *Byzantine Art and Archeology* (Oxford, 1911) 420.

<sup>94</sup> *Ibid.*, 429-30

<sup>95</sup> According to Dalton, some of the carving seen on upon Syro-Egyptian pyxes and diptychs of the 5<sup>th</sup> and 6<sup>th</sup> centuries copy mosaic originals. An example of this is a composite diptych of a seated Virgin and Child modeled according to the mosaics on the Church of the Nativity at Bethelhem. *Ibid.*, 181-2.

the artist was portraying the decoration and the artisanship of the great Syrian monuments to the Egyptians.

We can confirm that the mosaic technique of the 'Ain al-Sira group (although seen before in ancient Egypt) could be considered a new technique that was reintroduced to Egypt at a certain time and to serve a certain purpose. However, it seems that the technique was not received with enough enthusiasm to allow it to flourish and continue. The reason for this is that it appeared during a phase when carving, whether on wood, ivory, stucco, or stone, had achieved its highest perfection. Only when we reach the Mamluk period do we see the flourishing of all types of inlay techniques, so much so that it became one of the major art expressions of that period.

The reason for the dominance of wooden inlay technique during the Mamluk period is that it is the period of colors. Enhancing works of arts with colors was one of the most distinctive features of the period. This is seen in many examples. First in metalwork, we simply have to compare an early example of Egyptian metalwork such as the Marwan II ewer (fig. 19), with a Mamluk example such as the Baptiste of Saint-Louis (fig. 57) and we can immediately recognize the difference. In architectural decoration, we can see the introduction of *ablaq* and floor marble revetments. And a very important example of such expression is the painted wooden ceiling. Even the wooden doors of the mosques were covered with metal revetments. And this can be explained partly by the origin of the Mamluks; originally they came from a tribal civilization where color played a great role in decorating surfaces. I believe that the effect of color is the main reason that inlaying the wooden surface with ivory and bone was so commonly adopted during the Mamluk period.



Another important reason for the dominance of wooden inlay technique in later periods is that the main woodworking technique, especially for minbars, of the Mamluk period was strapwork. This is because of economic reasons which limited the use of large wooden pieces to smaller ones joined together to form the design, and because of the dominance of the geometrical designs on the artistic tastes of the period in general. Therefore, ivory (or bone for economic reasons) was the most suitable material for adding both color and richness to the decorated pieces in the strapwork technique.

But where is the missing link? How could an art start and die without leaving any effect on the period and then come back in such a powerful and effectively expressed revival that dominated the wood decoration of later periods? To answer such questions we have to look back to other regions where the art of inlay reappeared.

The minbar from the Kutubiyya mosque in Marrakech is the first surviving example that shows the same technique used in the 'Ain al-Sira group (figs. 58-59). The inscription on the minbar indicates that the work was begun in 1137 A.D. and completed by 1145 A.D. The minbar is decorated in both wood carving and bone mosaic technique (fig. 60).<sup>96</sup> Bloom calls the mosaic technique marquetry and he affirms that Spanish ivory caskets offer some stylistic and technical parallels with the

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<sup>96</sup> The material used for inlay was technically identified through both visual and EDS analysis. Bloom, *The Minbar from the Kutubiyya Mosque*, 21, 28.



carvings of the minbar, but there is none for its marquetry. For him the Kutubiyya is the earliest surviving example of marquetry technique from Islamic Spain and this technique, in which the entire surface including the background is covered with another material, is different, according to him, from other inlay techniques used in other Islamic regions. He then continues his argument by stating that "One such technique practiced in Egypt since ancient times, involved the art of inlaying ivory, bone, and colored woods and stones in a distinct wood ground. That the technique continued to be used in Islamic times is demonstrated by a group of sycamore panels, including one in New York, inlaid with ivory (?) and colored woods and attributed to late-ninth- or early-tenth century Egypt."<sup>97</sup> It seems that Bloom is confusing the intarsia and incrusting techniques with the mosaic marquetry technique. And in the 'Ain al-Sira group, which he is referring to with the Metropolitan piece, the wooden surface is not distinct, it is fully covered with small pieces of ivory and different colors of wood just like in the strapwork of the Kutubiyya minbar (fig. 61-62).

The Kutubiyya is not the first minbar from Spain to be decorated with mosaic inlay technique. The sources describe a Córdoba minbar made in 966 A.D. that was inlaid with red and yellow sandalwood, ebony, ivory, and Indian aloewood.<sup>98</sup> Another minbar formed of wooden panels incrusting with ivory is said to have been ordered some years later by Hisham II for the mosque of Fez.<sup>99</sup> The two examples must have served as prototypes for the Kutubiyya minbar. The technique continued in Spain and

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<sup>97</sup> Ibid., 22.

<sup>98</sup> Ibid. and Pinder-Wilson, R., "Islamic Art: Ivory," 525.

<sup>99</sup> Ibid., "Adj," 202

North Africa, where there is a similar example from the Qasaba mosque in Marrakech, dating from about 50 year after the Kutubiyya minbar (figs. 63-65). In this minbar, the strapwork mosaic bands were prepared first and glued to a cloth base; then they were mitered and joined with great care. This was done to avoid the uneven joints that we find in the Kutubiyya minbar, proof of the further development of the technique (figs. 65-66).<sup>100</sup>

From Spain come also many great ivory inlaid examples, especially in incrustated and mosaic techniques. Ferrandis also believes that since inlaying wood with the mosaic techniques is very much typical of the stone and glass mosaic technique, so the artist may have been influenced by the mihrab of Cordoba.<sup>101</sup> The oldest surviving example of this technique is the minbar of the Kutubiyya mosque. Most of the pieces that were found before in the palace of Cordoba and Madinat al-Zahara are lost. Nothing is left but a small door from the chapel of Huelgas in the city of Burgos which goes back to the 11<sup>th</sup> century A.D., and must have been transferred to the chapel through al-Andalus.<sup>102</sup> We have also from Spain three rectangular caskets with truncated pyramidal lids decorated with the incrustated technique which originally comes from Egypt. The caskets are attributed to the 12<sup>th</sup> and 13<sup>th</sup> centuries A.D. because of the similarity between their decoration and certain Toledan stuccowork.<sup>103</sup>

<sup>100</sup> Bloom, *The Minbar from the Kutubiyya Mosque*, 22.

<sup>101</sup> Ferrandis, J., *Marfiles árabes de occidente* (Madrid, 1935-40) 101.

<sup>102</sup> Ibid. 102.

<sup>103</sup> Pinder-Wilson, "Adj," 203.



The first one is the casket of Leòn (figs. 67-68). It measures 18 x 14 x 13 cm and is incrustated with aloe wood and bone. It is decorated with confronted hares, dogs, birds between branches, and leaves. The casket has a carved inscription band that turns all around the edge of the cover which can be differently read; however, what we are certain of is that it ends with the name of the one who made it:

<sup>104</sup>عمل محمد ابن السراج

"done by Muhammad al-Saraj"

The style of the decoration and the technique are different from the one we see from Egypt (Catalogue no. 12). The way the animals are depicted is very different from the way they are done in Egypt. The same can be said of the scrolls and the leaves filling the background. The technique is practically the same, the background is filled with black paste and the bone pieces are incrustated on this black paste and form the design. But here the execution is very different from the Egyptian example in its use of relatively large bone pieces assembled together but which leave little space between them so as to give the black paste a chance to outline the incrustated pieces thus adding realism and motion to the depicted animals. In addition, incising is used to give volume and depth to the incrustated pieces.

The other two caskets are from the Cathedral of Tortosa (Tesoro de la Catedral de Tortosa). They are both identical in terms of decoration, shape, and technique.

<sup>104</sup> Monneret de Villard says that the name written is the name of the inscriber (writer):

"ma che certamenti si chiude col nome dell'autore, Muhammed ibn as-Sarag."

Monneret de Villard, *Monumenti dell'arte musulmana*, 16.

This may not be the case because 'amal usually indicates the one who actually performs all the work and the decoration and not just the inscription, if someone carved the inscriptions only we would usually find *kataba*. For a discussion of the different terms for signing work see Mayer, L. A., *Islamic Woodcarvers*. 16-19., and, Abd al-Wahab, H., "Tauqi'at al-sunna' 'ala athar Misr al-islamiyya," *BIE*, 36 (1953-4), 533-558.



The dimensions are also almost the same. The first one is 36 x 25 x 25 cm (fig. 69), and the second is 38 x 26 x 26 cm (fig. 70).<sup>105</sup> The decoration of these two is different from the Cassette di Leòn (figs. 67-68) in the fact that the surfaces of the Tortosa caskets are divided into circular compartments filled with black paste and the incrustation is inside these circles. The spaces between the circles are filled with bone laminates. The decoration consists of figurations of falconers riding horses, unicorns, lions, and gazelles. On the four sides of each casket, we see a line of naskhi inscriptions that contain the usual formula for good wishes. It is obvious that the two caskets were made by the same person or in the same atelier.

An important casket that is fully decorated with small incrustations of ivory (and/or bone) and different colored wood is in Palermo and is known as the Tesoro della Cappella Palatina (figs. 71-73). The shape of the casket is unusual with rounded corners and domical lid, and measures 40 x 23.5 x 39. We find this form in only three other Islamic ivory caskets, but they are all decorated with a different technique.<sup>106</sup> The casket is densely as well as lavishly decorated with friezes of birds, animals, sphinxes, and schematic paired figures positioned facing each other but in opposite directions, all set within scrolls. The casket also has five tiers of incrustated naskhi inscriptions. The inscriptions give neither dates nor production locations. They are rather lines of poetry with the usual phrases invoking blessings, glory, and power to its owner.<sup>107</sup> Migeon cites this casket as an example of Italian *tarsa* which corresponds to the rich period of the Hohenstaufen emperor Frederic II around the first half of the

<sup>105</sup> Monneret de Villard, *Monumenti dell'arte musulmana*, 16.

<sup>106</sup> *Ibid.*, 3.

<sup>107</sup> *Ibid.*, 5.

13<sup>th</sup> century, but he did not explain the inscription band.<sup>108</sup> However, Monneret de Villard, after a thorough study wholly dedicated to the casket, attributes it to Egypt based on similarities between the technique and the style of the Palermo casket and that of the Fatimid inlaid panel found in Edfu (Catalogue no. 12). And based on the style of the Naski inscription, he gives the casket a date for around the end of the 12<sup>th</sup> and the early 13<sup>th</sup> centuries.<sup>109</sup>

The casket can be compared to the Edfu piece in terms of technique, but this is not enough to relate the piece to Egypt because the decorative style is very different. The figures and the animals of the Palermo casket are very schematic and stylized with no details; only the silhouettes of figures. I would compare the casket to Islamic inlaid metalwork rather than to one single panel incrustated with ivory. The shape of the casket might be compared to Mamluk lunch boxes (fig. 74), while the decoration, if not typical, has the same feeling of density and contrast between the dark background and the shiny inlay that we find in gold and silver inlaid metalwork from Mosul, and from Ayyubid and early Mamluk Egypt and Syria (fig. 75).

Another inlay example from outside Egypt is a rectangular ivory casket with bulbous legs and finials from the Fatimid period known as the "Arqueta de Carrion de los Condes", now in the National Archaeological Museum in Madrid (fig. 76). The casket measures 42 x 24 x 20 cm., and is decorated with ivory plaques on each of the five sides. Four of the five plaques are bordered by painted scrollwork. The fifth is a

<sup>108</sup> Migeon, G., *Manuel d'art musulman II: les arts plastiques et industriels* (Paris, 1907) 362.

<sup>109</sup> Monneret de Villard, *Monumenti dell'arte musulmana*, 14-15.



flat lid which has an ivory intarsia inlay inscription which says that the casket was made for al-Mu'izz in al-Mansuriyya, which would date it before 972 A.D. when he moved to Egypt (fig. 77).<sup>110</sup> The inscription reads:

"بسم الله الرحمن الرحيم ... نصر من الله وفتح قريب لعبد الله ووليه معد أبو تميم الإمام المعز  
لدين الله) أمير المؤمنين صلوات الله عليه وعلى آبائه الطيبين وذريته الطاهرين مما أمر بعمله  
بالمنصورية المرضية صنعته .... مد الخراساني"<sup>111</sup>

"In the name of the Merciful and Compassionate God: Qur'an (13:61) to the servant and friend of God Ma'add Abu Tamim, the Imam al-Mu'izz li-(Din Allah), Commander of the Believers. May God's blessings be upon him, his fine ancestors, and his pure progeny. This is from the things which he ordered at al-Mansuriyya the pleasant. The work of ... mad al-Khurasani "

The inclusion of the caliph's ancestors and descendants in the inscription is the usual Fatimid formulary. Some authors believe that Egyptian craftsmen set up a workshop in al-Mansuriyya under the patronage of the Fatimid caliphs before they assumed sovereignty in Egypt. Those are the workmen who might have helped to establish the ivory carving industry in Andalusia.<sup>112</sup> However, the origin of the workmen cannot be proven, partly because the name of the maker of the Fatimid casket is al-Khurasani (nisba of Khurasan).

The last inlaid example that we have from outside Egypt is the minbar of the Aqsa mosque. It is an important inlaid minbar which would set the example for all later inlaid strapwork minbars. This minbar was commissioned by Nur al-Din the Zangid ruler of Aleppo in anticipation of recapturing the Aqsa from the Crusades. It

<sup>110</sup> Bloom, J., "The Origins of Fatimid Art," *Muqarnas* 3(1985) 31, 37.

Pinder-Wilson, "Ivory," in *The Arts of Islam: Hayward Gallery Exhibition* (London, 1976), 151.

<sup>111</sup> Hasan, Z. M., *Funun al-Islam* (Cairo, 1948) 501.

<sup>112</sup> Chesney, C., et. al., *Ivory: a History and Collector's Guide* (London, 1987) 79.

Pinder-Wilson, *Hayward Gallery Exhibition*, 148.



was finished in the year 1168 A.D. and kept in Aleppo until the capture of Jerusalem by Salah al-Din who then moved the minbar to the Aqsa mosque in 1187 A.D. [Unfortunately it was destroyed recently in 1969].<sup>113</sup> The minbar is composed of strapwork and richly decorated with ivory for both outlining the polygonal figures and for the smaller interstitial stars (figs. 78-80).<sup>114</sup> It was made by four men among whom is Salam the son of the famous woodcarver Ma'ali who erected the mihrab of Maqam Ibrahim in the Citadel at Aleppo.<sup>115</sup>

This minbar is the prototype of the later Egyptian ivory inlaid minbars. Although we can say that it is contemporary to the Kutubiyya, it is the Aqsa minbar style with the intarsia inlay technique rather than the mosaic technique of the Kutubiyya that reappeared in Egypt in the Mamluk period. However, the mosaic technique did not disappear totally. We still find in the Mamluk period outstanding examples decorated in this technique, but they are mainly boxes and tables rather than minbars. Among these examples is an exquisite tray decorated on its all sides with a very fine, delicate mosaic of different colored woods, ebony, and ivory that is added to small parts in addition to the geometric Kufic inscription.<sup>116</sup> This delicate appliance of ivory is used to emphasize the geometric inscription (figs. 81-82). The technique in this tray is like the mosaic pieces of the Catalogue with the same mastery, but the design style of the tray is typical Mamluk.

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<sup>113</sup> Al-Kawakibi, S. Z., "Minbar al-Masjid al-Aqsa," *Adiyat Halab* 4-5 (1978-9), 31-66.

<sup>114</sup> Bloom, J., & O'Kane, B., "Woodwork, Egypt, Syria and Iraq, c. 1000-c. 1250," in *The Dictionary of Art*, 16: 490

<sup>115</sup> Mayer, *Islamic Woodcarvers*, 17-18, 63. Salam signed his work with "san'at" which may indicate a superior work to 'amal, but this has not been proven.

<sup>116</sup> Cairo Islamic Museum, inv. 9019.

## Conclusion

We can finally say that the mosaic technique, after having appeared in Egypt in the 'Ain al-Sira group, made its first reappearance in Spain in the Kutubiyya minbar that was made for the mosque in Marrakech. The technique was later transferred to North Africa where it was used extensively with minbars. Then the mosaic technique returns again to Egypt but later in the Mamluk period. In Spain the inlaying technique continued to be used in caskets using the incrustated technique. The Fatimid casket found in al-Mansuriyya and dated before 972 A.D. is believed to have influenced all the later Spanish ivory inlaid caskets. Contemporary with the Kutubiyya minbar is the Aqsa mosque minbar, which we consider the true prototype for the latter Mamluk inlaid wood minbars, where intarsia inlay and small carved ivory or bone inserts were the most suitable decorative technique to be used with the geometric strapwork of Mamluk minbars.

## Conclusion

During the early Islamic period we find the domination of the carving technique in ivory production when compared to other ivory working techniques such as painting, inlaying, and incrusting. The extensive use of ivory, especially in Fatimid Egypt and in Andalusia, can be explained as the result of the availability of the material, and can also be viewed as part of the general attitude of that period when expensive and lavish objects were the sign of the wealth and power of the court. Carved ivory can be considered as the distinct mark of courtly objects.

Nevertheless, the use of carved bone for small inlays or incrustated pieces was also quite common. Since it is relatively hard to distinguish between ivory and bone, we see the working techniques applied to ivory are the same as the ones applied to bone. It is not unusual or surprising to encounter numerous articles made of bone. In the literature of the technique, bone pieces are quite often described as ivory.

Wood is fairly scarce in the major parts of the Muslim world; a fact which helped it to achieve an importance and significance that it did not have in societies where wood is more plentiful. What is said about the importance of ivory because of its rarity and cost is equally applicable to wood. Since it was an expensive import and a luxury material, we find that it was consequently ornamented with lavish care, especially during the early Islamic period. Wood as material is very much like ivory, both are practical materials that do not permit much waste and can be worked with the same tools. However, ivory, unlike wood, can be carved in all directions without regard to its grain.



The term inlay is a general name used for ornamental or figural work that is produced by setting together upon a flat surface variously shaped pieces of different materials such as marble, stone, ivory, or wood. Wood inlay is a technique that dates back to ancient Egypt; it was used for artistic purposes as early as the Old Kingdom.<sup>117</sup> The inlay technique is usually used to emphasize the design or the precious material employed to the wooden surface. The three most agreed upon inlay techniques are intarsia inlay, incrusting inlay, and mosaic marquetry inlay.

Egypt provides us with a nonstop tradition of all inlay techniques. From the tomb of Tutankamen we have an inlaid casket executed in the mosaic technique. Later we have other pieces that employing intarsia and incrusting techniques. However, a simplification started to occur towards the beginning of the Christian era, inlay became limited to ivory or bone and a few colored woods.<sup>118</sup> We have many examples from the immediate pre-Islamic period all executed in the intarsia and incrusting inlay techniques.

Inlay technique was not among the celebrated arts of the Byzantine period; the only examples we find are carved ivory plaques inserted in wooden objects. Therefore, unlike the case with carved ivory, we cannot say that Byzantine art influenced the Islamic inlay technique. The main influence on most later Islamic wood inlay is from Egypt, which as we said retained the inlay technique through the

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<sup>117</sup> Alder, "Fine Wood-Work, 663-4.

<sup>118</sup> Monneret de Villard, *Monumenti dell'arte musulmana*, 7.

ages. The only ivory examples we have from the very early Islamic period are a few carved (not inlaid) pieces.<sup>119</sup> It seems that during the early Umayyad and Abbasid periods in places other than Egypt there was not much of an ivory tradition, which greatly contradicts with the strong art of Christian ivory carving that was well established in both Syria and Egypt during the Roman and Byzantine periods. The reason could be that ivory carving was considered by Muslims of the early period as an entirely Christian art since it was mostly associated during the Byzantine period with the religious art of the Christian church. Which could explain why we do not find any real ivory tradition in the early Islamic period, and why most of the carved ivory objects found in Egypt during that period are usually attributed to Coptic craftsmen.<sup>120</sup>

The 'Ain al-Sira group of ivory inlay raised many questions concerning dating, decoration, and influence. The group can be dated to the late Umayyad period (the second half of the 8<sup>th</sup> century A.D.). This conclusion was reached through the study of different decorative elements the group shared, in addition to the mosaic inlay technique used in all the pieces. First, the arch which composed the main decorative element of the group was used in other media in the early Islamic period. The most relevant examples are two carved (not inlaid) wooden panels also from 'Ain al-Sira and dated to the Umayyad and early Abbasid period in Egypt (late 8<sup>th</sup> and early 9<sup>th</sup> century A.D.). The layout of the 'Ain al-Sira group corresponds in many ways with the layout of these two Islamic Museum carved wooden panels (figs. 22-23). Another

<sup>119</sup> Such as the cosmetics dish in the shape of a bird with worm in its beak.

Ereshefsky, *Bone and Ivory Carving*, pl. 23. And Scanlon, "Preliminary Report 1965, Part I," 104.

<sup>120</sup> A very good example are our carved ivory plaques of the 'Ain al-Sira group.

important piece that contains arcades is a frontispiece of a Syrian Qur'an that, like our pieces, suggests the Umayyad architecture of the period (fig. 20).

Another characteristic decorative theme that we find in the 'Ain al-Sira group is winged motif springing out from a vase and filling the spandrels of the arches. This motif was first seen in the mosaic decoration of the Dome of the Rock. The vase motif is classical in origin, while in contrast to what is usually accepted, the use of the winged motif does not necessitate direct Sasanian influence.<sup>121</sup> A carved (not inlaid) wooden panel in the Islamic museum in Cairo, also from 'Ain al-Sira, carries winged motifs and dated to the 9<sup>th</sup> century A. D (fig. 29). This panel, in addition to the 'Ain al-Sira group are an indication of the influence of the decoration of the Dome of the Rock.

The designs of the minute mosaic decoration that fills the surface of all the panels of the 'Ain al-Sira group is also Classical in style, which is expectable because the mosaic technique, in general, is originally a Greek and Roman art. We can find many of the designs of the 'Ain al-Sira panels in the floor mosaics of the Umayyad desert palaces, at Khirbat al-Mafjar and Qasr al-Minya particularly (fig. 32-33).

One more important element of the 'Ain al-Sira group which relates them to classical art is the carved ivory (or bone) plaques in circular and triangular shapes and incrustated within the mosaic decoration. They are carved with different modifications of the classical vine scroll popular in the Hellenistic and early Christian art, as well as

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<sup>121</sup> Creswell, *Early Muslim Architecture*, I, 278.



Coptic art. However the carving of 'Ain al-Sira ivory plaques is of less quality compared to other ivory carved examples of Coptic origin containing the same type of scrolls. Still, there is a good chance that the 'Ain al-Sira plaques were executed by Coptic craftsmen.

The Umayyad style of wall and floor mosaics influenced the design of the inlaid 'Ain al-Sira group. The pure Classical Hellenistic style of the general decorative elements of the 'Ain al-Sira mosaic panels as influenced by Coptic art was very popular during the Umayyad period. The mosaics of the Dome of the Rock; the great mosque of Damascus, the Aqsa mosque and the mosaics of the Syrian desert palaces must have all influenced the wooden inlaid panels both in technique and subject matter.

The second group of our Catalogue is the incrustated technique group consists of two wooden panels in the Islamic Museum in Cairo (Catalogue nos. 10 and 11). These panels might be parts of seating furniture or large boxes. In these pieces, unlike in the mosaic technique of the earlier 'Ain al-Sira group, the wooden surface is apparent and forms a major part of the design; therefore, valuable kinds of woods are used. We have seen the incrustated technique in pre-Islamic Coptic examples; we also find it in Coptic examples dated to the Islamic period. The most important example is the inlay decoration on the doors of the Dayr al-Suriani in Wadi al-Natrun, dated between 913 and 914 A.D., where the design of some of the panels is very similar to our two Catalogue pieces (figs. 43-46).

Another important feature of our two incrustated Catalogue pieces is the inlaid inscription bands bordering the objects on the three sides. In the intarsia inscription band on Catalogue no. 10, we can witness the beginnings of foliated Kufic apparent in the attempt to end the letters with half palmettes. A further development is witnessed in the remains of the incrustated inscription band of catalogue no. 11; scrolls growing out from the letters which may be considered as a very early attempt at floriated Kufic.

If we assumed the inscription band of catalogue no. 11 is a true floriated Kufic, it could mean that the panel would be dated to the Fatimid period, which does not correspond with the general decoration of the piece. On the other hand, the inscription band could be considered as the first pre-Fatimid example of floriated Kufic. However, a more likely explanation is that the execution of the inscription in Catalogue no. 11, can be seen as an attempt to fill the incrustated space behind the inscription band, which the incrusting technique allowed, rather than being a true floriated Kufic. This assumption in addition to the decorative elements of Catalogue no. 10 and 11, the resemblance with al-Suriani doors, and the foliated Kufic inscription of Catalogue no. 10, would all allow us to date the two panels to the late 9<sup>th</sup>-early 10<sup>th</sup> century A. D.

The third group of the catalogue consists of only one inlaid panel, Catalogue no. 12. The panel is attributed to the Fatimid period and executed in the intarsia and incrusting techniques. The only reason for attributing this piece to the Fatimid period is its decorative theme of an eagle attacking a hare. This theme is found in carved ivory and wood of the same period (figs. 53-54); however, if we

compare the panel to luster pottery of the same period executed in the reserve style, we would find the theme of attacking animals in only one object (fig. 55).<sup>122</sup> This technique of wood inlay was not among the important and celebrated arts of the Fatimid period. We have many carved ivories inserted in wooden piece that would serve as a frame, but the type in which ivory pieces were cut to form a design and incorporated with the wood, is not found. The only other inlaid piece that we have from the Fatimid period is an ivory casket with an intarsia inlay inscription band on its flat lid. The casket was made for al-Mu'izz in al-Mansuriyya, which would date it before 972 A.D. (figs. 76-77).

In an attempt to track the influence of the Egyptian inlay technique on other Islamic regions we start with Spain. The decoration of many Spanish ivory inlaid caskets is very close to our Fatimid example (Catalogue no. 12), but executed differently by using relatively larger bone or ivory pieces with black paste outlining the incrustated pieces thus adding realism and motion to the depicted themes.

Another very important casket fully decorated with small incrustations of ivory (and/or bone) and different colors of wood: the Tesoro della Cappella Palatina. This casket is attributed by Monneret de Villard to Egypt; however, this attribution causes many doubts. The casket can be compared to the Fatimid panel (Catalogue no. 12) in terms of technique, but it is not enough to relate the piece to Egypt because the decorative style is very different from the inlay decoration we find in Egypt. In my

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<sup>122</sup> Grabar, "Imperial and Urban Art in Islam," 178.



opinion, a further study relating this piece to contemporary metalwork needs to be done.

The minbar from the Kutubiyya mosque in Marrakech, dated 1145 A.D. and originally made in Spain, is the first surviving example that shows the same mosaic technique used in the 'Ain al-Sira group. The minbar is decorated in both wood carving and bone mosaic technique. This technique continued to be used in later minbars from North Africa. The Aqsa mosque minbar dated 1168 A.D., composed of strapwork and richly decorated with ivory for both outlining the polygonal figures and for the smaller interstitial stars, might be considered as the prototype for later Mamluk ivory inlaid minbars. Although both the Kutubiyya and the Aqsa minbars were executed in the same period, it is the Aqsa minbar style with the intarsia inlay technique rather than the mosaic technique of the Kutubiyya that gripped Egypt.

The objects of the Catalogue are the only inlaid pieces that have been reported from the early Islamic period in Egypt. They are a limited number of pieces stretching from the Islamic conquest of Egypt until around 1200 A.D. Even before the Islamic period, we cannot say that the inlay technique was that popular. The incrustated articles we have from the Coptic period are too few to consider the inlay technique of that period as forming an art tradition. However later Islamic periods witnessed the domination of the inlay technique because of the effect of color, in addition to the fact that ivory and bone inlay was very suitable to be used with geometric strapwork, the distinctive woodworking technique of later Islamic periods. Thus ivory and bone came to dominate during the later Mamluk period in Egypt almost to the exclusion of carved ivory and bone objects, *per se*.

## Bibliographical Abbreviations:

- AARP     Art and Archeology Research Papers  
BFA     Bulletin of the Faculty of Arts, Fouad I University.  
BIE     Bulletin de l'Institut d'Egypte  
BMMA     Bulletin of the Metropolitan Museum of Art

## Bibliography:

Abd al-Wahab, H., "Tauqi'at al-sunna' 'ala athar Misr al-islamiyya," *BIE*, 36 (1953-4), 533-558.

Abdel-Wahab, M. A., *Terminological Decorative Analysis and Artistic Styles of Islamic Art: A Study Based on the Woodwork Collection of the Metropolitan Museum of Art*, New York (D. Phil. thesis, U. of Michigan, 1970).

Abu Khalaf, M. F., *The Early Islamic Woodwork in Egypt and the Fertile Crescent* (D. Phil. thesis, U. of Oxford, 1985).

\_\_\_\_\_, "Woodwork, before c. 1250, Egypt, Syria and Iraq," in *The Dictionary of Art*, 16: 487-489.

Alder, C., "Fine Wood-Work," in *A History of Technology I*, ed. Charles Signer, et. al. (Oxford, 1954) 684-703.

Anglade, E., *Catalogue des boiseries de la section Islamique* (Paris, 1988).

\_\_\_\_\_, & Rutschowskaya, M. "Les bois egyptiens du Musée du Louvre (VIe-IXe Siecle)," *AARP* 15 (1979), 1-8.

Anon., *Hudud al-'Alam*, trans. V. Minorsky (E. J. W. Gibb Memorial Series, New Series XI) (London, 1937).

Badawy, A., *Coptic Art and Archaeology: The Art of the Christian Egyptians from the Late Antique to the Middle Ages* (London, 1978).

Barnett, R. D., "Fine Ivory Works," in *A History of Technology I*, ed. Charles Signer, et. al. (Oxford, 1954), 663-683.

Bloom, J., "The Origins of Fatimid Art," *Muqarnas* 3 (1985), 20-38.

\_\_\_\_\_, & O'Kane, B., "Woodwork, Egypt, Syria and Iraq, c. 1000-c. 1250," in *The Dictionary of Art*, 16: 489-491.

\_\_\_\_\_, Toufiq, A., et. al., *The Minbar from the Kutubiyya Mosque* (Rabat, c. 1998).

Du Bourguet, P., *Coptic Art*, trans. Caryll Hay-Shaw (London, 1971).

Butler, A. J., *Ancient Coptic Churches of Egypt*, (Oxford, 1970).

Cahen, C., "Khashab," in *The Encyclopaedia of Islam* 2<sup>nd</sup> ed. 4: 1085-1086.

Cammann, S. V. R., "Ivory and Bone Carving: Material and Techniques," in *Encyclopedia of World Art* 8: 758-763.

Chesney, C., et. al., *Ivory: a History and Collector's Guide* (London, 1987).

Creswell, K. A. C., *Early Muslim Architecture* (Oxford, 1969).

Cruz, M. I. V., *Hispano-Umayyad Caliphal Iconography: A Study of Ivory Objects Patronized by the Court* (MA. thesis, American U. in Cairo, 1997).



Cutler, A., *Late Antique and Byzantine Ivory Carving* (Aldershot; Brookfield USA; Ashgate, c1998).

Dalton, O. M., *Byzantine Art and Archeology* (Oxford, 1911).

De Azevedo, M. C., "Inlay: Antiquity, " in *Encyclopedia of World Art* 8: 126-130.

Dimand, M. S., *A Hand Book of Muhammadan Art* (New York, 1958).

\_\_\_\_\_, "An Egypto-Arabic Panel With Mosaic Decoration," *BMMA* 33 (1938), 78-79.

\_\_\_\_\_, "Studies in Islamic Ornament," *Ars Islamica* 4 (1937), 293-337.

Emery, W. B., *The Royal Tombs of Ballana and Qustul* (Cairo, 1938).

Ereshefsky, M., *Bone and Ivory Carving in Early Islamic Egypt* (MA. thesis, American U. in Cairo, 1980).

Ettinghausen, R., "Early Realism in Islamic Art," in *Studi orientatistici in onore di G. Levi Delle Vigne* I (1956), 250-273.

Ferrandis, J., *Marfiles árabes de Occidente*, (Madrid, 1935-40).

Folsach, K. V., *Islamic Art: The David Collection* (Copenhagen, 1978).

Goitein, S. D., *A Mediterranean Society: The Jewish Communities of the Arab World As Portrayed in the Documents of the Cairo Geniza*, vol. IV, (Berkeley, Los Angeles, London, 1983).

Grabar, O., "Imperial and Urban Art in Islam: The Subject Matter of Fatimid Art," *Colloque international sur L'histoire du Caire* (1969), 173-189.

\_\_\_\_\_, "Islamic Art and Byzantium," *Dumbarton Oaks Papers* 18 (1964) [67]-88.

Grohmann, A., "The Origin and Early Development of Floriated Kufic," *BIE* 37(1954-5) 275-304.

Harding, C., "Mosaic," in *The Dictionary of Art*, 22: 154-160.

Hasan, Z. M., *Funun al-Islam* (Cairo, 1948).

\_\_\_\_\_, *Moslem Art in the Fouad I University Museum* (Cairo, 1950).

Herz-Pacha, M., *Catalogue of National Museum of Arab Art* (Cairo, 1907).

Hillenbrand, R. *Islamic Art and Architecture* (London, 1999).

Karnouk, G. S., "Form and Ornament of the Cairene Bahri Minbar," *Annales Islamologiques* 17 (1981), 113- 142.

al-Kawakibi, S. Z., "Minbar al-Masjid al-Aqsa," *'Adiyat Halab* 4-5 (1978-9), 31-66.

King, G. R. D., "The Architectural Motif as Ornament in Islamic Art, The 'Marwan II' Ewer and Three Wooden Panels in the Museum of Islamic Art in Cairo," *Islamic Archeological Studies* 2 (1980), 23-57.

Kollwitz, J., "Alexandrinische Elfenbeine," *Christentum am Nil* (Recklinghausen, 1964).

Kuhnel, E., "Ivory in the East: Islam," in *Encyclopedia of World Art* 8: 758-763.

\_\_\_\_\_, *The Minor Arts of Islam*, trans. Katherine Watson (New York, 1971).

MacGregor, A., *Bone Antler Ivory and Horn: the Technology of Skeletal Materials Since the Roman Period* (New Jersey, 1985).

Marangou, L., *Bone Carvings from Egypt* (Germany, 1976).

Mayer, L. A., *Islamic Woodcarvers and Their Work* (Geneva, 1958).

McParland, E., "Ivory," in *The Dictionary of Art*, 16: 796-800.

Migeon, G., *Manuel d'art musulman II. Les arts plastiques et industriels* (Paris, 1907).

Monneret de Villard, U., *Monumenti dell'arte musulmana in Italia: I. - La cassetta incrostata della Cappella Palatina di Palermo* (Rome, 1938).

Museum für Islamische Kunst, *Islamische kunst: ausstellung des museums für islamische Kunst*, Johanna Zick-Nissen (Berlin, 1979).

Papadopoulo, A., *Islam and Muslim Art* (Paris, 1976).

Pinder-Wilson, R., "Adj," in *The Encyclopaedia of Islam*, 2<sup>nd</sup> ed.1: 200-203.

\_\_\_\_\_, "Ivory," in *The Arts of Islam: Hayward Gallery Exhibition* (London, 1976), 147-156.

\_\_\_\_\_, "Islamic Art: Ivory," in *The Dictionary of Art* 16: 522-527.

Piotrovsky, M., *Earthly Art, Heavenly Beauty: the Art of Islam* (Amsterdam; Nieuwekerk: 1999).

Quibell, J. E., *Excavations at Saqqara: 1907-1908* (Cairo, 1909).

Roux, J., Ameit, P., et. al., *L'Islam: dans les collections nationales* (Paris, 1977).



Rutschowascaya, M., *Catalogue des bois de l'Egypte copte* (Paris, 1986).

\_\_\_\_\_, "Woodwork, Coptic," in *The Coptic Encyclopaedia* 7: 2325-2347.

Sarre, F., *Islamic Bookbindings* (Berlin, 1923).

Scanlon, G. T., "Fustat Expedition: Preliminary Report 1965, Part I," *Journal of the American Research Center in Egypt*, 5 (1966) 83-112.

\_\_\_\_\_, "Fustat Expedition: Preliminary Report 1968, Part 1," *Journal of the American Research Center in Egypt*, 11 (1974) 81-91.

\_\_\_\_\_, "Moulded Early Lead Glazed Wares from Fustat: Imported or Indigenous?" in *In Quest of an Islamic Humanism*, ed. A. H. Green (Cairo, 1984) 65-96.

Scarce, J., "Wood," in *The Arts of Islam: Hayward Gallery Exhibition* (London, 1976), 273-280.

Shafi'i, F., "al-Akhshab al-muzakhrafa fi'l tiraz al-umawwi," *BFA* 2/14 (1952) 57-111.

\_\_\_\_\_, "Mumayyizat al-akhshab al-muzakhrafa fi'l tirazain al-'abbasi wa al-fatimi fi Misr," *BFA* 1/16 (1954), 57-94.

Stern, H., "Quelques oeuvres sculptées en bois, os et ivoire de style omeyyade," *Ars Orientalis* 1 (1954), 119-131.

*Tresors Fatimides du Caire: exposition présentée à l'Institut du Monde Arabe du 28 avril au 30 aout 1998* (Paris, 1998).

Udovitch, A. L., "Fatimid Cairo: Crossroads of World Trade From Spain to India," in *L'Egypt Fatimide: son art et son histoire* (Paris, 1999) 681-691.

United Arab Republic Ministry of Culture, *Islamic Art in Egypt 969-1517* (Cairo, 1969).



Fig. 1

Reproduction of the cabinet of Tatarsharraf.

Reproduction of the cabinet of Tatarsharraf.

Reproduction of the cabinet of Tatarsharraf.



Fig. 1

Chest from the tomb of Tutankhamen.

The mosaic pieces are composed of thin slips of ebony and ivory arranged as in the detail below.



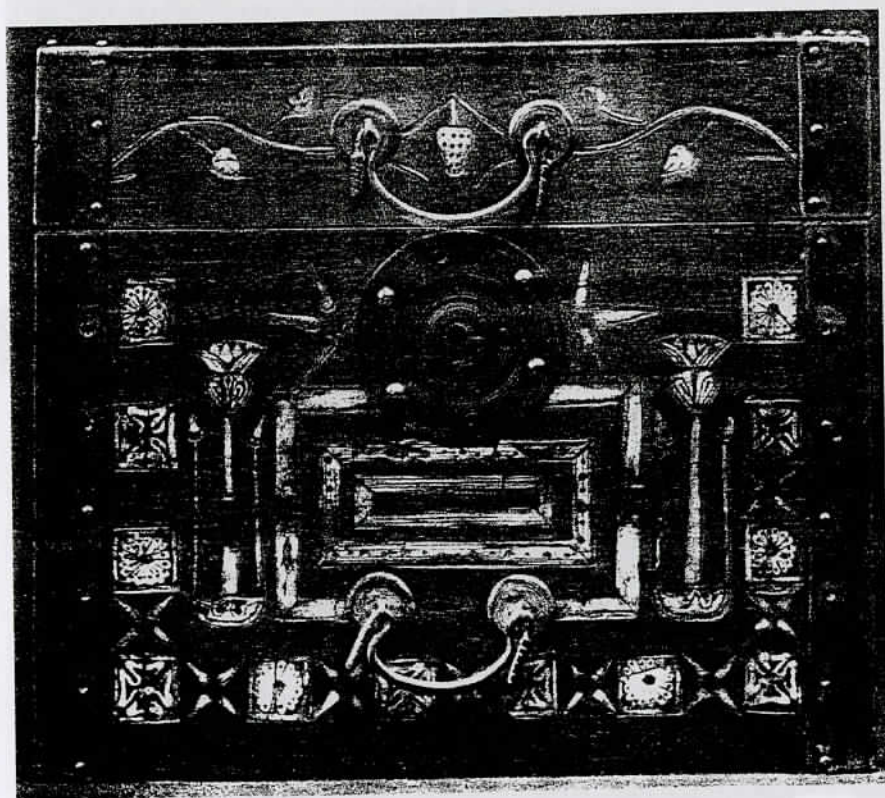


Fig. 2  
Inlaid casket from Karanog, Nubia

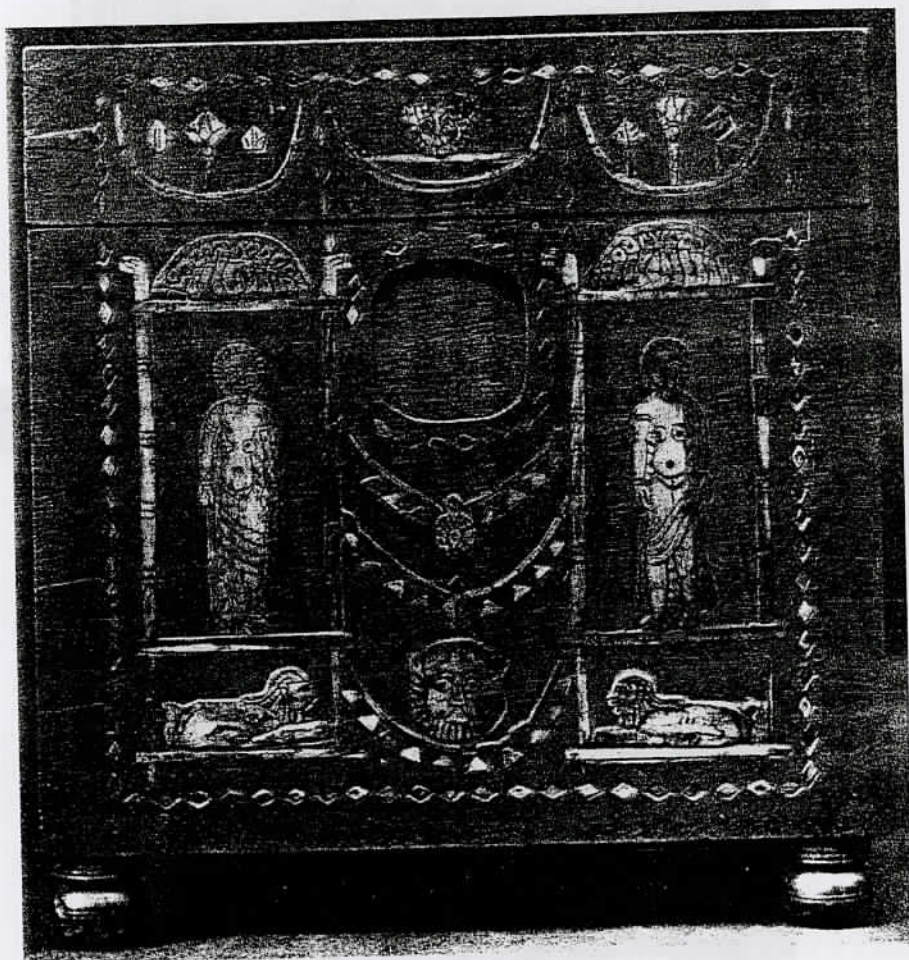


Fig. 3  
Inlaid casket from Karanog, Nubia

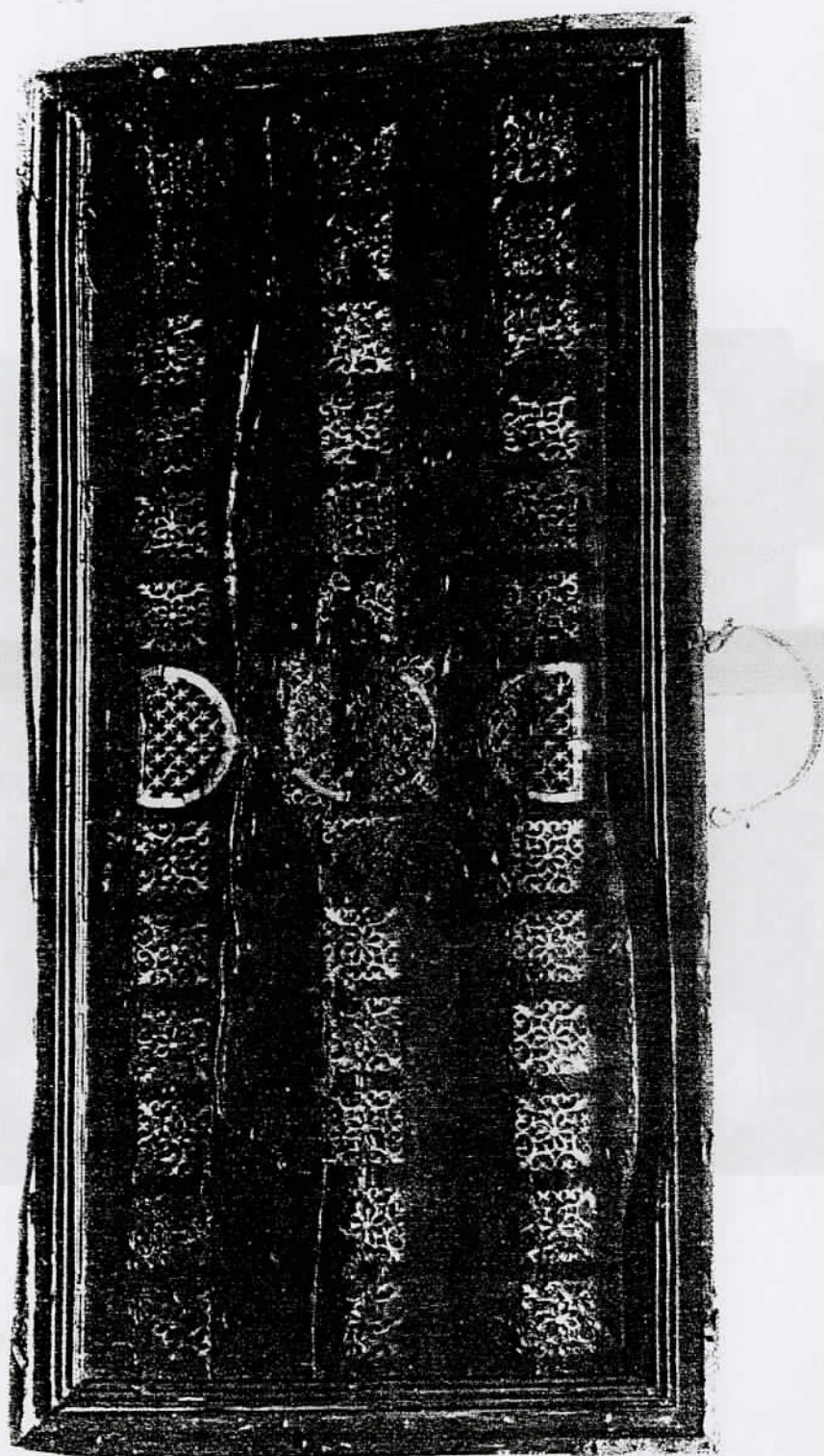


Fig. 4  
Inlaid game table from Ballana, Nubia.



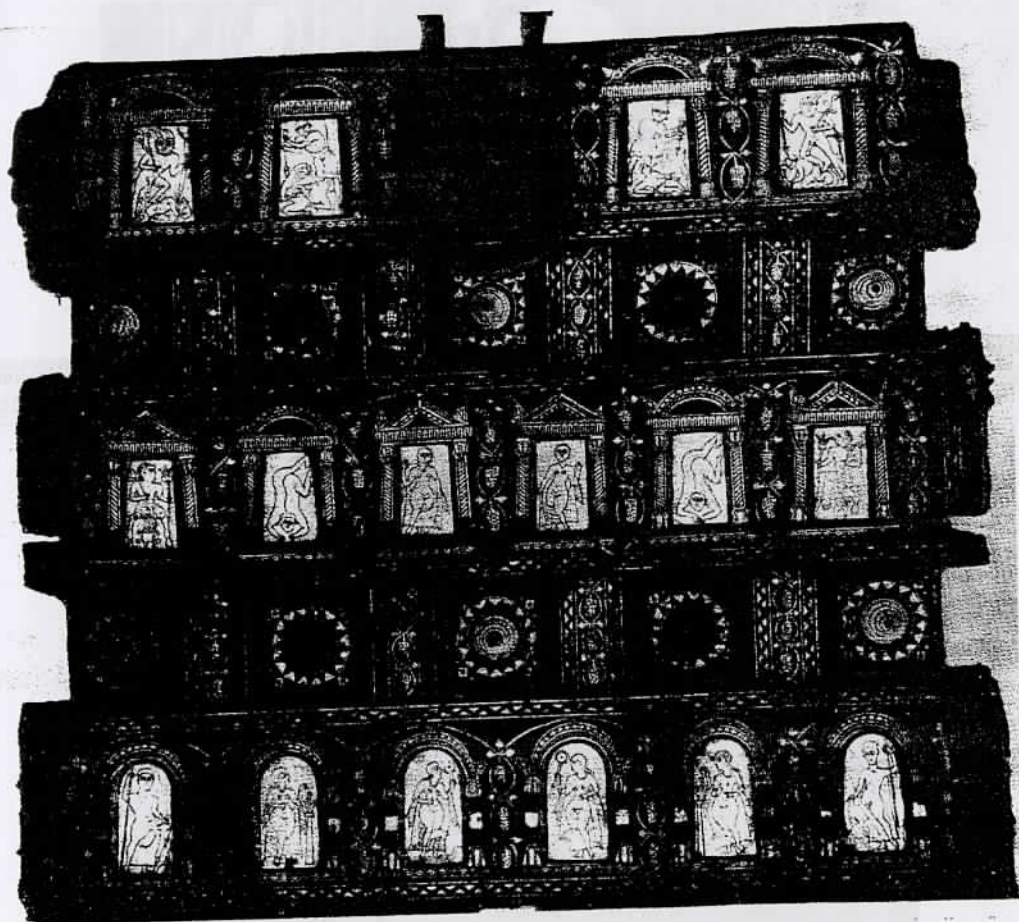


Fig. 5  
Wooden chest from Ballana, Nubia.



Detail of fig. 5

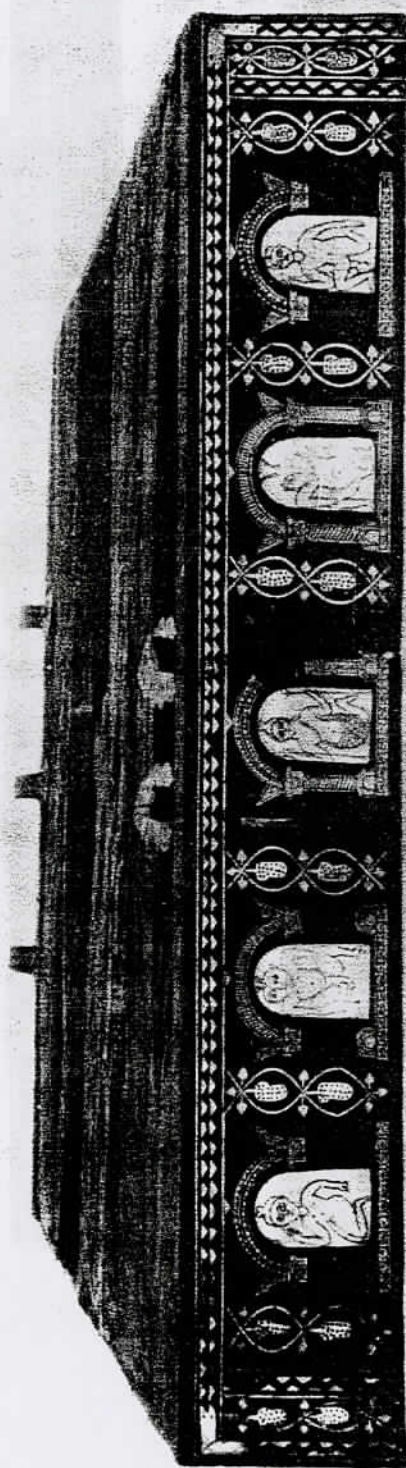


Fig. 6  
The front of the chest



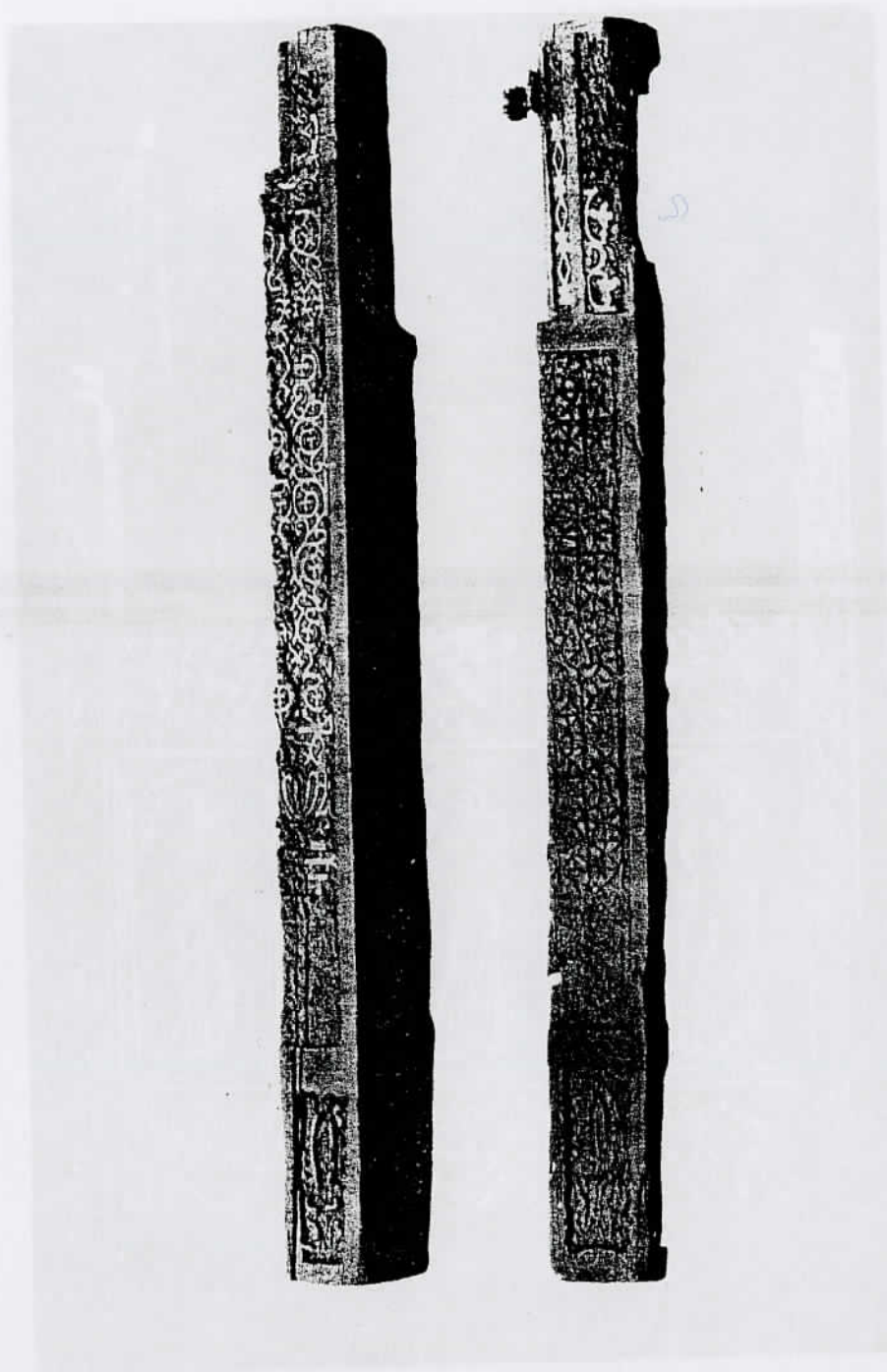


Fig. 7  
Two uprights from a wooden chest from the  
Monastery of St. Jermias at Saqqara

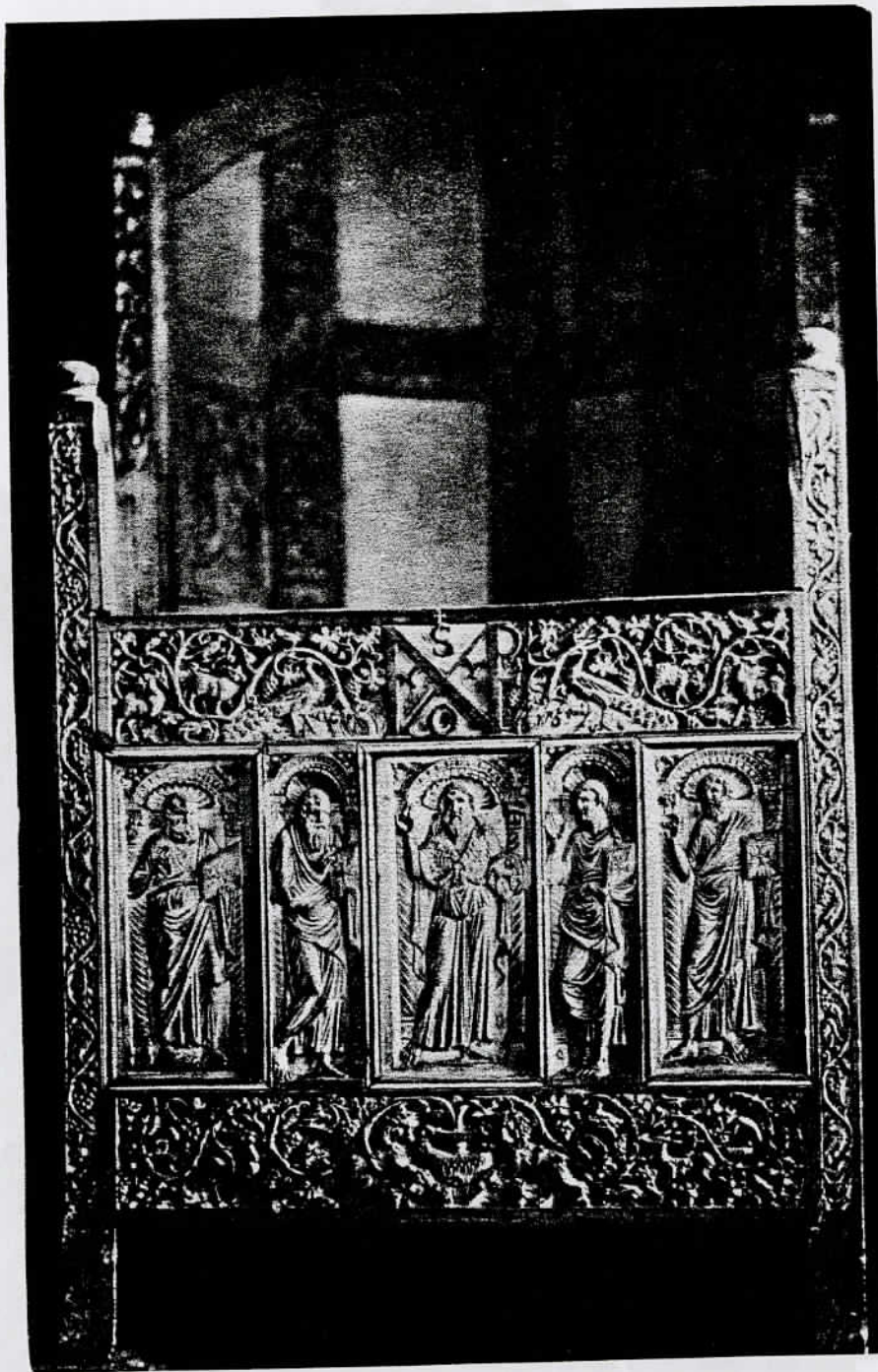


Fig. 8  
Front of ivory-covered chair of Maximian at Ravenna



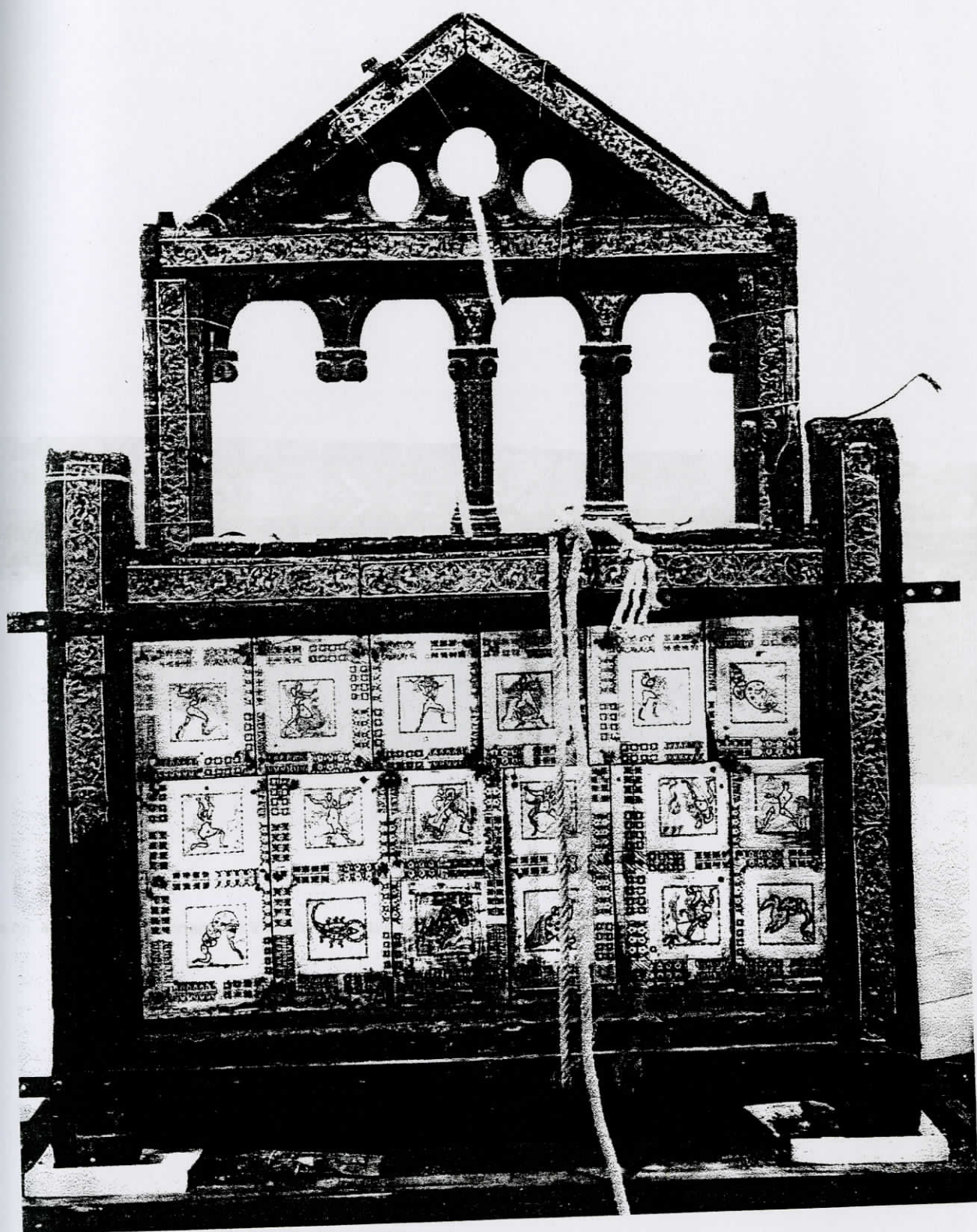


Fig. 9  
Chair inlaid with carved ivory plaques from the Cathedra of St. Peter in the Vatican





Fig. 10  
Catalogue no. 4 as seen in Monneret de Villard's catalogue of the year 1938.

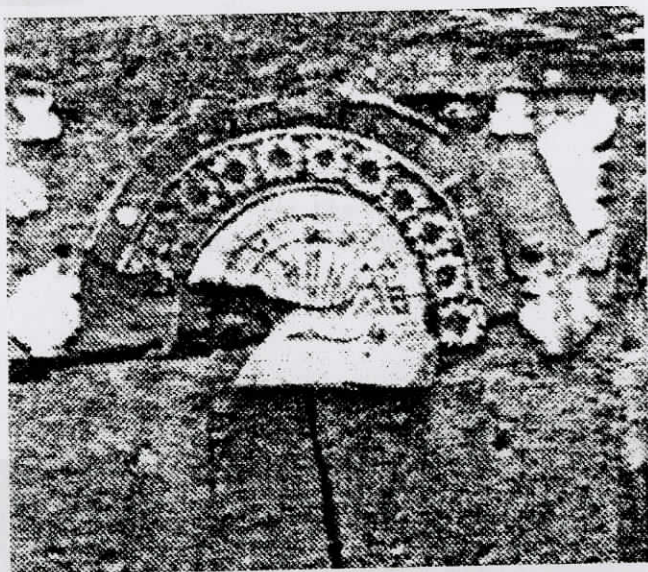


Fig. 11  
Detail from Catalogue no. 11

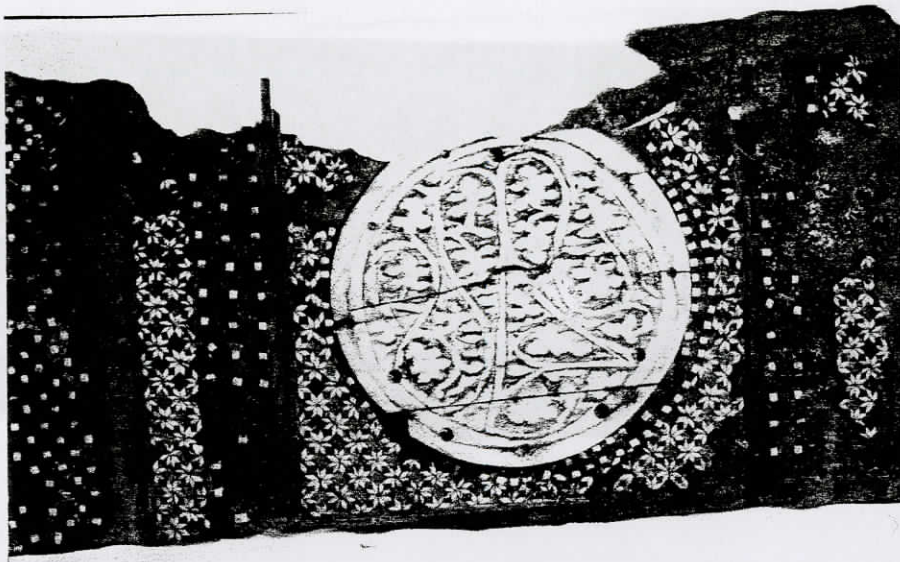


Fig. 12 a  
The middle part of Catalogue no. 6/1

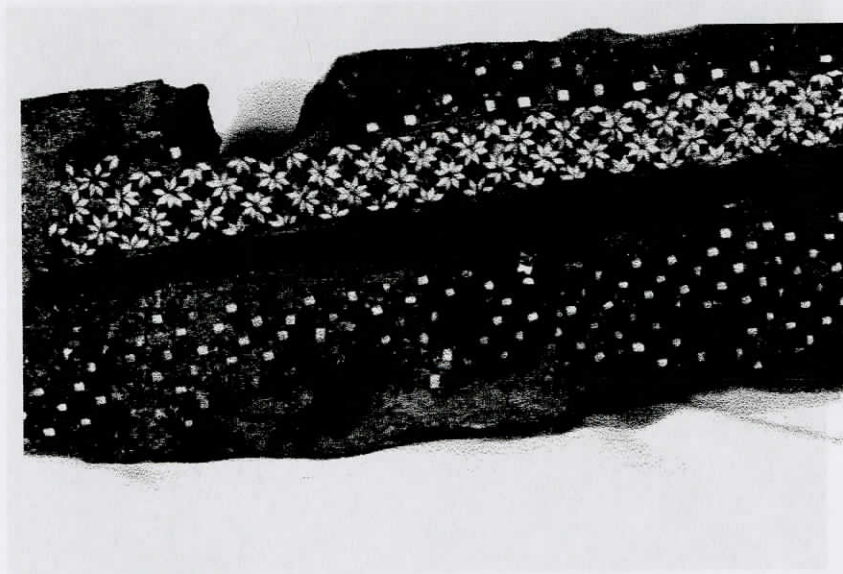


Fig. 12 b  
Detail of Catalogue no. 12/2





Fig. 13 a  
Back detail of Catalogue no. 7



Fig. 13 b

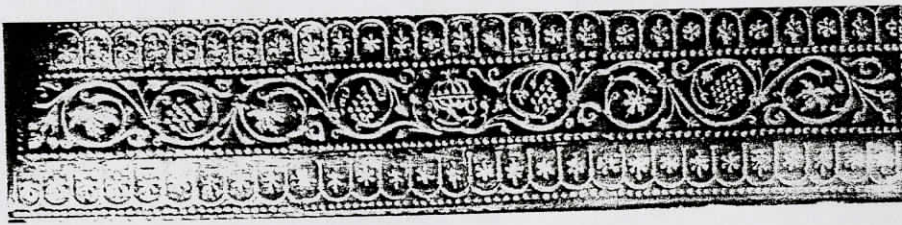


Fig. 14  
Repoussé bronze panels at the Dome of the Rock

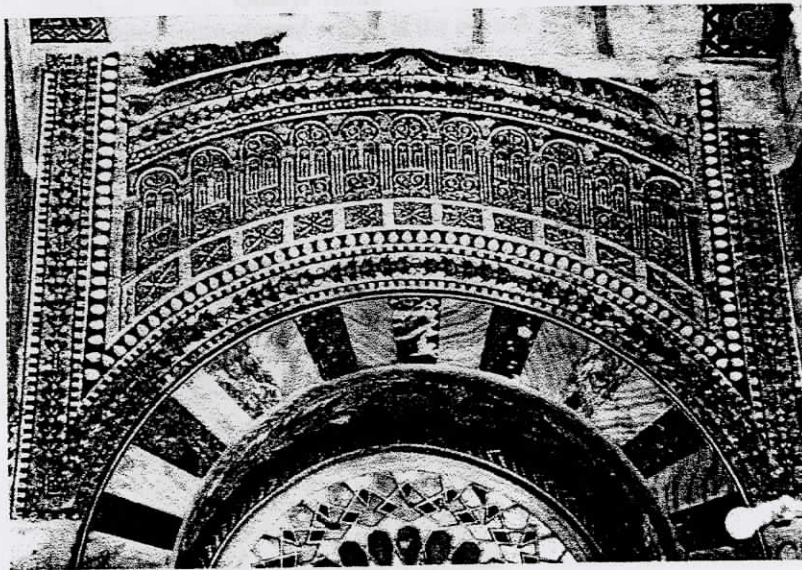


Fig. 15  
Arches design in the mosaics of the  
Great Mosque of Damascus





Fig. 16  
Qusayr 'Amra  
Painted mitre-shaped arches at the central  
vault of the great hall



Detail of fig. 16



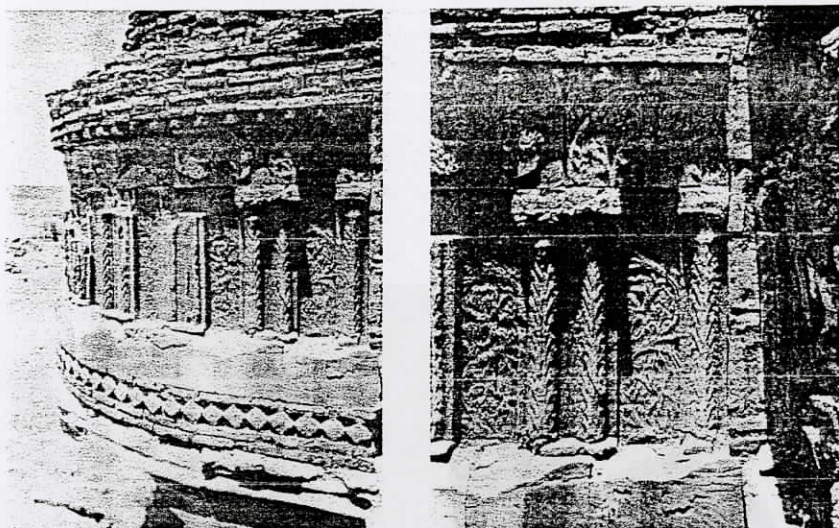


Fig. 17  
The monumental gateway of Qasr al-Hayr al-Gharbi

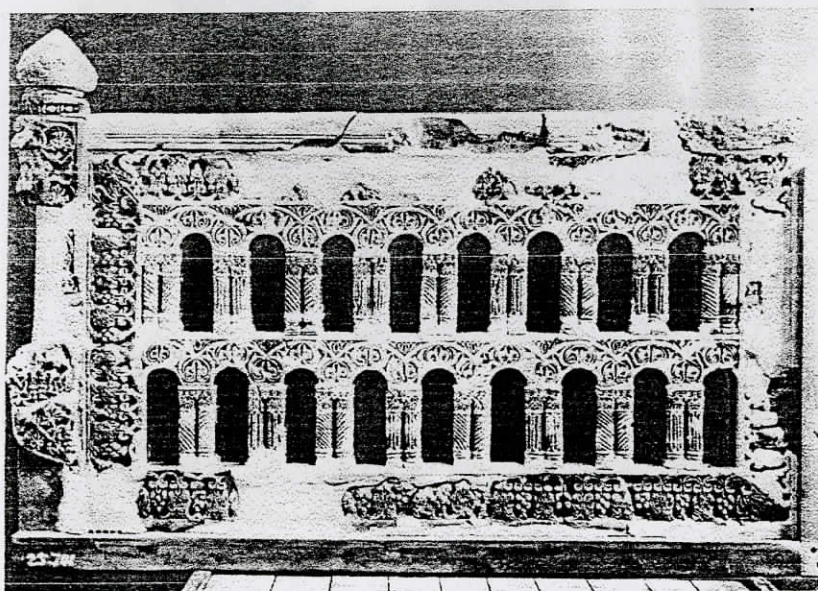


Fig. 18  
The façade of Khirbat al-Mafjar



Fig. 19  
Marwan II ewer, c. 750 A.D.

Fig. 19  
Marwan II ewer, c. 750 A.D.



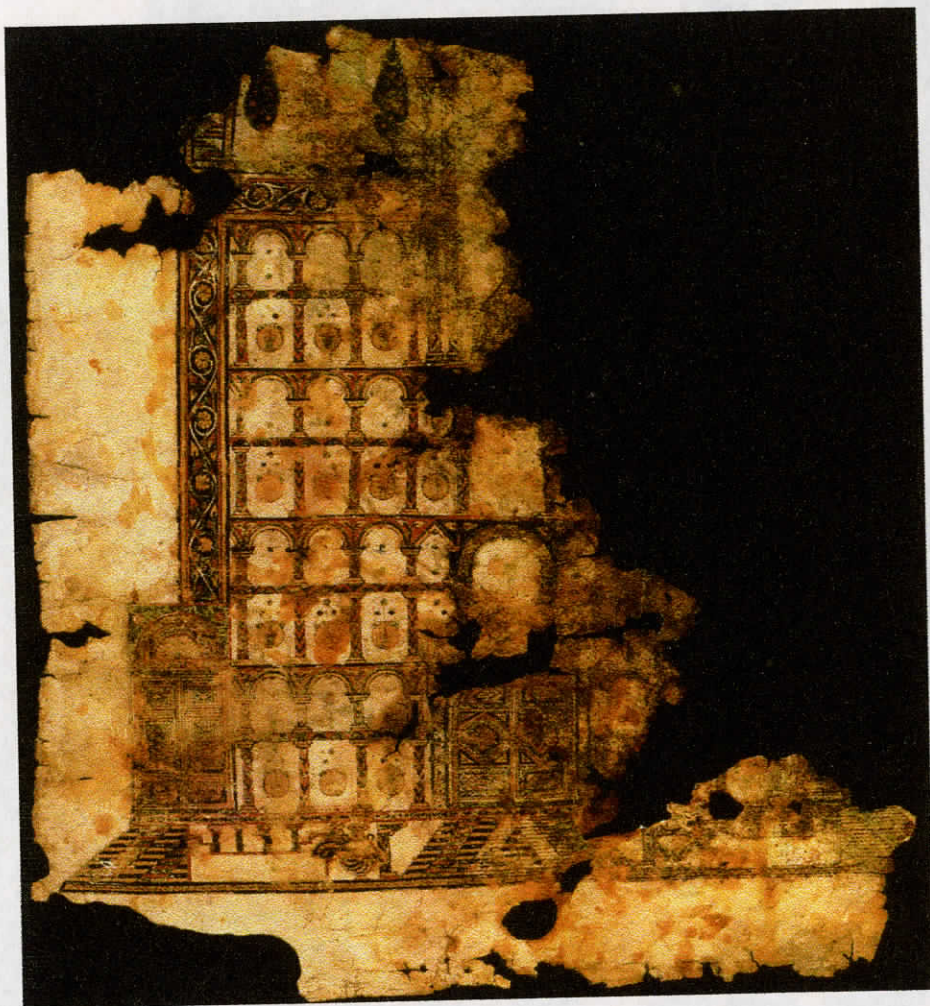
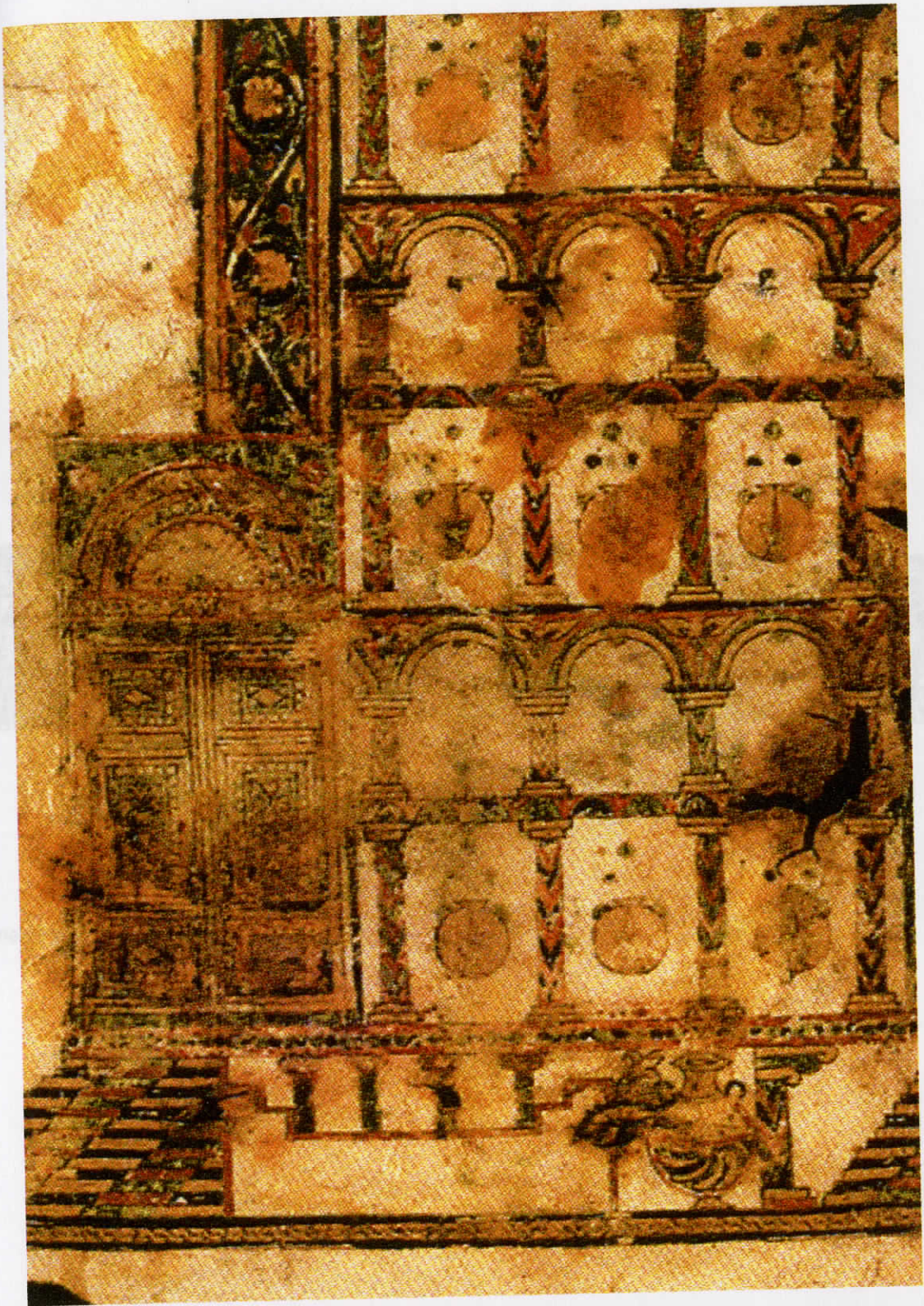


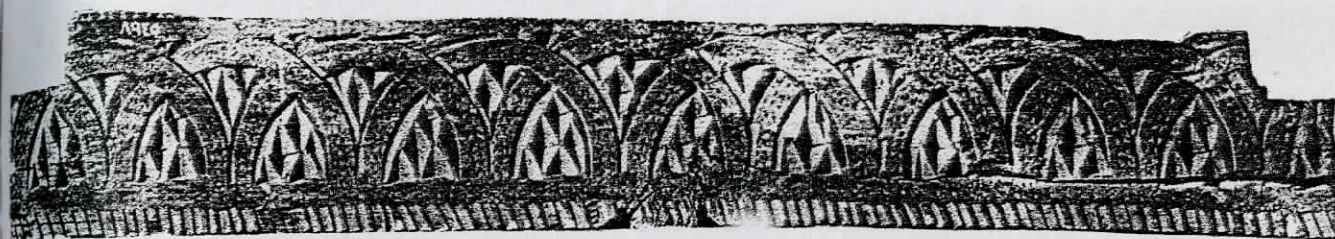
Fig. 20  
frontispiece of a Syrian Qur'an





Detail of fig. 20





wooden panels from 'Ain al-Sira



Fig. 22

Carved wooden panels from Fustat





Fig. 23  
Carved wooden panels from Fustat

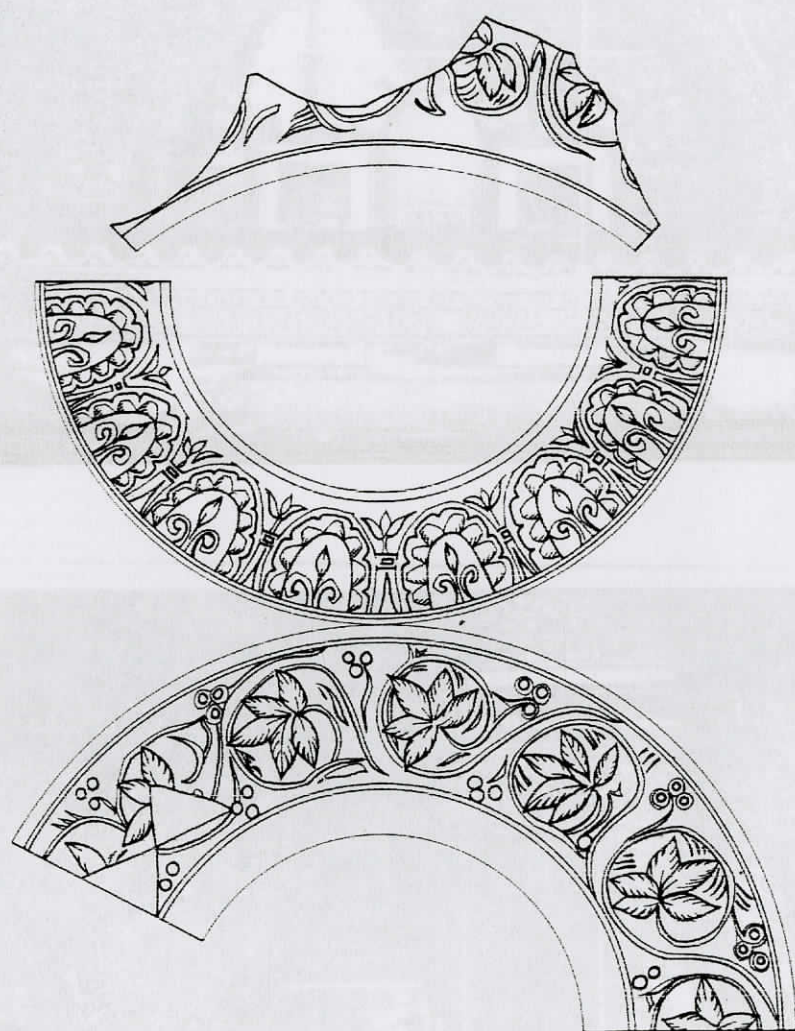


Fig. 24  
Lead glazed fragment from Fustat



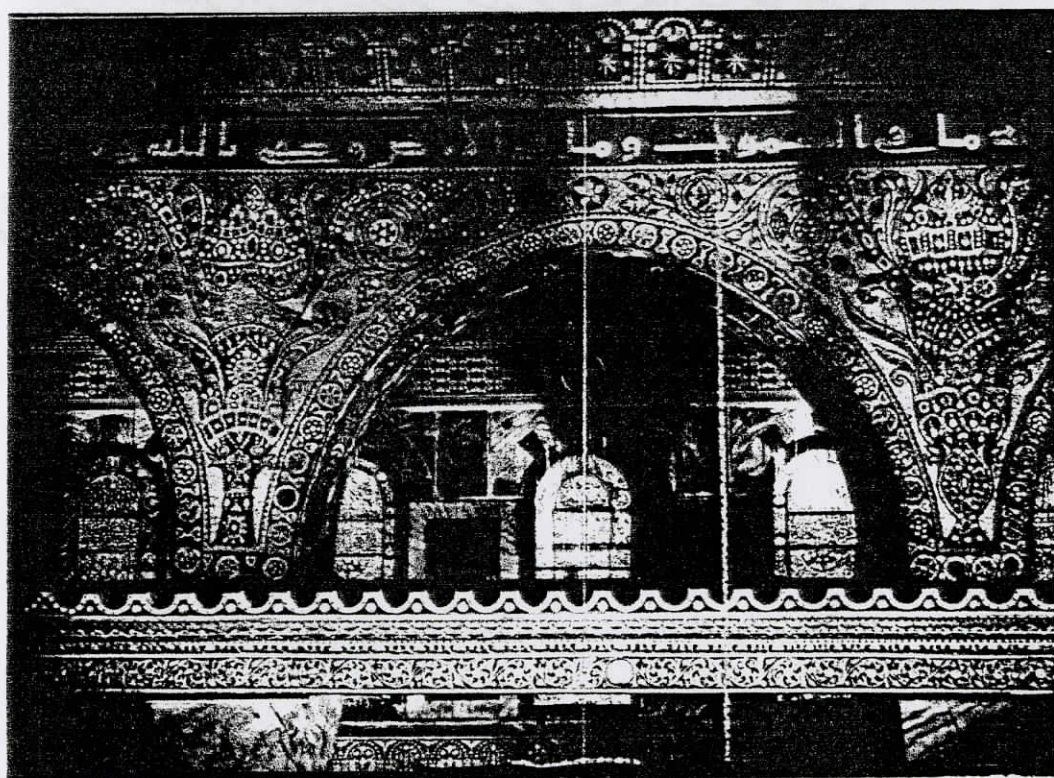
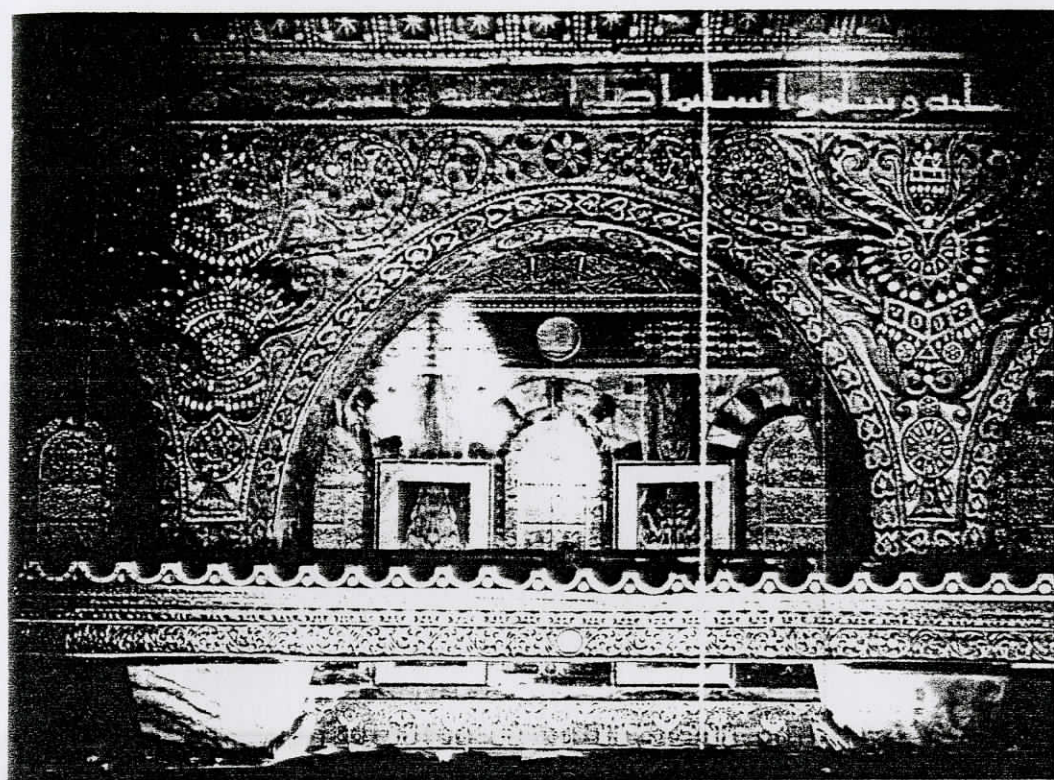


Fig. 25  
Vase and winged motif at the mosaic of the Dome of the Rock



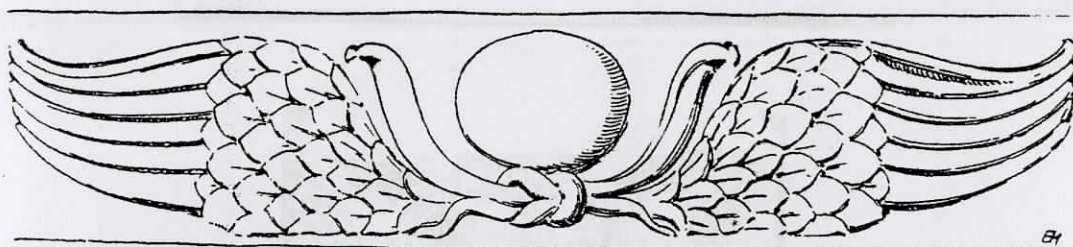


Fig. 26  
Roman winged motif

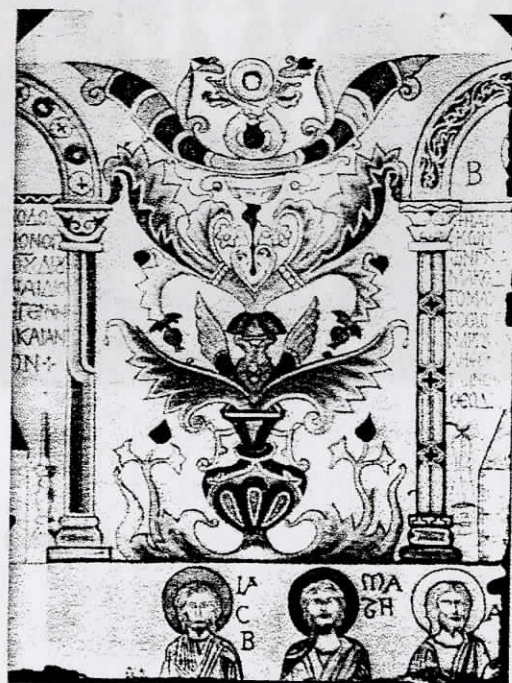
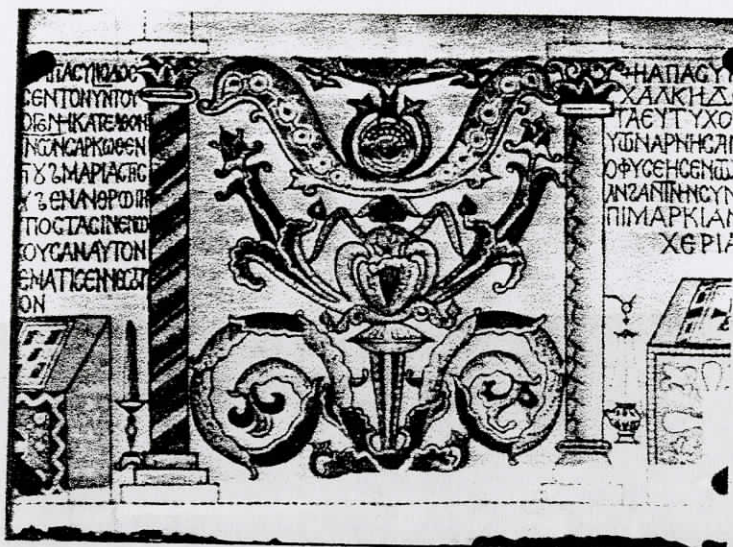


Fig. 27

Byzantine mosaic example of vase and winged motif from the Church of the Nativity, Bethlehem.



Fig. 28  
Arch detail from Catalouge no. 1



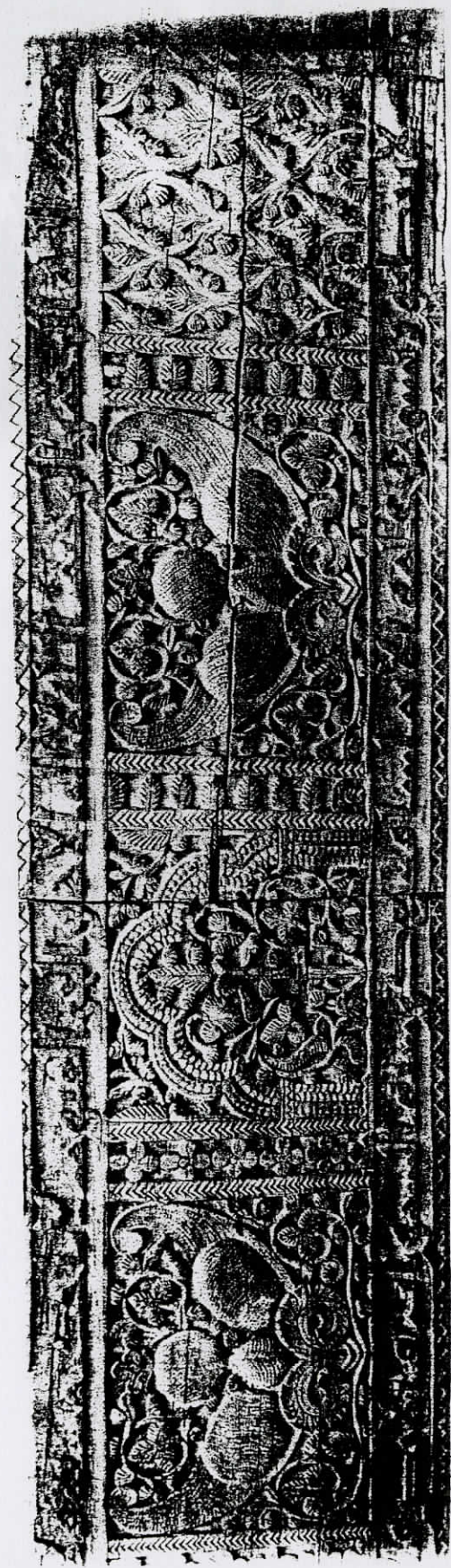


Fig. 29  
Carved panel from the Islamic Museum in Cairo

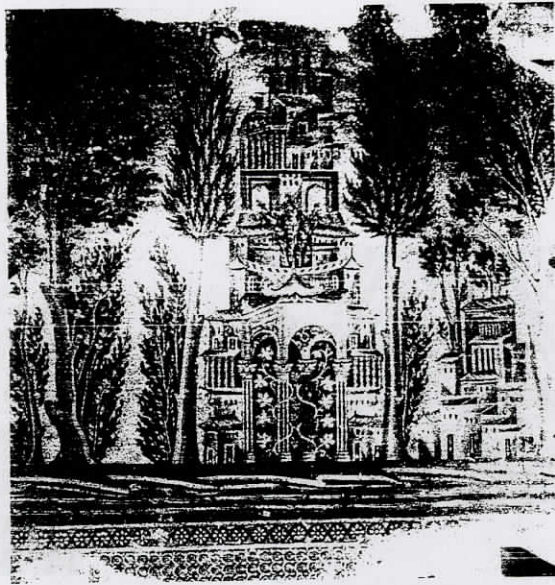
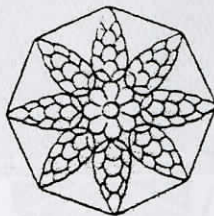


Fig. 30  
The eight-petaled flower in the  
Great Mosque of Damascus



H-I und J-K

Fig. 31  
The façade of Mshatta



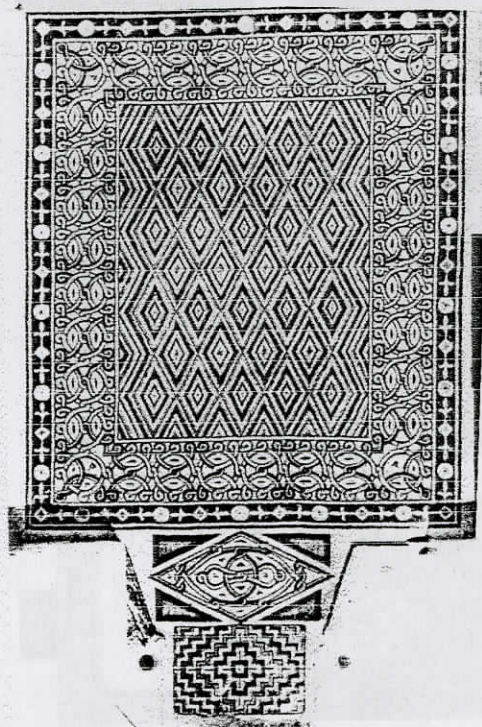
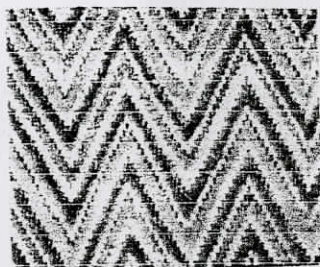
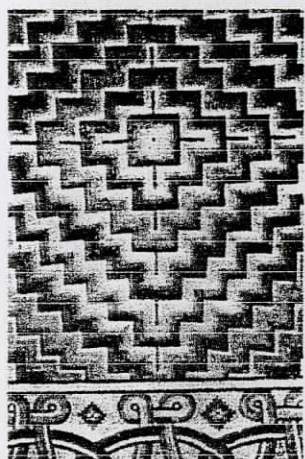


Fig. 32  
Floor mosaics from  
Khirbat al-Mafjar



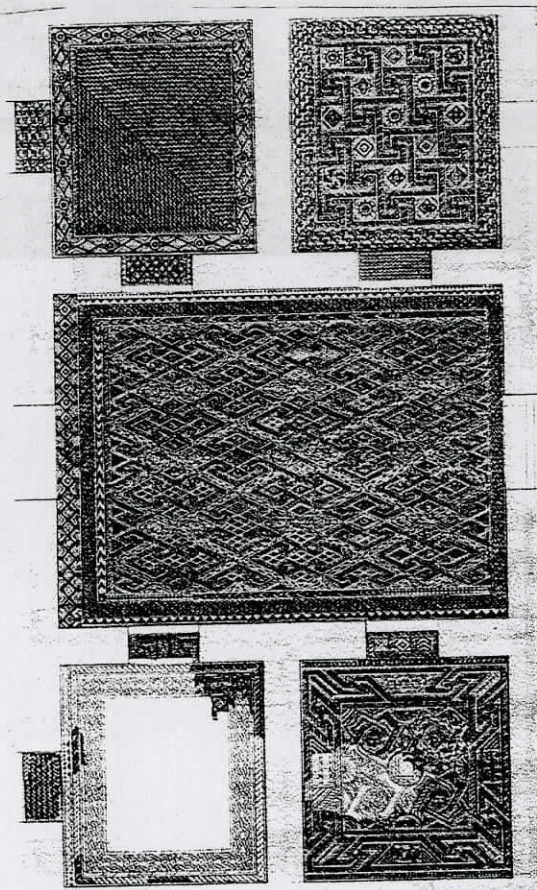
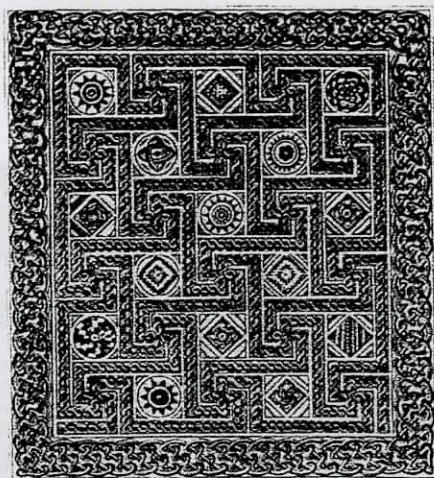
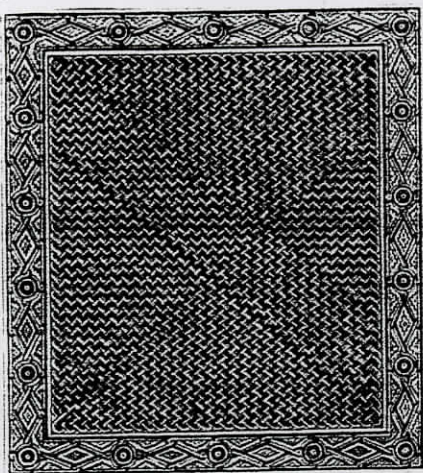


Fig. 33  
Floor mosaics from Qasr al-Minya

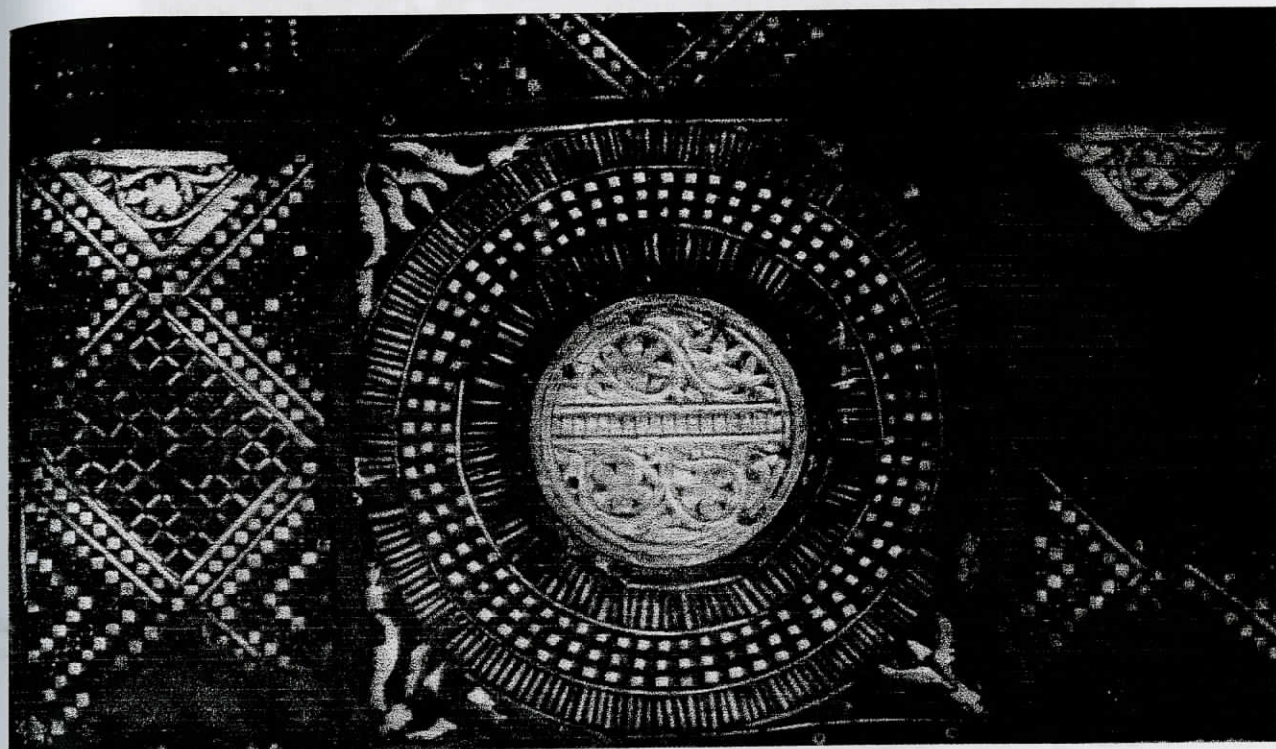


Fig. 34  
Bone detail from Catalogue no. 1



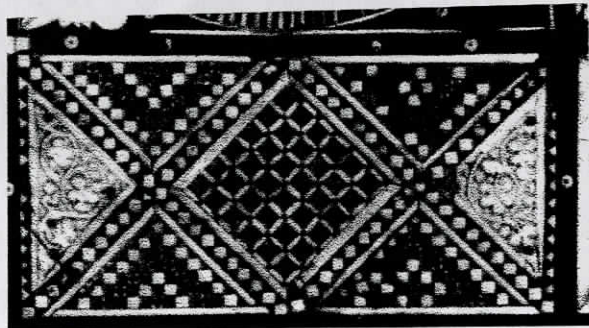
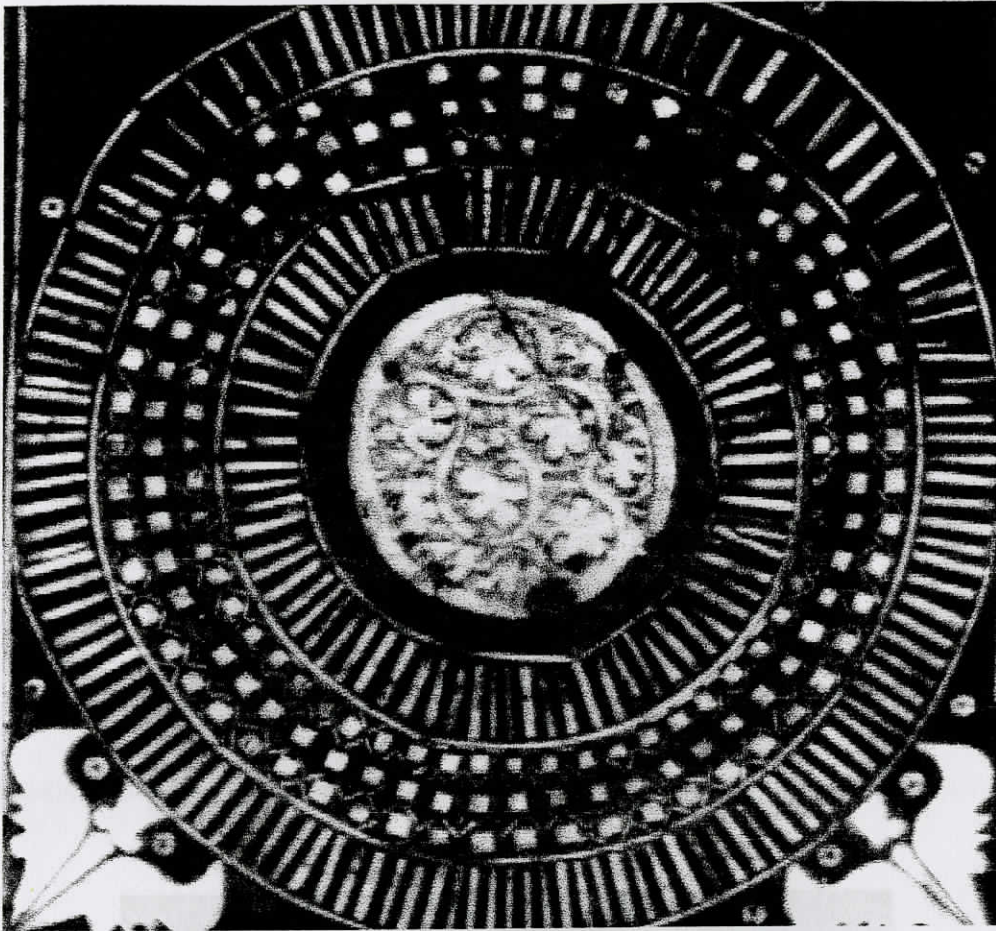


Fig. 35  
Bone carving detail  
Catlogue no. 2



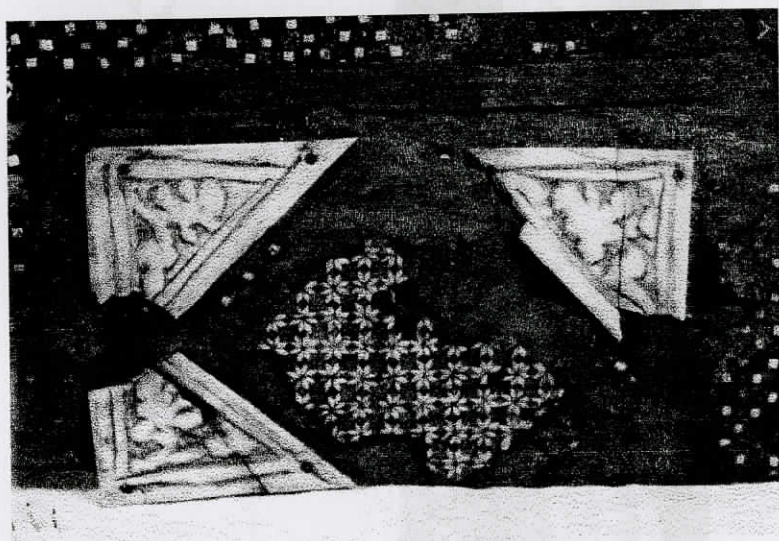
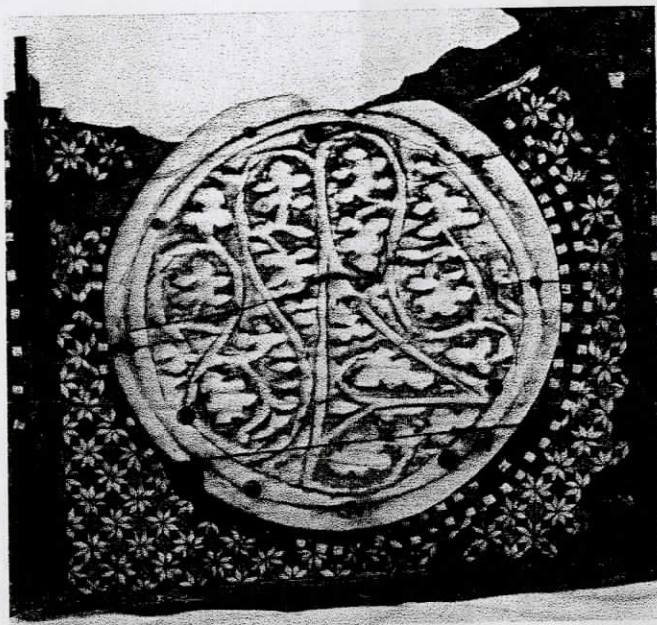


Fig. 36  
Bone detail from Catalogue no. 2

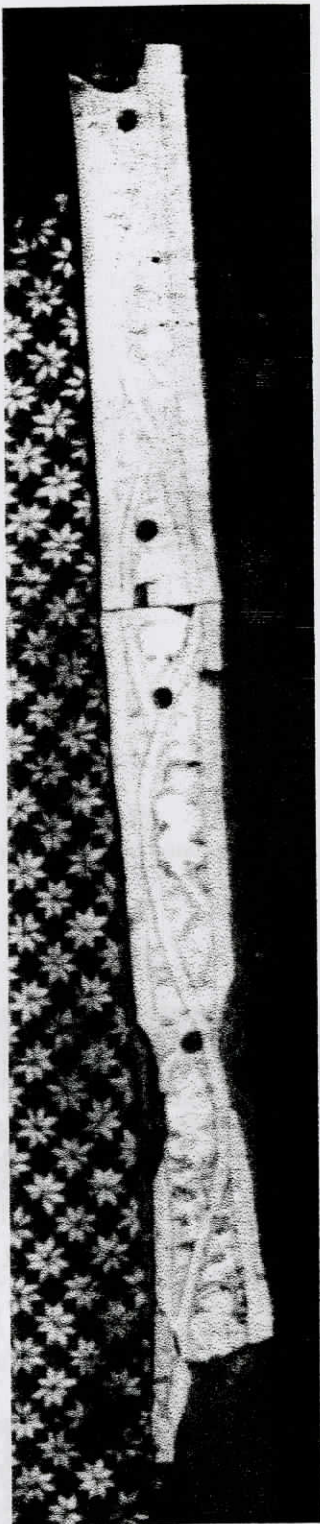


Fig. 37  
Bone detail from Catalogue no. 7





Fig. 38  
Examples of Coptic bone carvings





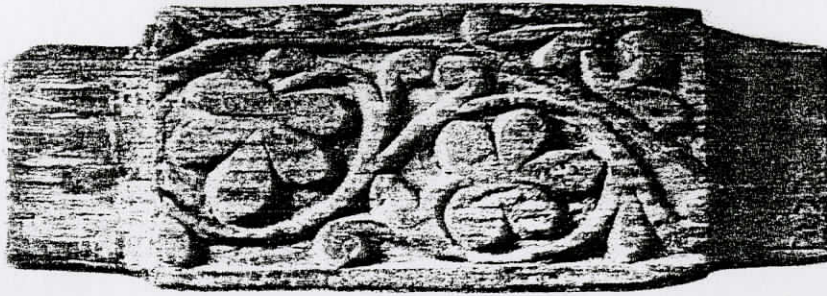


Fig. 39  
Carved wood panel from Fustat



Fig. 40  
Carved wood panel from from the  
cemetery of 'Ain al-Sira



Fig. 41  
Carved wood panel from the cemetery  
of 'Ain al-Sira



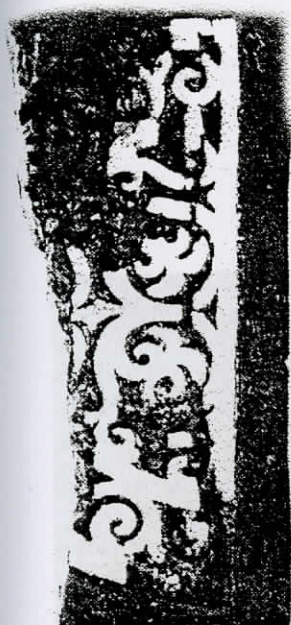


Fig. 42

Coptic inlaid examples from the 8th and 9th centuries A.D.





Fig. 43  
Incrusted doors from  
Dayr al-Suriani in Wadi al-Natrun



Fig. 44  
Incrusted doors from  
Dayr al-Suriani in Wadi al-Natrun

Fig. 44  
Detail from the Doors of  
Dayr al-Suriani





Fig. 45  
Detail from the doors of  
Dayr al-Suriani



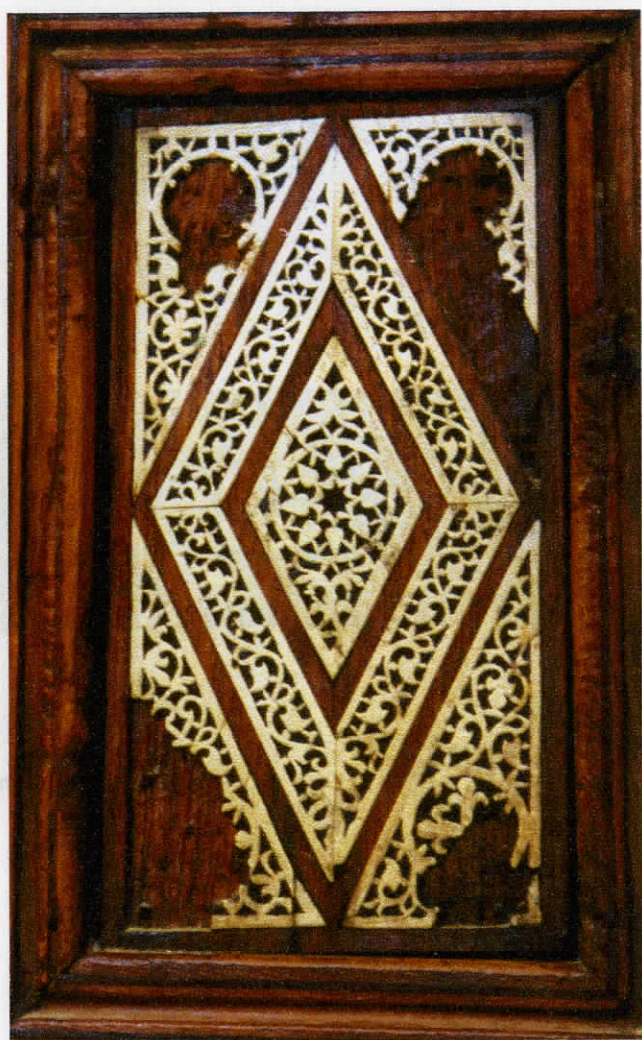


Fig. 46  
Detail from the doors of  
Dayr al-Suriani

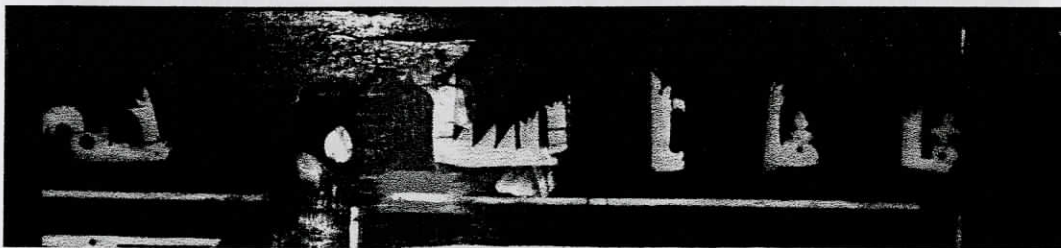


Fig. 47  
Inscription detail from Catalogue no. 10



Fig. 48  
An epitaph in the Islamic Museum in Cairo



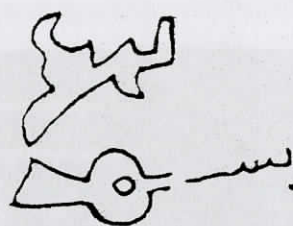
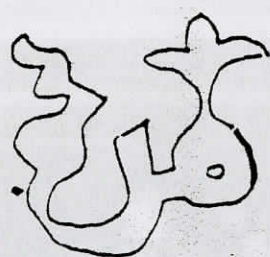


Fig. 49  
Inscription at the enclosure wall of  
the Haram at Jerusalem

Fig. 50

Inscription from the Haram at Jerusalem



Fig. 50  
Inscription detail from Catalogue no. 11

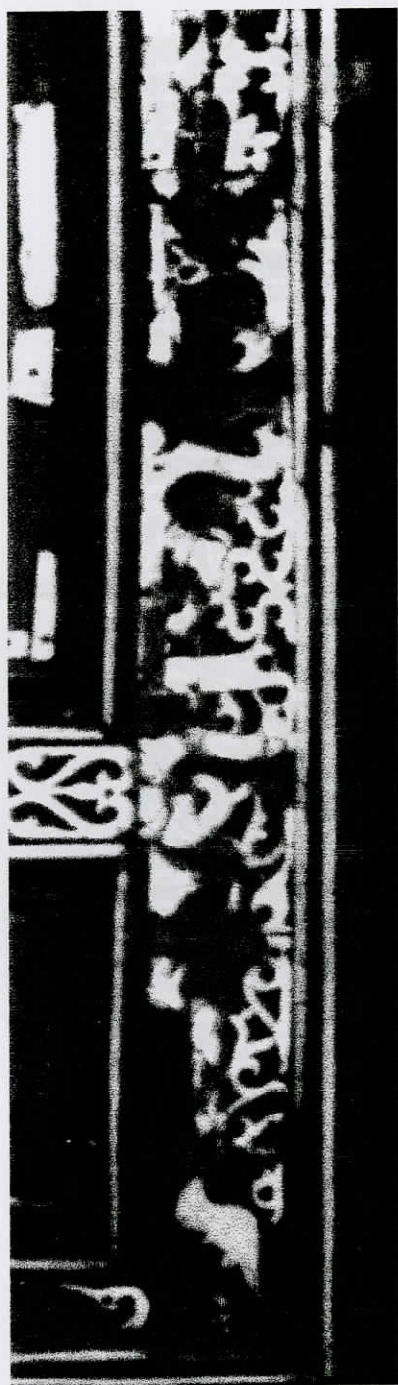


Fig. 51  
Inscription detail from Catalogue no. 11





Fig. 52  
Floriated Kufic from the al-Hakim mosque



Fig. 53  
Carved wood example from the Fatimid period



Fig. 54  
Carved ivory example from the Fatimid period





Fig. 55  
Pottery jar in the Islamic Museum in Cairo



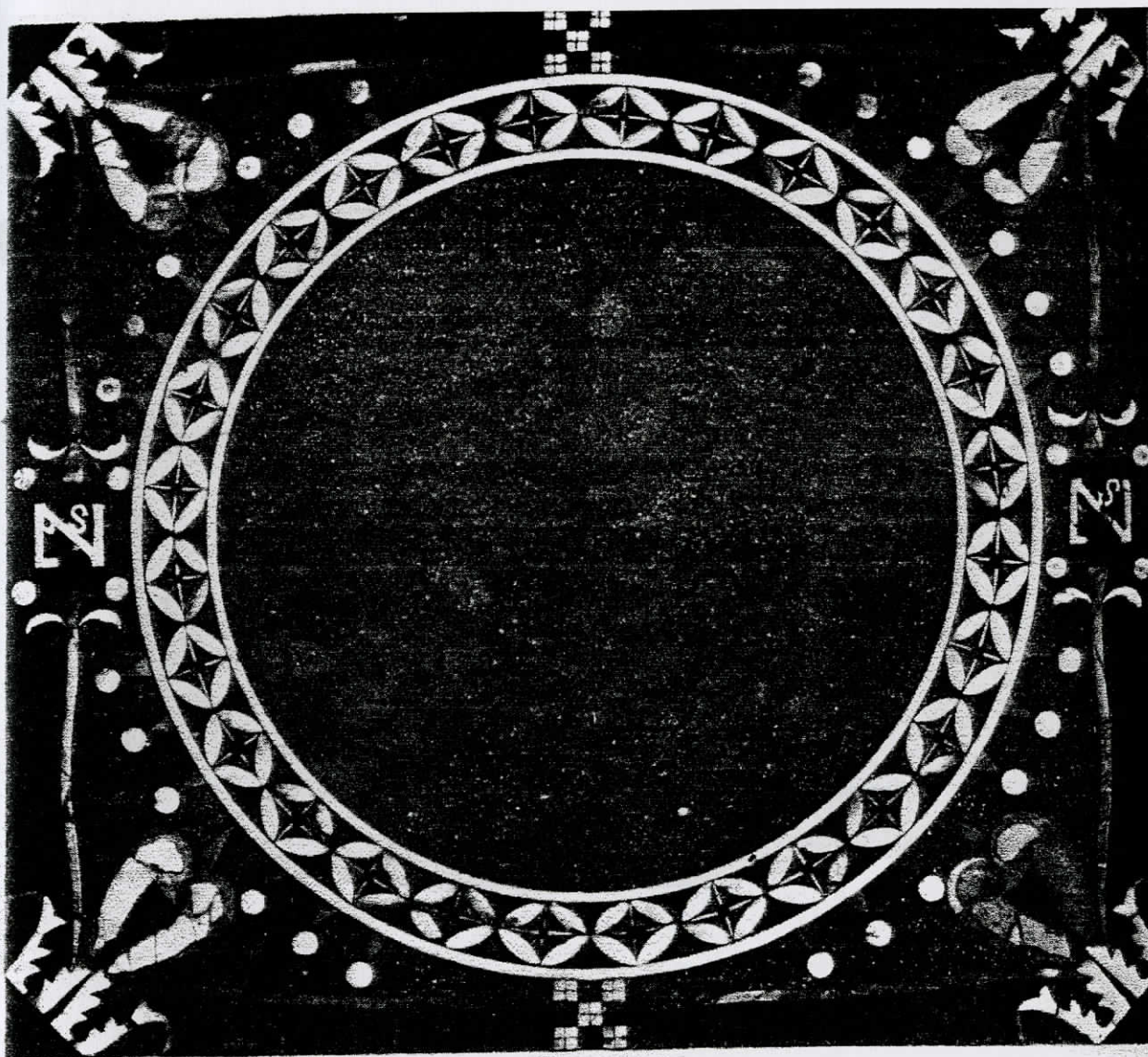


Fig. 56  
Inalid Marble from S. Vitale, Ravenna.



Fig. 57  
Musée de Saint-Louis



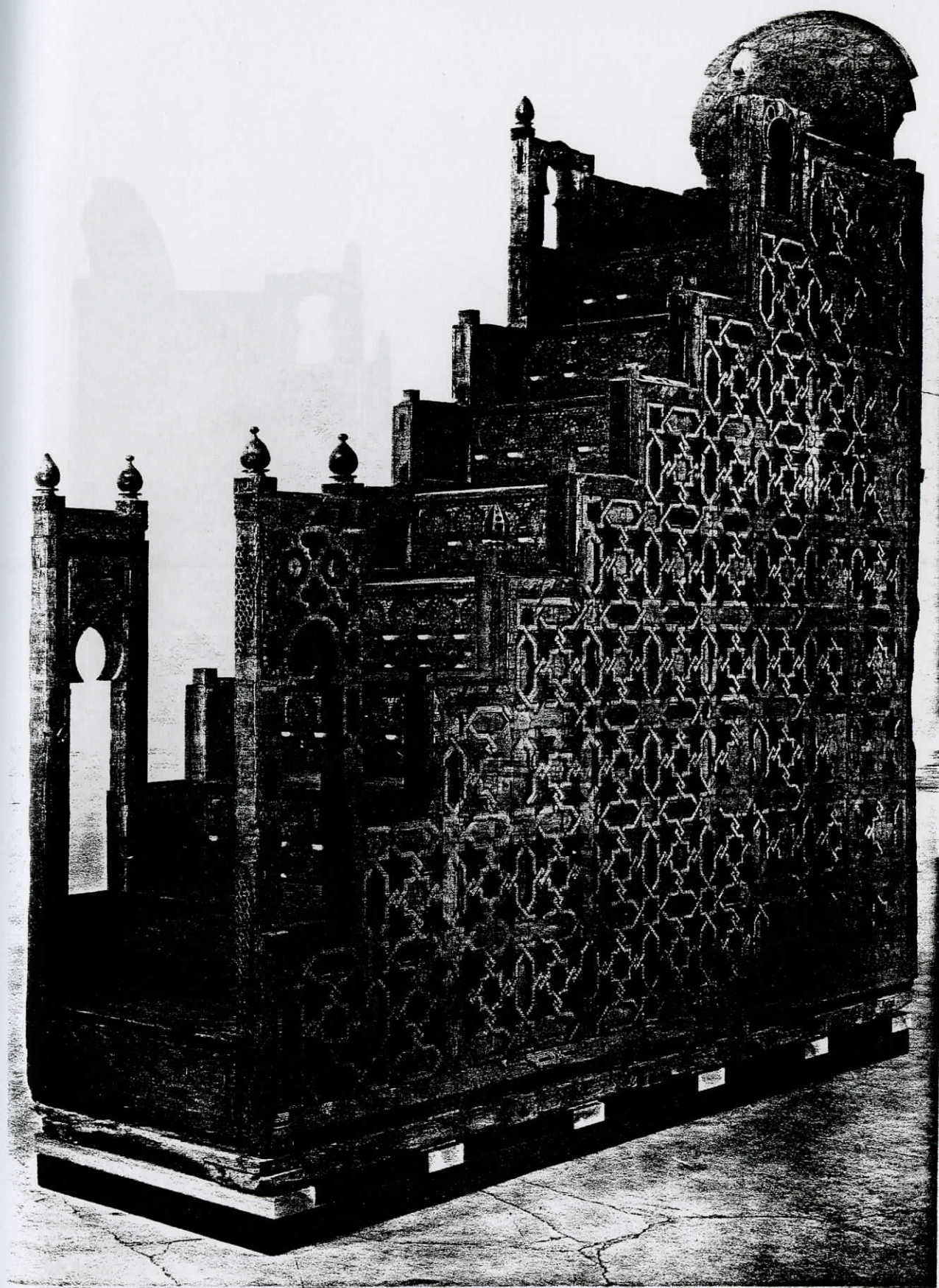


Fig. 58  
Kutubiyya minbar



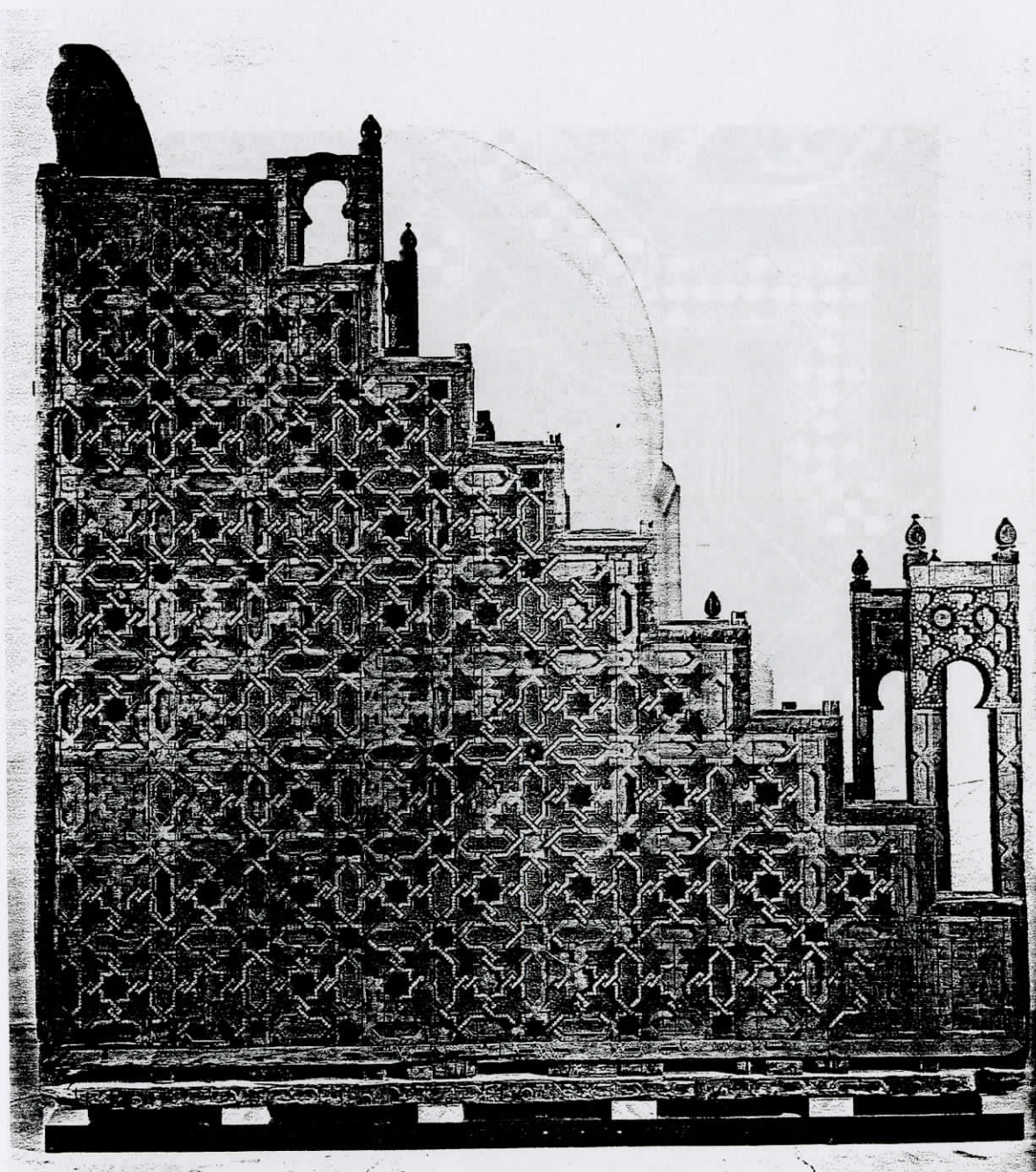


Fig. 59  
Kutubiyya minbar,  
left flank



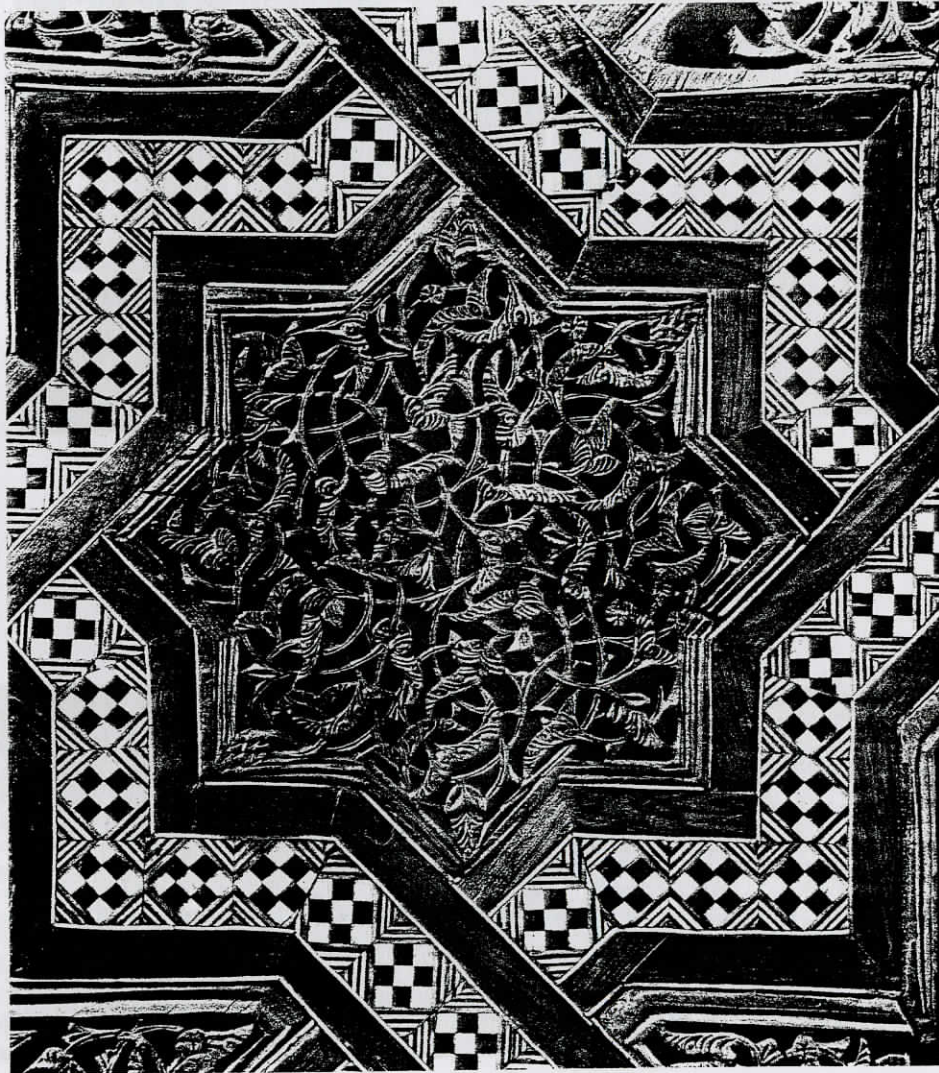


Fig. 60  
Kutubiyya minbar,  
detail of marquetry strapwork



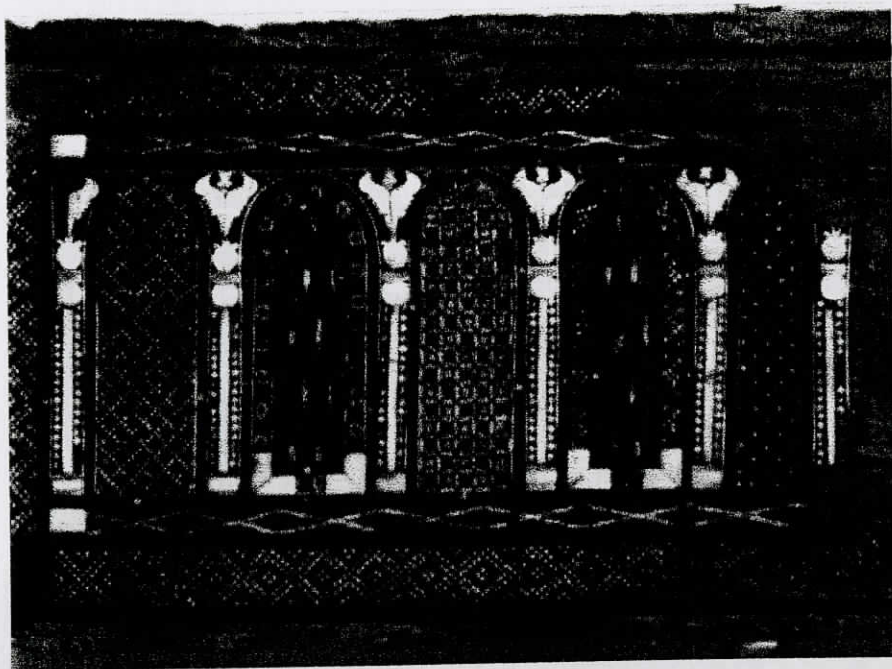


Fig. 61

Detail from Catalogue no. 2



Detail from the minbar of  
the Kutubiyya mosque

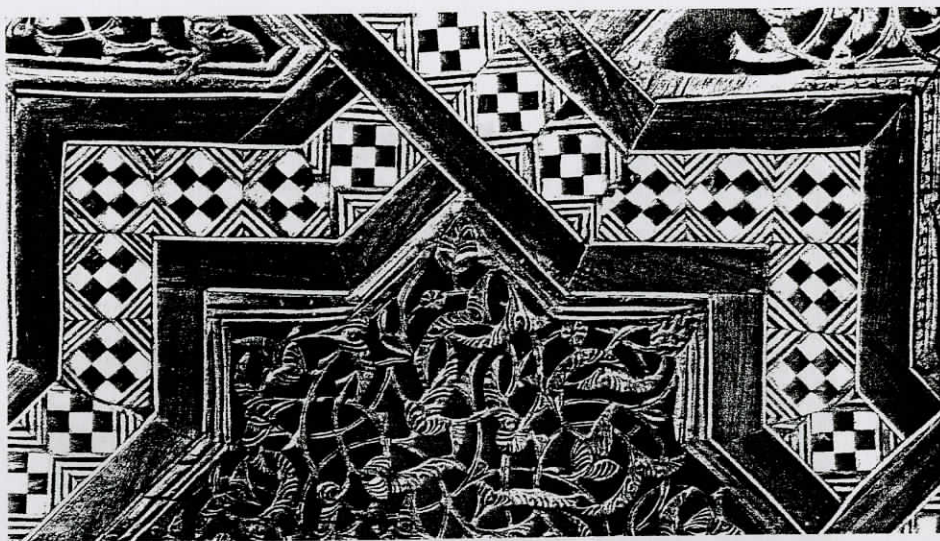
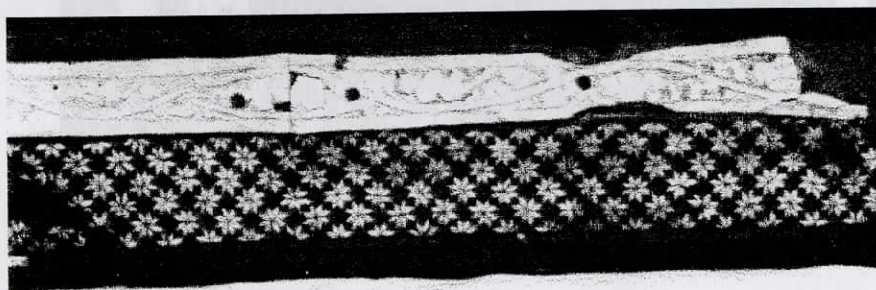


Fig. 62

Mosaic inlay detail from the  
Kutubiyya minbar



Mosaic inlay detail from Catalogue  
no. 7



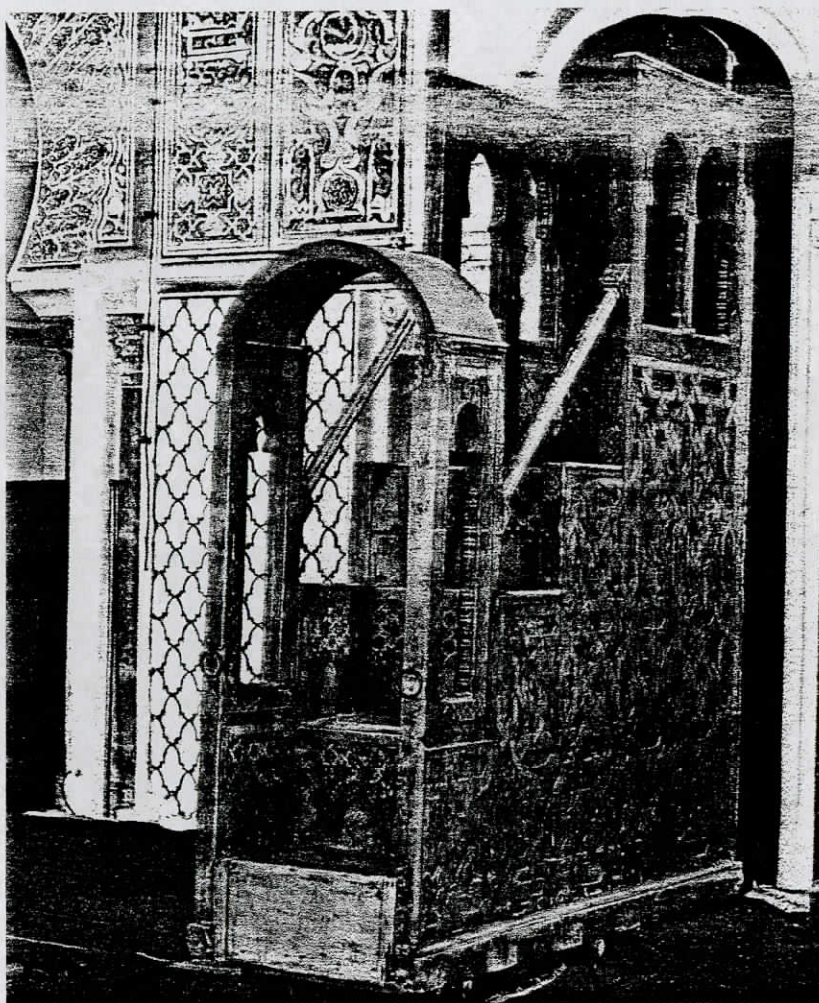
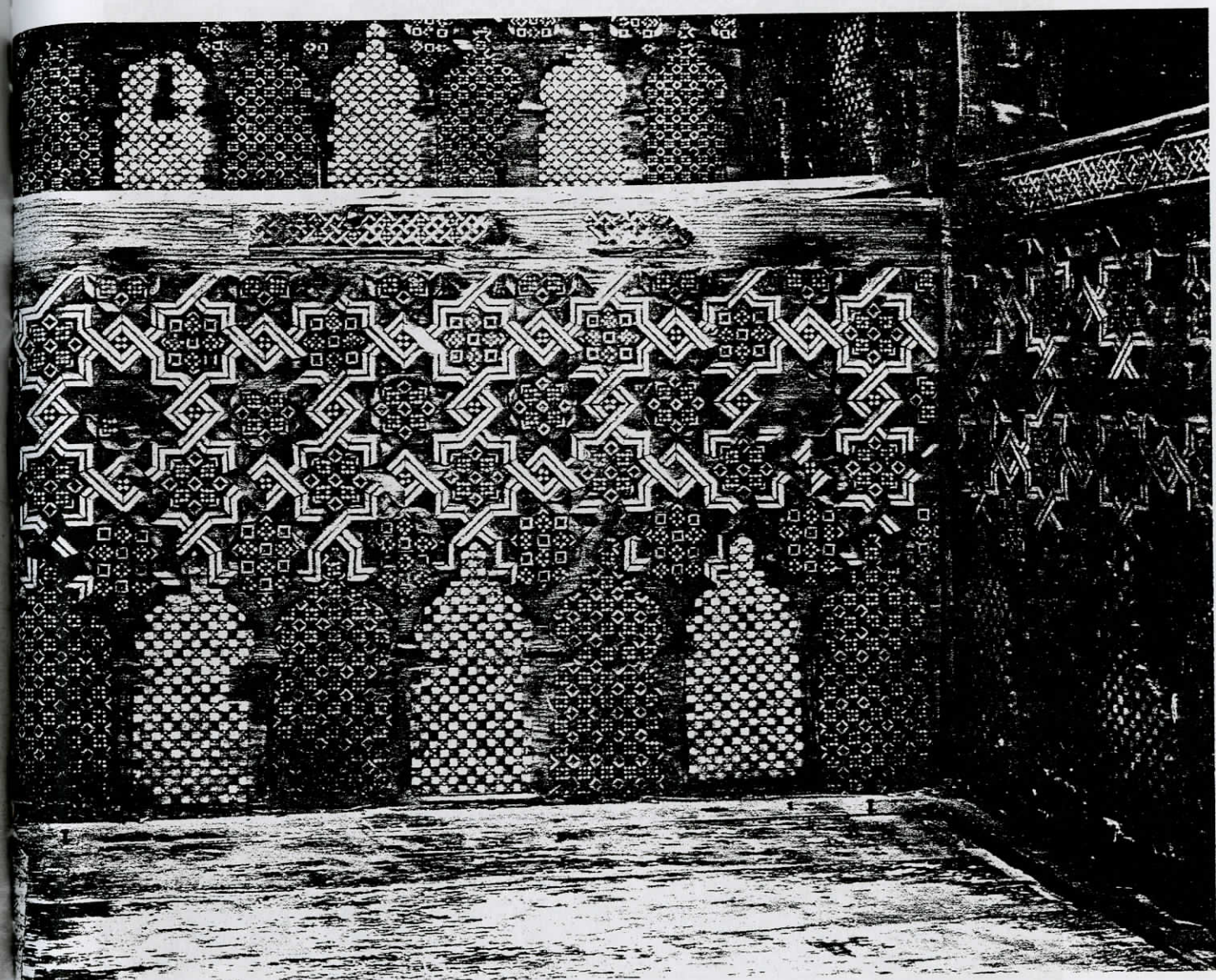


Fig. 63  
Qasaba Mosque minbar





Mosque minbar, detail of the steps



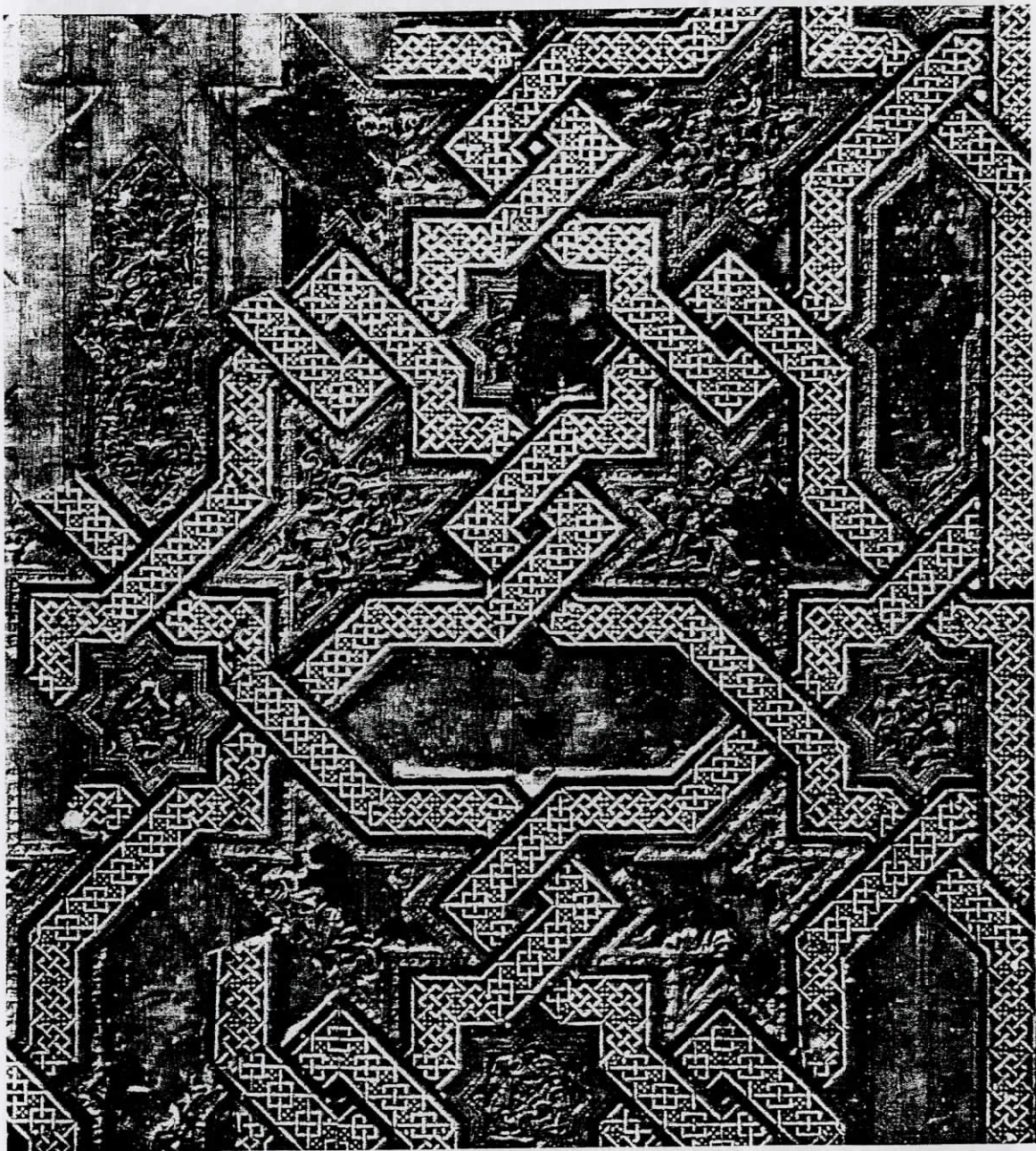


Fig. 65  
Qasaba Mosque minbar,  
detail of the right flank



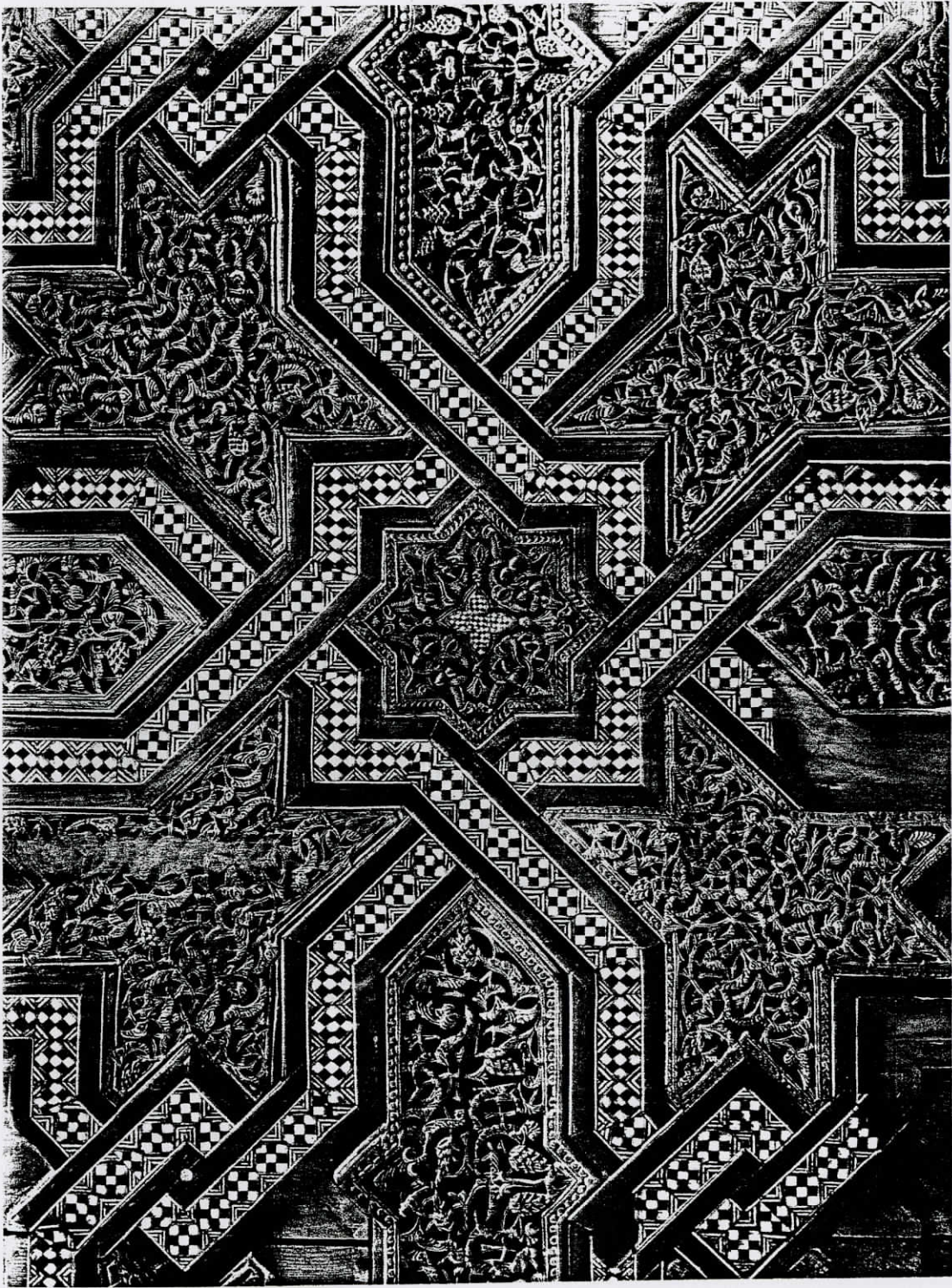


Fig. 66  
Kutubiyya minbar,  
detail of stropwork pattern





Fig. 67  
The casket of Leon

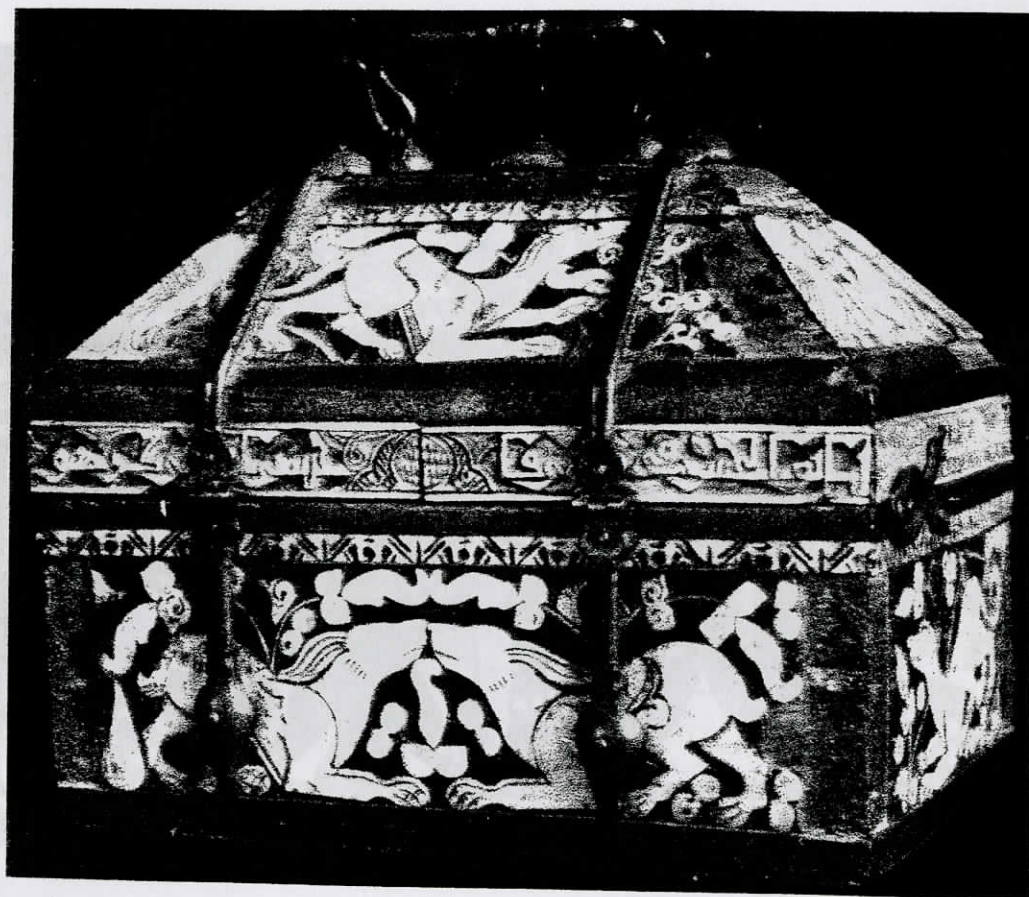


Fig. 68  
The casket of Leon



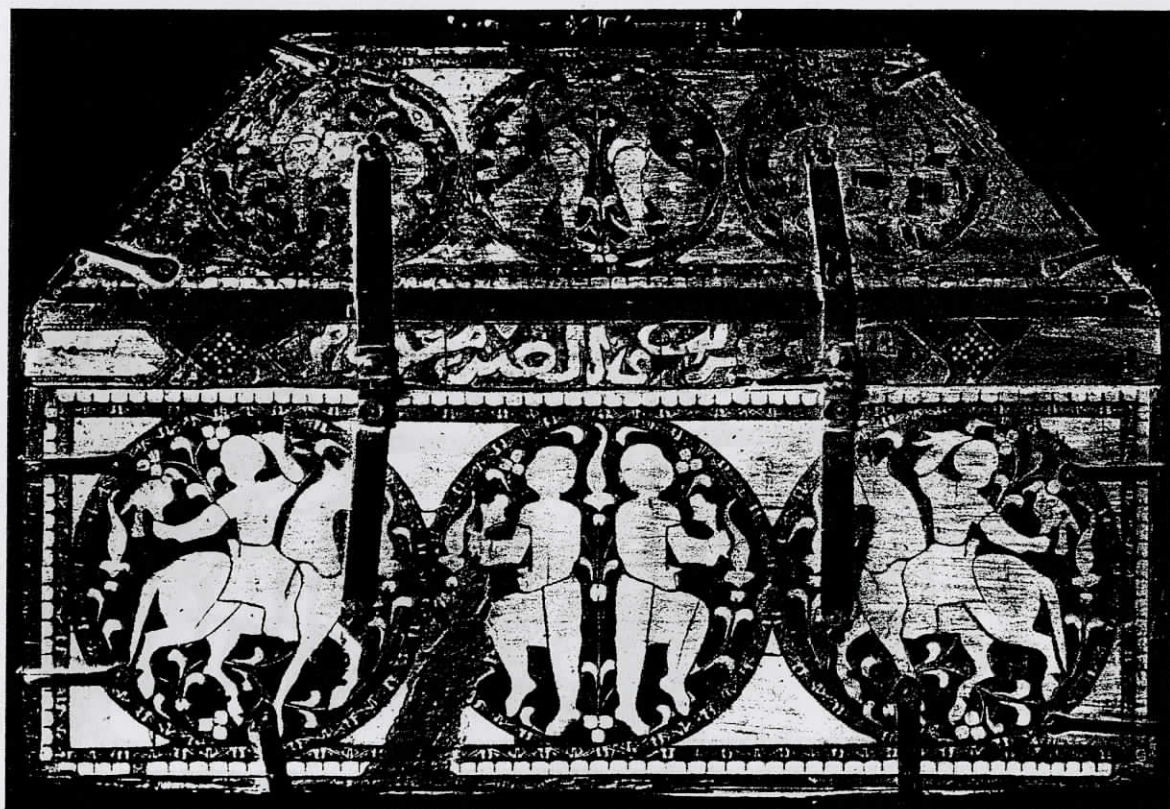


Fig. 69  
Catedral de Tortosa casket

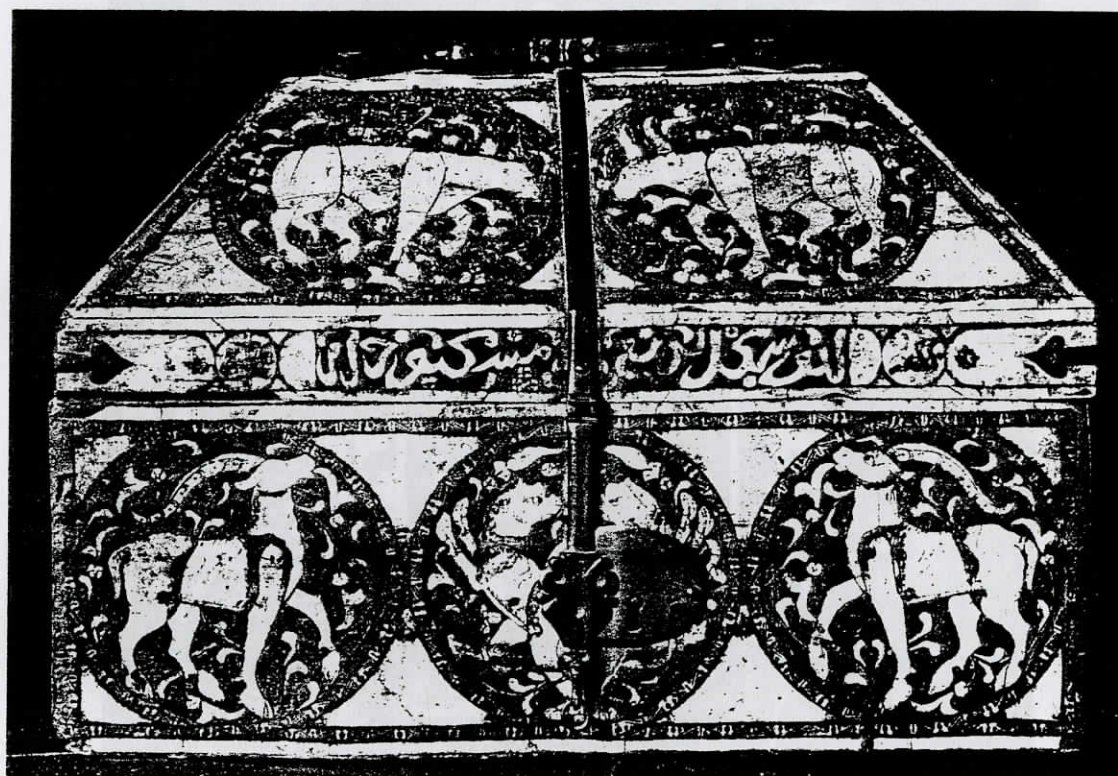


Fig. 70  
Catedral de Tortosa second casket





Fig. 71  
Cappella Palatina casket

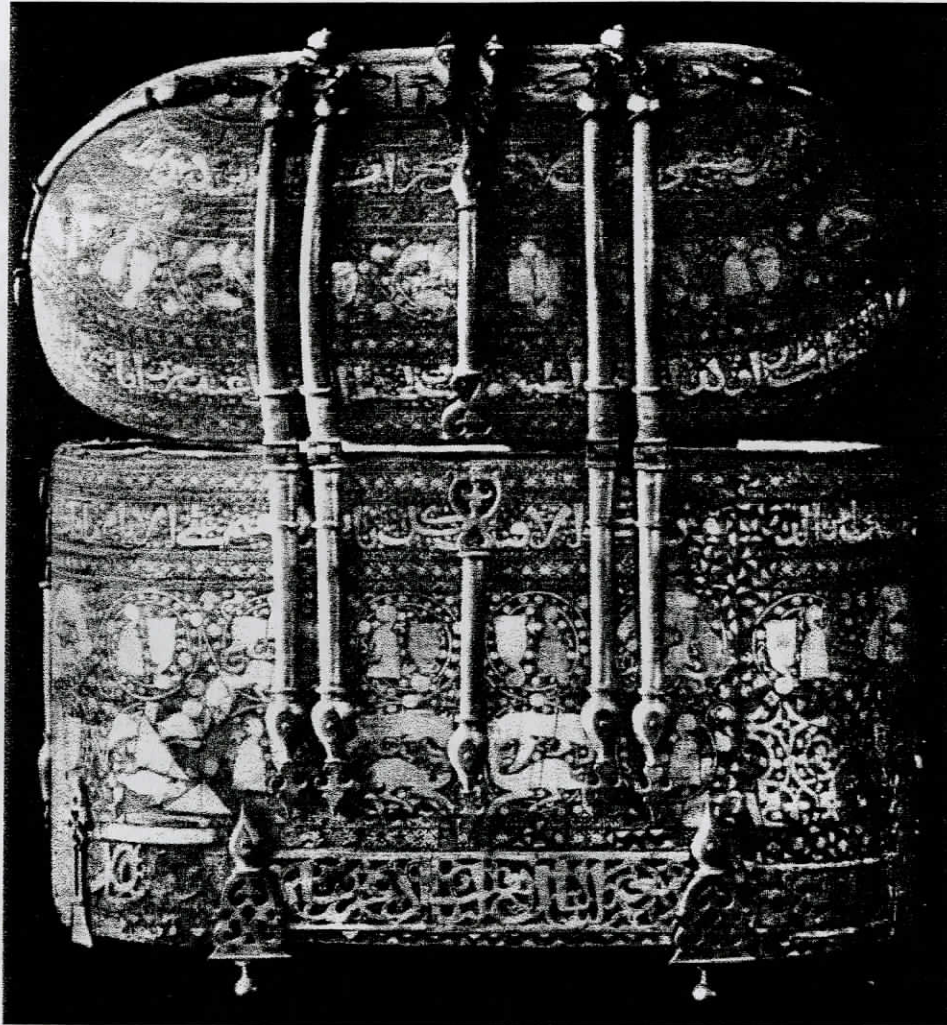


Fig. 72  
Cappella Palatina casket





Fig. 73  
Cappella Palatina casket, detail



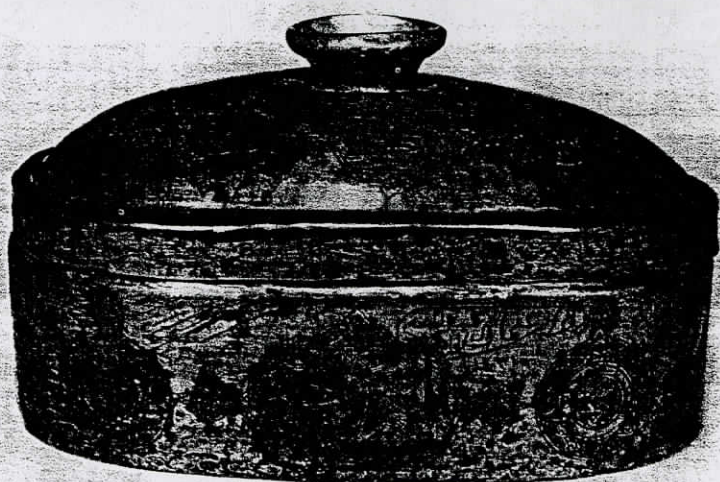
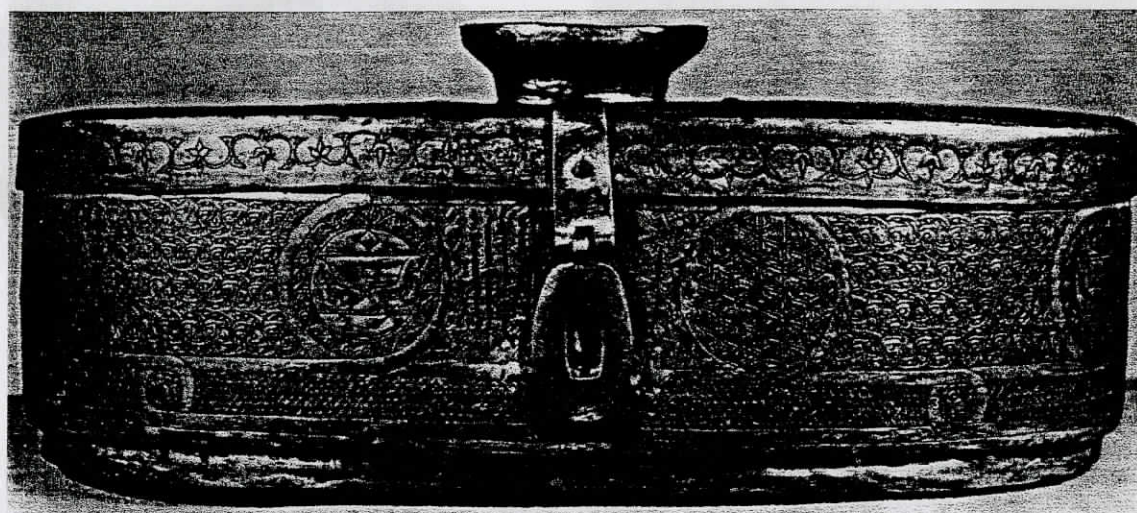


Fig. 74  
Mamluk lunch boxes





Fig. 75  
Examples of Islamic metalworks



Fig. 76  
Fatimid casket.





Fig. 77  
Fatimid casket



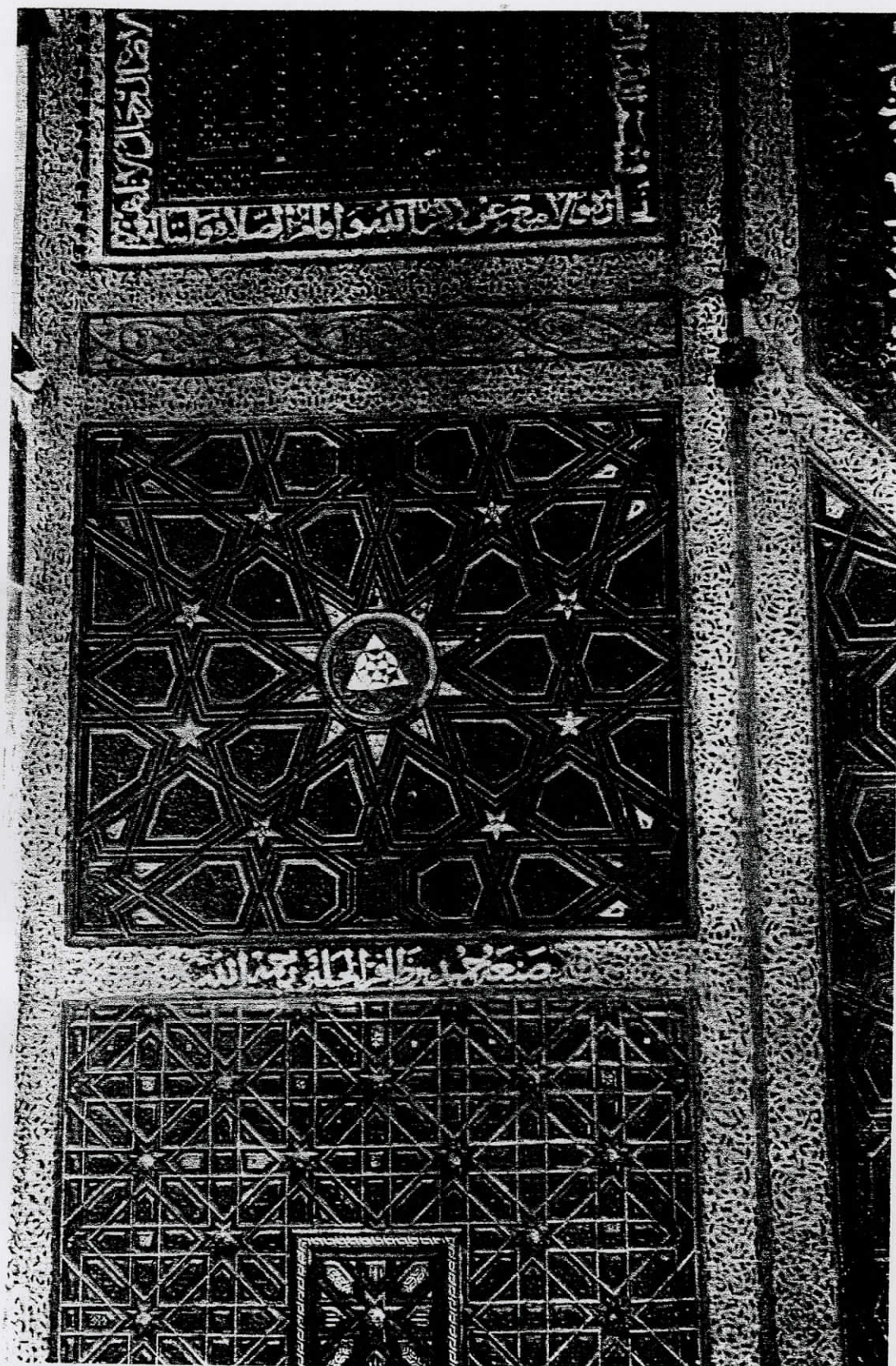


Fig. 78  
The Aqsa mosque minbar



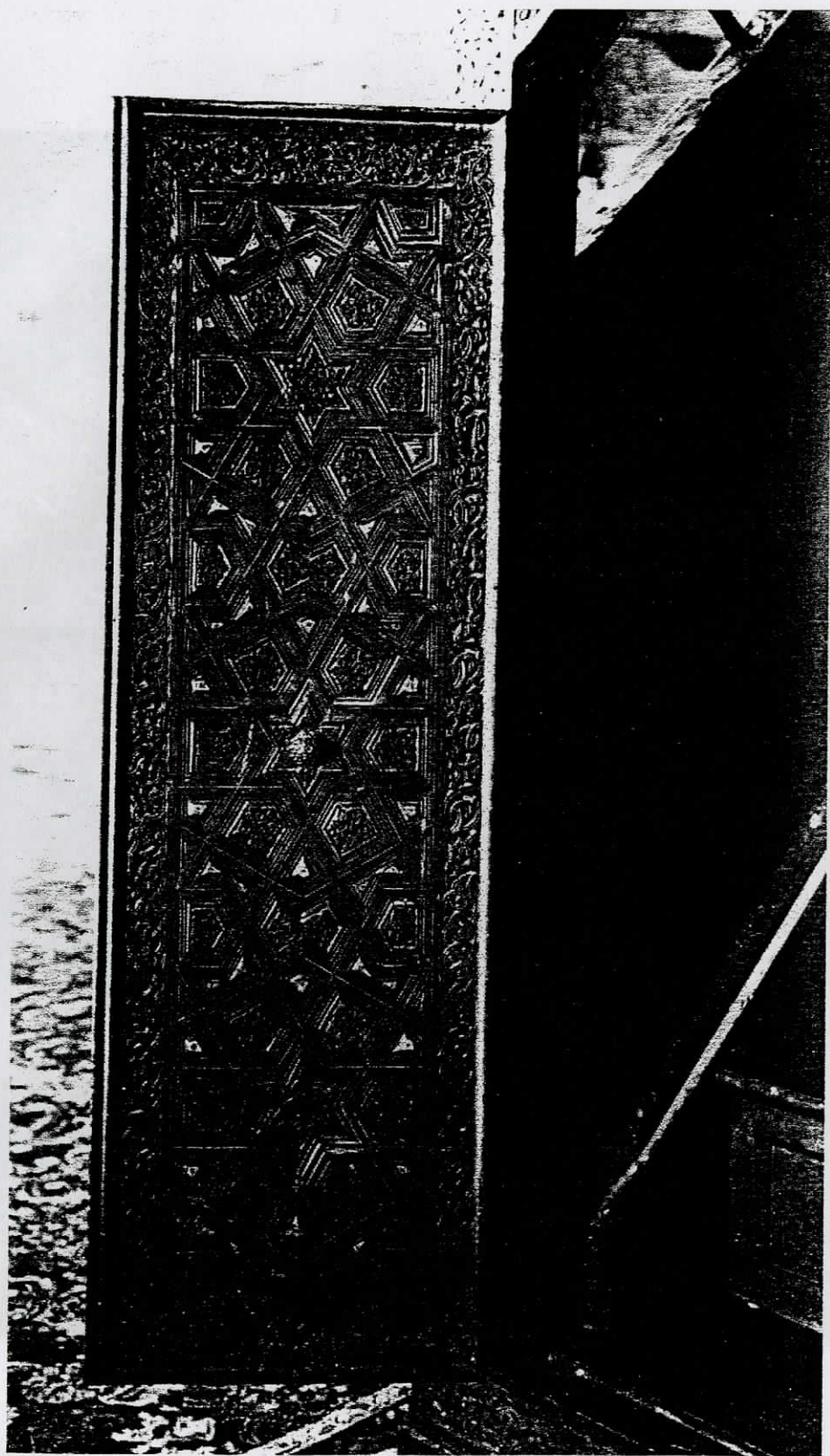


Fig. 79  
The Aqsa mosque minbar



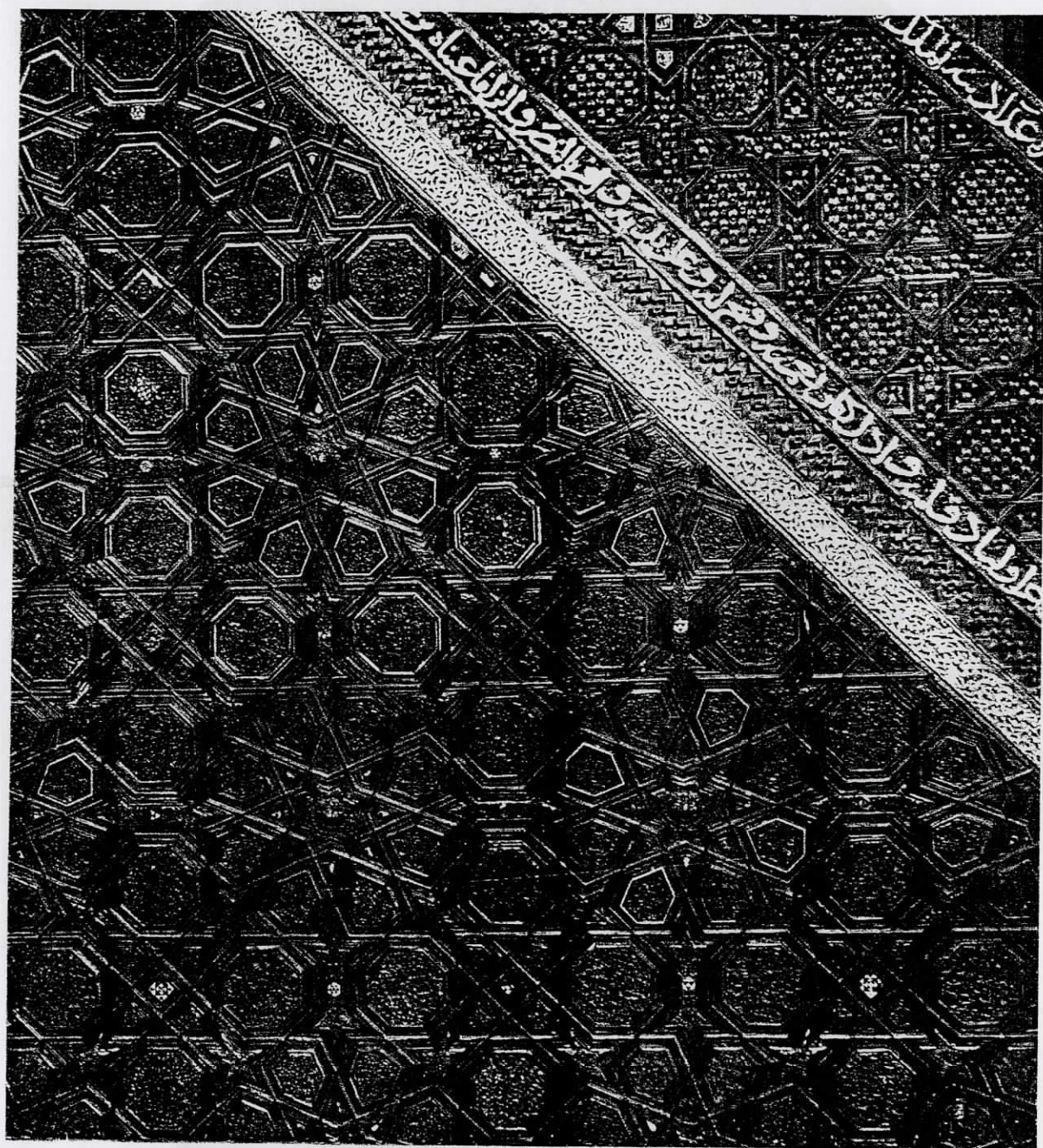


Fig. 80  
The Aqsa Mosque minbar, right flank detail





Fig. 81  
Mamluk tray



Fig. 82  
The back and the rim of the tray



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